

William W. Eaton, Jack Burke; Project Officers were Carl A. Taube and William Huber. We also acknowledge the research assistance and word processing of Miss Jean Lavelle and Miss Denise Spriggs.

*Address correspondence to:* Dr. James Anthony, The Johns Hopkins University, School of Hygiene and Public Health, 624 North Broadway, 8th Floor, Baltimore, Maryland, 21205. (410) 955-8551 or Fax (410) 955-9088

## MARITAL THERAPY AND EMPLOYEE ASSISTANCE PROGRAMS

KATHERINE WRIGHT and STEVEN R.H. BEACH  
*University of Georgia*

Organizations serving employees should expect to come under increasing pressure to provide help for marital problems. While many forces have contributed to the view that marital therapy is a luxury service, this view is increasingly at odds with the data. To argue successfully for the provision of marital therapy services or to provide appropriate referral for treatment, however, it is necessary to have information both about the various problems which are related to marital discord and the various time limited and cost effective approaches to marital therapy which are currently available. The current paper provides this information as well as directing interested persons to the primary sources for outcome research on marital therapy and clinical intervention in marital therapy. It is argued that EAP professionals may play an important role in enhancing the maintenance of marital therapy outcome.

Most employed individuals are also married. This simple fact of social organization has several implications for professionals who serve the needs of employees. First, it suggests that many of the problems for which employees seek help will have either marital antecedents or else marital sequelae. In fact it has been known for some time that marital problems are among the most common of complaints in outpatient mental health settings (Sager, Gundlach, Kremer, et. al. 1968). Accordingly, organizations which serve employees can expect to come under increasing pressure over time to provide help for marital problems. Second, it suggests that marital relationships are likely to be an important context for understanding many of the remaining problems presented by employees. Specifically, it is likely that the positive resolu-

tion of many of the problems with which employee assistance professionals work will be influenced by events in the marital relationship. For example, a growing literature suggests that treatment outcome is less favorable and relapse following treatment more likely for patients in unsatisfying relationships (e.g. Hooley, 1986). Finally, it suggests that some employers will attempt to follow the lead of third party payers in restricting access to services for marital problems because they are too common and so services may be too commonly requested. Indeed, at present marital and family therapies are excluded from coverage under many insurance policies and are viewed as luxury services by many HMO's and mental health centers. Likewise, psychiatric professionals, who may be more attuned to biological factors, or psychologists, who may be more attuned

*Journal of Employee Assistance Research*, Vol. 1, No. 1 (Summer 1992).  
© by the Employee Assistance Professionals Association, Inc.

to intra-individual factors may dismiss marital variables as being of only peripheral importance, complicating the task of the EAP professional in providing optimal referrals and comprehensive care. So, while the ubiquity of marriage is a reason for greater attention to marital effects and marital interventions, it is necessary to face potential objections to greater attention to marital problems both on the grounds of cost and on the grounds that individual or somatic interventions should be considered primary.

How can EAP professionals both respond to the challenge of providing better services in an area which is important to employees and yet deal with the fear of potential cost explosion? We believe the key element in both cases is to have available the empirical evidence which addresses the issue of marital therapy as a critical element in successful treatment of various disorders, and information about cost-effective, time-limited approaches to marital therapy. This type of information allows the EAP professional to recommend those forms of intervention which have been supported in the outcome literature and recommend them for those situations in which marital intervention is most likely to provide substantial benefit.

#### Is the Marital Relationship Worthy of Attention?

One reason health professionals pay attention to marital problems is the importance individuals place on marriage and family. Integrity of the marriage is valued by many persons seeking help for other problems. Indeed, often it is made clear by the person seeking help that they do not value the resolution of their focal problem as much as they value the restoration or preservation of a more harmonious or stable family life. Disruption of marital functioning constitutes a serious loss in the quality of life, and

reduction of a focal problem which does not address the associated disruption of marital functioning is often unsatisfactory to persons seeking help. From the standpoint of consumer demand, then, attention to marital problems will often become a focus of attention.

However, marital problems may also be a fundamental link in the chain of events leading to first episodes or relapse in a variety of disorders, including depression (Brown & Andrews, 1986), anxiety (Barlow, O'Brien, & Last, 1984), substance abuse problems (Billings, Kessler, Gromberg, & Weiner, 1979), and psychotic disorders (Falloon, Boyd, McGil, Razani, Moss, & Gilderman, 1982). Across a range of problem areas, many of which are common and capable of producing considerable disturbance in the work place, then, it will be prudent to have a marital approach as an adjunctive (or primary, Beach, Sandeen, & O'Leary, 1990) intervention. If effective and appropriate procedures can be advanced for carrying out the marital component of the overall treatment, this provides a complete rationale for the recommendation of marital therapy.

#### What is Known about Marital Discord?

The empirical base for understanding the development and maintenance of marital discord has expanded rapidly in the last 15 years (Weiss & Heyman, 1990). While we will not attempt to provide a comprehensive review of this work, it may be useful to briefly summarize the most clinically relevant aspects of the basic work.

As couples become discordant, they find the balance of events in their relationship changing in a negative direction (Barnett & Nietzel, 1979; Birchler, Weiss, & Vincent, 1975; Margolin, 1981). They become more reactive to negative behavior from their spouse, exaggerating the stress engendered by negative ex-

changes (Levenson & Gottman, 1983; Jacobson, Waldron, & Moore, 1980; Jacobson, Follette, & McDonald, 1982). They begin to more readily reciprocate negatives from their spouse (Billings, 1979; Gottman, 1979; Margolin & Wampold, 1981; Revenstorf, Hahlweg, & Schindler, & Vogel, 1984; Smith, Vivian, & O'Leary, 1990). Both spouses may begin to perceive their partner's behavior as more negative (Floyd & Markman, 1983), and more blameworthy or deserving of punishment (Fincham, Beach, & Nelson, 1987). In conjunction with this increase in frequency and perceived negativity of marital exchanges between spouses, discordant spouses are also more confident that their negative judgements of their spouse are true (Noller & Venardos, 1986). These changes result in considerable difficulty in attempting to resolve existing problems or even discussing low level disagreements (Gottman, Markman, Notarius, 1977; Koren, Carlton, & Shaw, 1980), generating considerable frustration for the discordant couple. This increasing frustration is likely to be manifested in higher rates of criticism, demands, or nagging on the part of one spouse and withdrawal, avoidance, and hurt feelings on the part of the other spouse (Christensen, 1987). In short, the spouses often find themselves in a "coercive spiral" (Patterson & Reid, 1970; Weiss, Hops, Patterson, 1973) in which each partner tries to influence the other in an escalating exchange of negative behavior.

Clearly, in the context of ongoing marital discord the ability of each spouse to provide support for the other is severely compromised. Yet, married persons list their spouses both as their number one source of support and their number one source of negative interaction (Beach et al., in press). Accordingly, when stresses are encountered it is the spouse who is most commonly approached for various forms of support and when support is available, at least

some of the potentially negative consequences of severe and threatening stressors may be averted (Brown & Harris, 1986). Accordingly, marital discord disrupts one of the primary buffers against severe stressors at the same time that it adds new major threats and stressors in its own right.

Approximately 20% percent of all married couples are experiencing marital discord at any given time (Beach, Arias, O'Leary, 1987), but only about 29% are willing to characterize their relationships as less than "very happy" (Glenn, 1991). Nonetheless, about half of all newlyweds in first marriages will divorce (Click, 1984). Further, the likelihood of attaining "marital success" appears to have declined in recent years (Glenn, 1991). In addition to the associations mentioned earlier with mental health problems, marital discord and marital disruption are also associated with a variety of physical disorders for spouses (Somers, 1979), and with mental health problems for their children (Emery, 1988).

This thumbnail sketch of what is currently known about marital discord highlights the fact that marital discord is, in itself, a very troubling problem. Most persons who experience marital discord hope to do something about it. And, if no effective means of reducing the level of discord is found the individual is likely to suffer one or more of a variety of negative psychological or physical problems. There are good reasons to suspect that within any large work setting there will be a large group of persons who are in need of services directed at improving the quality of their marital relationship. However, this leaves open the question of what sort of treatment should be recommended.

#### Can Marital Discord be Treated?

Overall marital therapy is successful 70% of the time in increasing marital

satisfaction for an extended period of time (O'Leary & Wilson, 1987). Only in the last 15 years, however, has systematic outcome research been conducted in the field. Currently many types of therapy exist with many divergent labels, but closer scrutiny of their techniques and strategies often suggests substantial overlap. Nonetheless, it is not the case that all approaches are the same or that all are equally well supported in the outcome literature. We now turn to the outcome literature on the effectiveness of marital therapy.

#### Overview of Marital Therapy Outcome Literature

Therapists may reasonably ask why it is necessary to review the literature on effectiveness in the context of discussing what types of interventions might be applied most appropriately within the context of a brief intervention format such as is most typically provided by an EAP setting. Indeed, we believe therapists do often ask such questions. However, the type of outcome research which is available is most appropriate for utilization by settings in which open-ended therapy is unlikely or unavailable. In these settings, information regarding level of effectiveness within a specified time frame of the sort obtainable from outcome studies is potentially a useful element in planning the optimal use of limited staff resources. In addition, careful consideration of the outcome literature can be a good antidote to the sometimes hyper-inflated claims of competing "brands" of marital therapy.

First let us examine what issues should be considered when examining outcome literature. Of primary importance to documenting effectiveness is the existence of a control group and the procedure of random assignment to conditions. Only these attributes allow us to safely argue that something about the treatment itself accounted for differences between groups

and that this difference represents a gain over no treatment at all. Without a control group we have no way of knowing how many of the couples would have improved with little or no therapeutic intervention. However, if random assignment is absent we cannot exclude the possibility that the observed differences were due to sampling differences between the two groups. Without either a control group or random assignment, we cannot appropriately infer that the intervention itself is responsible for the differences between groups.

In light of these considerations, we will examine research on the effectiveness of approaches to marital therapy by reviewing only those having a control group and random assignment to groups. We will not examine the large body of literature documenting success rates in the absence of a control group, or review the single-subject design studies in the marital literature. While this literature has played a central role in the development of marital techniques (e.g., Stuart, 1969), there are grave problems with generalizing from treated individuals to the larger population of maritally distressed couples (Beach & O'Leary, 1985).

We are interested in documenting the effectiveness of therapy, so we will not be including studies which have only 4 or fewer sessions followed by assessment. Our aim in restricting the studies to be reviewed is to assure ourselves that the studies which remain meet the minimal criteria for internal validity (Campbell & Stanley, 1966) in experimental design.

We will also restrict our review to those studies which have gone through standard peer review procedures provided for by English-language journals publishing marital outcome work (Beach & O'Leary, 1985). Although this limits the scope of the review, as suggested by Beach and O'Leary 1985, it ensures that certain minimal standards of quality are met by the studies included in the review—i.e.,

those standards provided by the existing scientific journals. Different journals apply different criteria, but those journals which provide for external peer review give a "stamp of professional approval for the studies they publish" (Beach & O'Leary, 1985, p. 1038).

*Insight-oriented marital therapy.* Insight-oriented marital therapy aims to help couples interact in a more mature manner by resolving unconscious sources of conflict (e.g., Gurman, 1981; Sager, 1976). Insight-oriented therapy usually emphasizes the unconscious factors which help determine the choice of one's mate and the types of conflicts that later arise. Manuals for therapies which fall in this family of treatments include *Emotionally focused therapy for couples* by Greenberg and Johnson (1988), and an as yet unpublished manual by R.M. Wills cited in Snyder and Wills (1989).

Five studies met our criteria for review.

In the earlier studies, by Crowe (1978) and Epstein and Jackson (1978), insight was used without any directive techniques, a form of insight therapy that differs substantially from that described by prominent writers in the area. That is, no homework assignments were used and no attempt was made to encourage the spouses to try new patterns of relating. Accordingly, it was suggested that these studies tell us only that insight in the absence of a clearly specified direction of change is not a valuable approach to marital therapy.

The earliest controlled study testing the efficacy of nonbehaviorally oriented insight therapy was conducted by Crowe (1978). Crowe randomly assigned 42 couples with marital problems to one of three therapy conditions: (1) a directive therapy based on the work of Stuart (1969) and Liberman (1970) (primarily contracting), (2) an interpretative approach based on the work of Skynner (1969, 1976) (insight-oriented marital therapy), and (3) a control condition in

which couples met with a therapist who avoided giving either advice or interpretation as much as possible.

On a global measure of marital adjustment used (a 16-question self-report measure), the insight group was significantly superior to the control group at nine month follow-up but not at posttherapy, 3-month follow-up, or 18-month follow-up. No differences between the insight group and the control group were found on improvement in sexual adjustment, general individual adjustment, or specific target problems. Thus, the Crowe study found the insight group to be weaker than predicted by the authors. Indeed, the one difference found (at the .05 probability level) out of the 20 posttherapy comparisons is not different than a result which would be expected by chance alone and cannot be taken as evidence that the insight group fared any better than the control group.

It should be pointed out that the therapists in the interpretative condition were limited to interpretation and not allowed to be directive. Skynner (1981) regards this as a critical deviation from his own preferred mode of therapy, and it may in fact account for the observed weakness of the therapeutic effects. Indeed later studies do suggest that more directive forms of insight-oriented marital therapy can be more effective in resolving marital problems than no therapy.

Epstein and Jackson (1978) conducted a controlled-outcome study which included an interaction insight group which might be described as behaviorally oriented insight group. Epstein and Jackson (1978) randomly assigned 16 couples (mean age not reported) to one of three conditions: (1) a communication group based on the work of Alberti and Emmons (1974), (2) an interaction insight group, or (3) a no-treatment waiting-list group. Subjects in the treatment group met for five sessions of one and one-half hour each over a three-week period. The

communication treatment emphasized assertion training and clear communication. The insight treatment involved instruction in the observation of verbal and nonverbal messages that exacerbate conflict. The major goal was to increase each subject's awareness of the impact of his/her behavior on the spouse's feelings and behavior. In the insight condition, directive interventions for alternate behaviors were kept to a minimum.

An analysis of variance on the pretest scores showed no difference between groups. Dependent measures used were ratings of communication by trained raters on 11 categories of verbal behavior (no reference given) and three scales from the Barrett-Lennard relationship inventory (Barrett-Lennard, 1962) yielding scales scores for degree of empathy, congruence, and unconditional positive regard generally received from the spouse.

Of the 11 coding categories, only one (disagreement) showed a significant change for the insight group relative to the control group. None of the three scales derived from the Barrett-Lennard showed a significant change for the insight group relative to the control group. Since 1 of 14 variables showing a significant change is not different from a result which could be expected on the basis of chance variability, behaviorally oriented insight therapy was not demonstrated to be an effective treatment of marital distress.

In contrast to the non-directive techniques used in both of these early studies, Boelens, Emmelkamp, MacGillavry, & Markvoort (1980) studied an insight-oriented approach that included a clear specification of direction of desirable change. Boelens et al. (1980) randomly assigned 21 couples to one of three therapy conditions: (1) a behavioral contracting approach based on the work of Azrin, Naster, and Jones (1973), (2) an insight-oriented approach based on the

work of Watzlawick, Weakland, and Fisch (1974) among others, and (3) a wait-list control condition. Outcome was assessed using (1) the Maudsley marital questionnaire (MMQ), which was based upon the marital adjustment scale used by Crowe (1978); (2) the marital deprivation scale (MDS) (Frenken, 1976), which was adapted from the marital attitude evaluation scale of Schutz (1967); (3) partner ratings of severity of their three main marital problems; (4) therapist ratings of the couples relationship; and (5) an observational rating scale measure of rates of positive and negative verbal behavior (MICS) (Hops, Wills, Patterson, & Weiss, 1972).

Pre-post analyses indicated that the two treatments considered together were significantly better than a wait-list control in improving scores on the MMQ, the MDS, the partner ratings of problem severity, the therapists ratings, and the observed level of positive social reinforcement. Only the level of negative social reinforcement failed to change more for the treated groups than for the wait-list. While analyses were not presented which contrasted each treatment separately with control group, it was possible to compute Fisher exact probabilities based on the number of couples showing improvement or showing no improvement in treated versus control conditions. (For the purposes of these computations, couples who had separated or divorced were considered unimproved.) Immediately posttherapy, the group receiving insight-oriented treatment was significantly improved over the untreated group ( $p = .0435$ ). However, at one-month follow-up and six-month follow-up, there was no significant difference between the group receiving insight-oriented treatment and the untreated group. Out of eight couples treated with insight-oriented therapy, at one-month follow-up, two were separated, three remained together but showed no improvement, and three

showed improvement. This represented a deterioration from results obtained immediately posttherapy.

In a fourth more recent addition to the field of insight-oriented techniques, Johnson and Greenberg (1985a) evaluated the effectiveness of "emotionally focused" marital therapy (Greenberg & Johnson, 1988). This approach borrows techniques from gestalt and systems approaches and utilizes techniques common to cognitive and behavioral approaches. Its unique contribution lies in its focus on unexpressed and/or unacknowledged feelings and on helping couples come to a new understanding of their relationship based on the exploration of these feelings. In their study, 45 couples were assigned randomly to emotion-focussed, problem-solving, or wait-list control. Moderately to severely discordant couples were excluded from the sample (Dyadic Adjustment Scale, DAS, scores below 65). Johnson served as one of the therapists in the emotion focussed condition, with therapists nested under treatment in the study design. Baucom and Hoffman (1986) and Weiss and Heyman (1990) rightly point out that this design feature poses serious problems in the interpretation of the comparison between the two active treatments, yet it does not compromise the comparison of emotion focused therapy with the control group. Emotion focused therapy produced an overall change in marital satisfaction while the control group showed no change.

Although subsequent studies using less experienced therapists and more discordant couples have not replicated the dramatic effects found in the initial study (Johnson & Greenberg, 1985b; Goldman, 1987), the Johnson and Greenberg (1985a) study highlights another source of potentially useful techniques in the treatment of mild to moderate marital discord. In light of the failure to replicate the initial strong effects in more discordant samples,

however, one must conclude that a strong case has not yet been made that marital outcome can be substantially enhanced simply through the use of emotion focused techniques in addition to, or instead of, standard behavioral marital therapy. Indeed, other outcome work in progress suggests that there is no additive effect when standard Behavioral marital therapy (BMT) and Emotion-focused therapy are combined (Baucom & Sayers, 1988). However, to the extent that some couples respond particularly well to emotion-focused therapy or to emotion-focused techniques used at certain points in therapy the potential for the enhancement of marital therapy outcome is clear (Baucom & Sayers, 1988; Margolin, 1987; Weiss & Heyman, 1990).

A fifth contribution to the insight-oriented outcome literature is reported by Snyder and Wills (1989). In this study 79 couples seeking treatment for relationship distress were assigned to either a BMT condition, an insight-oriented marital therapy condition, or a treatment on demand wait-list condition. Both treatment conditions resulted in significant improvement, but did not differ significantly from each other. Snyder and Wills (1989) note the similarity between their insight-oriented approach and the therapeutic approach used by Johnson and Greenberg (1985a). These two effective insight-oriented approaches have strong directive components and provide clear messages about the direction of change that would be desirable, which is more similar to how prominent writers have outlined insight-oriented therapy. The Snyder and Wills (1989) study shows also that treatment gains were maintained at six month follow-up.

From the evidence of Johnson & Greenberg (1985a) and Snyder and Wills (1989) insight-oriented therapies with strong directive components can now be said to be roughly equal to other therapeutic approaches with regard to apparent effec-

tiveness, although maintenance beyond six months remains unknown. Again, however, effectiveness is well below the level most marital therapists would hope for, despite the increased length of marital therapy in the Snyder and Wills (1989) study (19 sessions). Thus, once again, while there is evidence pointing to potentially useful new technologies, there is little reason to expect substantially enhanced average outcomes to result from their addition as a standard treatment component.

*Behavioral contracting approaches.* Behavioral contracting approaches use contracting for increasing the incidence of positive behavior within the marriage. The origins of this approach come from the work of Stuart (1969), Liberman (1970), Azrin, Naster, and Jones (1973). In this approach couples are seen as suffering from a low rate of exchange of reinforcers. The goal of therapy is to increase the frequency of behaviors the spouses desire in one another. Usually, therapists help spouses construct written behavior change agreements. Manuals for therapies which fall in this family of treatments include *Marital Therapy: Strategies based on social learning and behavior exchange principles* by Jacobson and Margolin (1979), and Stuart's (1980) book *Helping couples change: A social learning approach to marital therapy*. In both these cases the therapy described is far more complex than behavioral contracting alone, particularly as it was originally described and tested. However, the two manuals may be taken as mature versions of this form of treatment.

Often the contracting approach is combined with other approaches. However, it has been tested three times alone in the context of a controlled-outcome study. The first study of this type was the Crowe (1978) study discussed earlier. Crowe (1978) found that contracting was effective on a number of outcome measures relative to a control group. On the 16-item

self-report measure of marital adjustment used, couples in the contracting approach were significantly less maritally distressed than couples in the control group at 9 months and 18 months following therapy. On sexual adjustment, the contracting group was significantly superior to the control group at posttreatment assessment and nine-month follow-up. Similarly, the interpersonal and the intrapersonal target problems selected for therapy each showed significantly greater improvement for the contracting than for the control group at posttreatment and at nine-month follow-up. Thus, out of 20 opportunities to differ from the control condition following therapy, the contracting group differed 11 times in the direction of being superior and no times in the direction of being inferior. In the absence of an omnibus, multivariate F, submitting these differences to a sign test indicates the superiority of the contracting condition.

Boelens et al. (1980) included a contracting-only condition in their study which was discussed earlier. Improvement was found for the treated groups relative to the control group on all self-report measures of the marital relationship and on positive verbal behavior as judged by an observer using the MICS. No significant difference between treated and untreated couples was found for level of marital functioning as rated by an independent assessor, nor was any effect found on rate of negative verbal behavior using the MICS. Change was also rated in terms of overall improvement for each couple. Improvement was defined in terms of the amount of change on target problem scores. Changes of 25 percent or more were counted as improved, while changes less than 25 percent were counted as unimproved. Using this scheme, it is possible to separately contrast the group receiving training in contracting with the control group at posttherapy, one-month follow-up, and

six-month follow-up. Although not conducted by the authors, using the Fisher exact-probability test, it is possible to determine the superiority of contracting to no treatment at each point in time with  $p = .0435$ ,  $p = .0046$ ,  $p = .0046$  at post, one month, and six month respectively. Thus contracting proved superior to no treatment and maintained this superiority over time.

Baucom (1982) conducted another study on marital therapy in the context of controlled-outcome. Baucom randomly assigned 72 maritally distressed couples (mean age 32) to one of four treatment conditions: (1) quid pro quo contracting only, (2) communication training plus contracting, (3) communication training only, or (4) wait-list control. Outcome was assessed using trained observer rating of positive and negative behavior (MICS) (Marital Studies Center, 1975) and two self-report inventories of global marital satisfaction: (1) areas of change (Weiss et al., 1973) and (2) Locke-Wallace marital adjustment scale (Locke-Wallace, 1959). Comparisons of the contracting-only condition to the wait-list control group showed that contracting was superior at posttreatment on both self-report measure and on negative behavior as coded by the trained raters. Thus, contracting alone was superior to no treatment on three or four measures used. No significant changes in any of the measures were found from posttherapy to 3-month follow-up, indicating maintenance of treatment effects. These results indicate that the contracting was effective in helping alleviate marital distress.

All three studies of contracting alone (Crowe, 1978; Boelens et al. 1980; Baucom, 1982) showed that the use of behavioral contracts between spouses was superior to no treatment control conditions. In addition, the three studies complemented each other nicely in that one assessed the impact of treatment on the individual as well as the couple, and

two used both trained raters of marital interaction as well as self report measures to assess the impact of treatment on marital behavior and satisfaction. Thus, it was concluded that contracting approaches or, more specifically, the directive approach to specifying and increasing positive exchange in the dyad while decreasing coercive interaction, were effective in alleviating marital discord even when used alone.

Another contribution to the empirical literature on behavioral contracting is reported by Jacobson (Jacobson, 1984; Jacobson et al., 1985; Jacobson, Schmalting, Holtzworth-Monroe, 1987). This study compared the effectiveness of behavior exchange, communication problem-solving training, and the combination of these two approaches. As expected, all treated couples improved significantly more than wait-list couples. Consistent with prior research, the combined treatment was not significantly better than the component treatments. However, differences did emerge with regard to maintenance of treatment effects. Good maintenance of gains at six months was found for both groups receiving intervention targeted at increasing communication and problem-solving skills. However, the group receiving only behavior exchange (i.e., contracting) intervention showed a significant decline in marital satisfaction by six month follow-up. At longer follow-ups, the combined treatment was nonsignificantly superior to the behavior exchange treatment. Jacobson et al. (1985) concluded that the superiority of the combined treatment, relative to the behavior exchange treatment alone, is only temporary.

*Behavioral contracting and communication training.* Several earlier studies had examined the more usual pattern of behavioral marital therapy (BMT), which involves communication training as a concomitant or precursor to contracting (Jacobson, 1977; Jacobson, 1978; Turke-

witz & O'Leary, 1981; Hahlweg, Revenstorf, & Schindler, 1982; Baucom, 1982).

Jacobson (1977) was the earliest study to evaluate the effectiveness of a combination of problem solving and contracting as a marital intervention in the context of a controlled-outcome study. Ten married couples (mean age 31) were either assigned to a problem-solving and contingency contracting approach or a minimal contact/wait-list control group. Outcome was assessed using trained raters' observations of positive and negative verbal behavior (MICS) (Hops et al., 1972) and a self-report inventory of marital satisfaction (Locke-Wallace marital adjustment scale). Univariate t-tests at posttest revealed significant differences on both positive and negative couple interactions and for self-report of marital satisfaction. In all cases, the couples receiving communication and contracting training performed better than the control group. Thus, all three outcome measures showed the superiority of the contracting with communication training to not treatment. At one-year follow-up gains on global marital adjustment were maintained (only measure taken).

In a subsequent study, Jacobson (1978) assessed two different types of problem-solving/contracting approaches to marital therapy. Jacobson randomly assigned 32 couples (mean age 32) to one of four conditions: (1) problem-solving and good-faith contracts, (2) problem-solving and *quid pro quo* contracts, (3) a wait-list control, or (4) a placebo control group. Outcome was assessed using trained observers' ratings of positive, negative, and neutral verbal behavior (MICS) (Hops et al. 1971), as well as through two self-report indexes of global marital adjustment (the Locke-Wallace (1959), and Stuart and Stuart's (1973) marital happiness scale). Both of the problem-solving/contracting groups showed significant pre-post change in rate of negative verbal behavior and performed significantly bet-

ter than wait-list controls at posttest. Similarly, both treatment groups showed significant pre-post changes in rate of positive verbal behavior and performed significantly better than wait-list controls at posttest. The two self-report inventories also showed both treatment groups improving significantly and performing significantly better than the wait-list control at postassessment. Thus, both approaches to problem-solving/contracting therapy demonstrated their effectiveness relative to no treatment on all four outcome measures used. Couples were assessed on the Locke-Wallace at one-year follow-up, revealing maintenance of gains in global marital adjustment.

Turkewitz and O'Leary (1981) randomly assigned 30 couples (mean age 35.4 years) to one of three conditions: (1) a problem-solving/contracting condition, (2) a problem-solving/supportive-communication training condition, or (3) a wait-list control. Outcome measures used included the MAT, the primary communication inventory (PCI) (Navran, 1967), the positive feeling questionnaire (PFQ) (O'Leary, Fincham, Turkewitz, 1983), individual ratings of change, and behavioral ratings of communication behavior by trained raters (no reference given). Change scores on the three primary self-report inventories (MAT, PCI, PFQ) were highly intercorrelated. A multivariate analysis of variance simultaneously considering the MAT, PCI, and PFQ found significant differences between groups, with the two treated groups performing better than the wait-list control group. Taken as a cluster, the standardized self-report measures of change differentiated the treated from the untreated groups. However, due to the large variability in response to treatment, two measures (MAT and PFQ) did not show differences between treated and untreated groups when considered alone. Treated couples also performed significantly better than untreated couples on ratings of

positive change regarding their most important presenting marital problems. No change as a function of therapy was indicated from the observational measures.

The Turkewitz and O'Leary (1981) sample included a wide range of ages (from 25 to 61). Accordingly their finding that age was a predictor of success in therapy ( $r = -.76$  to  $-.52$ ) and moderated that effect of two therapy conditions is especially interesting. Separate tests of the young group (mean age 29.4) and the older group (mean age 40.9) revealed that only the young group differed from their respective young control group on the problem-solving/contracting condition. This indicates that problem-solving/contracting therapy may be more effective for younger couples than older couples.

In a study by Hahlweg, Revenstorf, Schindler (1982), 85 couples (mean age 33.7 year) were randomly assigned to one of five conditions: (1) problem-solving/contracting, (2) supportive-communication training, (3) problem-solving/contracting in a group format, (4) supportive-communication training in a group format, or (5) a wait-list control group. All couples were between the ages of 25 and 40. Outcome measures included the partnership questionnaire (Hahlweg, 1979), the conflict score (Hahlweg et al., 1980), a five-point rating scale of happiness in the marriage, and a behavioral rating of positive and negative communication behaviors using trained raters (MICS) (Hops et al., 1972).

Although specific contrasts were not reported, it is possible to reconstruct them from the information provided. Since there were no pretherapy differences between groups, we will present the results of t-tests conducted by Beach & O'Leary (1985) on the differences between posttherapy and postwait scores. With the exception of the quarreling subscales of the partnership questionnaire, all comparisons between the prob-

lem-solving/contracting groups and the wait-list control group were significant. Both problem-solving/contracting groups showed significantly higher scores at posttherapy than the control groups showed on the tenderness and communication subscales of the partnership questionnaire, on the conflict score, on the single-item general happiness score, and on positive communication behavior rated by trained observers. Both groups also showed significantly less negative communication behavior as rated by trained observers. The quarreling subscale scores were significantly lower for the couples in the group format problem-solving/contracting condition than for wait-list control couples, but not significantly lower for those in the couple format. Of the 14 possible comparisons, the two problem-solving/contracting groups performed better than the wait-list control group on 13 occasions.

In the Baucom (1982) study discussed earlier, comparisons of problem-solving/contracting condition with the wait-list condition indicated that the therapy group showed greater gains in the positive communication behavior as rated by trained observers, significantly greater reductions in negative communication behavior as rated by trained observers, and significantly more improvement on global marital satisfaction as measured by both the area of change questionnaire and the MAT. Follow-up data for the 13 of 17 couples who returned forms indicated no significant loss of gains to three months posttherapy. Thus the Baucom (1982) study found that contracting with communication training to be clearly superior to no treatment.

In a subsequent study, Melman, Baucom, and Anderson (1983) assigned 30 couples (mean age 35 years) to one of six treatment conditions: (1) immediate treatment by Therapist A, (2) immediate treatment by Therapist B (the 10 couples who received immediate single-therapist

treatment were included in the Baucom (1982) sample), (3) immediate treatment by Therapists A and B as a cotherapy team, (4) delayed treatment by Therapist A, (5) delayed treatment by Therapist B, and (6) delayed treatment by the cotherapy team. Treatment for all couples consisted of contracting and communication training. Outcome was assessed by the same measures used in the Baucom's (1982) study. No differences were found on the immediate treatment versus delayed treatment conditions or the single therapist versus team therapy groups. However, it was found that treated couples differed from wait-list control couples in frequency of negative communication, Locke-Wallace MAT scores, and the areas of change questionnaire. No difference was found by the trained observers in the frequency of positive communication. Thus on three of the four measures, contracting and communication-training groups showed gains over the control group.

Finally, the Jacobson (1978) study discussed above serves as further insight into the effectiveness of behavioral contracting in combination with communication training techniques. The study does indicate that superiority of this combined form of therapy, behavioral contracting and communication training, at six months posttherapy over no-treatment. The study also found that this combined form of therapy was more effective than standard BMT at 6 months posttherapy.

In an attempt to expand the effectiveness of a standard behavioral therapy program, Baucom, Sayers, and Sher (1990) did a comparison study. They included five groups in their study of 60 couples: (1) a 12 session behavioral marital therapy (BMT) only group which included communication training, problem-solving, and quid pro quo contracts; (2) a group which included 6 sessions of cognitive restructuring (CR) along with 6 sessions of BMT (the same topics were

covered as above, but with less time allowed for actual practice of the techniques); (3) a group with the same type of 6 session BMT along with 6 sessions of emotional expressiveness training (EET); (4) a group with 3 sessions of CR followed by the same 6 session BMT, and finally 3 sessions of EET; (5) and finally a wait-list control group. The study found that there were not significant differences between the active treatments on most of the measures. The only group that did not improve significantly in marital adjustment (measured by the Dyadic Adjustment Scale (DAS)) over the control group was the men in the CR + BMT group. No treatment condition for either gender demonstrated significant increases in positive communication as rated by trained observers. Couples in the CR + BMT condition and women in the BMT only condition showed significant changes on the two standard cognitive measures of relationship beliefs and partner expectations. Couples in the BMT + EET conditions evidenced affective changes on all three variables rated by trained observers. Baucom et al. note that three sessions (CR + BMT + EET) did not appear sufficient for learning the skills of either CR or EET. At six month follow-up no significant changes were found. The authors point out that longer term therapy to ensure all skills are learned may be useful in improving the effectiveness of behavioral marital therapy.

There was considerable consistency across studies of contracting with communication training. They concluded that contracting in conjunction with communication training influenced a number of facets of the marital relationship and was effective whether measured from the perspective of trained observers or via self-report measures. There is also some evidence that this approach might be more effective with younger couples than with older couples, although the finding

needs replication. Thus the combination of communication and contracting approaches emerged as a very viable form of marital therapy.

*Communication training.* A randomly sampled group of marital therapists (Geiss & O'Leary, 1981) rated poor communication as the most frequent and destructive problem presented by couples entering therapy. This indicates the fact that many different schools of marital therapy view effective communication as critical for a well-functioning marriage. Again, good descriptions of communication training are provided by Stuart (1980) and by Jacobson and Margolin (1979).

The communication approach to marital therapy has yielded the greatest number of peer-reviewed studies (Hickman & Baldwin, 1971; Ely, Guernsey, & Stover, 1973; Epstein & Jackson, 1978; Hahlweg et al., 1982; Turkewitz & O'Leary, 1981; Baucom, 1982). Despite this consensus, the outcome studies provide somewhat inconsistent pattern of results, as some studies show that couples' communication patterns change (as measured by trained raters and according to spousal reports), whereas other studies fail to show these effects. Likewise, most but not all studies, showed an impact of treatment on increasing marital satisfaction.

The earliest controlled-outcome study of communication training on marital difficulties was performed by Hickman and Baldwin (1971). They randomly assigned 30 couples (mean age not reported), who had been referred to the conciliation court, to one of three conditions: (1) communication training in a couples format, (2) communication training using a programmed text format, or (3) a wait-list control group. Outcome was assessed using a semantic differential measure (no reference given) and by comparing the number of spouses in each group willing to sign reconciliation agreements. Only the communication training

in couples format produced significantly more reconciliation agreements and performed better on the semantic differential measure than the control group.

Ely, Guernsey, and Stover (1973) assigned 23 couples (mean age 32.6 years) randomly to one of two conditions: (1) a communication-training condition, or (2) a wait-list control group. Outcome was assessed using: (1) the primary communication inventory (PCI) (Navran, 1967), (2) trained observers' ratings of two categories of communication behavior during role-play conditions (no reference given), (3) trained observers' ratings of feelings clarification in response to the Ely feeling questionnaire, and (4) the conjugal life questionnaire, a global self-report measure of marital harmony.

Couples in the treatment condition increased their communication skills significantly as measured by the observational measures and by the PCI. However, they did not change significantly more than the control group on the global measure of marital satisfaction. Since no reference is given for the measure of global satisfaction it is difficult to determine if the lack of difference is due to treatment truly having no effect on couples' satisfaction, or a failure of an unvalidated measure to be responsive to such change.

In the study described earlier by Epstein and Jackson (1978), one of the conditions included was communication-training condition which emphasized the ability to communicate in a precise, clear, and assertive manner. Of the 11 categories rated by trained observers, there were significant improvements for the communication group relative to the control group on frequency of the three categories: assertive requests, rate of disagreement, and rate of attacks. There were also significant changes on spouse-perceived empathy in the communication group relative to the control group. Thus, the communication group improved on 4 of

14 possible comparisons, which provides moderate evidence of treatment efficacy.

Hahlweg et al. (1982), whose study was discussed earlier in the communication/contracting section, also included two communication-training conditions, which emphasized stating feelings in a clear, direct, open way without accusing or blaming the spouse, active listening, and appropriate metacommunication for clarifying ambiguous statements. The two conditions differed only by one being in group and one being in couple format. Analyses indicated significant differences between groups on all measures except the observational ratings of positive communication behavior. The couple format produced significant changes on all measures except positive communication behavior. The group format was significantly different from the control group on only observational rating of negative communication behavior.

Hahlweg et al. (1982) report combined follow-up data for the group and couple format. Beach and O'Leary (1985) suggest that in light of the differences initially found between the two communication groups, the conclusions drawn about the follow-up data is questionable. Therefore, we will limit our conclusions to the posttherapy results.

The Turkewitz and O'Leary (1981) study discussed earlier included a communication-training-only group, which was found to be superior to no treatment on the MAT, PCI, and PFQ (the three major marital inventories used). Age was found to have a strong effect on response to treatment. Older couples (mean age = 40.9) improved significantly more than the older control group on the Locke-Wallace MAT and the PCI. However, younger couples (mean age = 29.4) did not show improvement on these measures over the younger control group. Thus Turkewitz and O'Leary (1981) found that communication therapy alone was effective, but moderated by the age of the

couple. It is important to note that the study did not find any significant changes on their observational measures of communication behavior.

The Baucom (1982) study discussed earlier included a communication-training-only condition. Couples in this group received training in problem-solving skills including stating problems clearly, discussing possible alternatives, and coming to an agreement on a mutually acceptable solution. In addition, couples were taught to avoid using guilt and to avoid becoming sidetracked. It was found that the communication training group was superior to the wait-list control group on all dependent measures except positive communication behavior rated by trained observers. Thus, Baucom (1982) found strong support for the efficacy of communication training alone in the treatment of marital distress.

Close examination of the reviewed studies revealed that lack of effectiveness was found when the outcome measures used were unstandardized or poorly validated. More specifically, in the Ely et al. (1973) study no effect was found on an unvalidated measure of marital satisfaction; in the Epstein and Jackson (1978) study changes were found on only 4 of 14 disparate change measures 11 of which were from an unvalidated observational measure; and Turkewitz & O'Leary (1981) found change on their standardized measures of marital satisfaction and communication but not on their unstandardized observational measure. Thus, it was concluded from these studies that poorly standardized or poorly validated measures are unlikely to show change as a function of marital therapy and hence should be avoided in marital therapy outcome research. When the error introduced by unreliable measurement was removed, communication training alone emerged as a well-documented treatment modality (Beach & Bauserman, 1990).

It is interesting to note that the studies

of group approaches (i.e., Ely et al., 1973; Epstein & Jackson, 1978; and the group condition in Hahlweg et al., 1982) all showed relatively weak outcomes relative to the control group, while the couples format approaches (Baucom, 1982; Hahlweg et al., 1982; Hickman & Baldwin, 1971; Turkewitz & O'Leary, 1981) tended to make stronger showings. It is tempting to conclude that the couple format is superior to the group format in light of the Hahlweg et al. (1982) direct comparison, but this hypothesis needs further replication.

*Cognitive-behavioral techniques.* Recently behavioral marital therapy has been elaborated through the addition of attention to attributions partners make for each others behavior, standards they use to evaluate their partners and their relationships, assumptions about relationship roles which they bring with them to marriage, and expectancies and selective perceptions which may influence their view of their relationship (Epstein & Baucom, 1989). These authors have provided a treatment manual which specifically addresses problems in the internal dialogues of spouses which may be dysfunctional for the relationship and integrates these cognitive interventions with the communication and behavioral approaches described in earlier manuals (Baucom & Epstein, 1990).

In an important addition to the field, Baucom and Lester (1986) examined a combination treatment of cognitive-behavioral techniques and traditional behavioral marital therapy (BMT) techniques. The cognitive techniques focused almost exclusively on causal attributions for marital events and individual and relationship standards. Twenty-four maritally distressed couples were used in the study and the two authors served as therapists. Results showed both treatments to be superior to a wait-list control group, with neither active treatment clearly superior to the other at post-test or

at a six-month follow up. Examination of within-group change patterns, however, suggested that the cognitive interventions were exerting consistent positive effects on cognitive variables in a way that was not true of the behavioral intervention. Thus, to the extent that these cognitive variables are important in marital satisfaction or the process of therapeutic change, the Baucom and Lester (1986) study indicates a promising set of techniques to be used in effecting cognitive change. Interestingly, the study did not demonstrate that marital therapy will be enhanced by the routine addition of a cognitive intervention component. Rather, the promise of this study lies in the possibility that therapists can choose the right cognitive intervention at the right point in therapy for the right couple (cf. Baucom, 1989). The Baucom and Lester (1986) study, therefore, leaves intact the conclusion that adding new components to existing behavioral interventions leaves average outcome unchanged.

*Conclusions.* Two observations that emerged from our review of the literature are disturbing. The first concerns the extent to which the field of marital therapy was (and is) based on relatively few peer-reviewed studies comparing treatment to no treatment. There are a relatively small number of well-controlled, peer-reviewed studies even for the categories of communication skills and behavioral contracting approaches, the two categories that are best represented. Even more striking was the paucity of outcome studies investigating the effectiveness of other potentially valuable approaches to marital intervention from systems, gestalt, or analytic traditions. Second, despite several studies that examine "combination" approaches, there was no evidence that any of them enhanced the overall outcome of marital therapy. Thus, we appeared to be approaching an asymptote with regard to effectiveness in

marital therapy with no breakthroughs being promised by the traditional approach to marital therapy outcome research.

The second observation is particularly disturbing because, as mentioned earlier, the effectiveness of marital therapy has not reached a level where the field can rest content. Although gains made following some forms of marital therapy (i.e., communication with contracting) remained relatively stable for up to one year following therapy (Hahlweg, Baucom, & Markman, 1988), rates of divorce for couples completing such therapy were between 10 and 15% for this same period (Hahlweg, Revenstorf, & Schindler, 1982), and rates of relapse after one year could not be estimated reliably. Further, when the effects of marital therapy are considered from the standpoint of how many couples moved from the distressed range to the nondistressed range, improvement rates tended to be about 50% or less (Jacobson, et al., 1984).

Cognitive marital techniques and techniques focused on insight into unspoken or unrecognized feelings toward the partner have very recently been added to the clinician's armamentarium. Indeed, some authors have already heralded the beginnings of a "cognitive-behavioral-affective" approach to marital therapy (Margolin, 1987). However, while technological options continue to proliferate, there is no evidence of enhancement of the overall effectiveness of marital therapy or enhancement of the percentage of couples improving in marital therapy (Baucom & Epstein, 1990). We conclude that greater emphasis needs to be placed on addressing the thorny issue of enhancing marital therapy outcomes. Now more than ever, it would appear that attention must be directed toward the specification and testing of clinically useful change models in marital therapy, particularly those models that specify the mediating goals of marital therapy.

#### Evaluation of Findings: Methodological Considerations

Although all the studies reviewed here have met minimal criteria of internal validity sufficiently well to allow them to be a part of the empirical justification of the practice of marital therapy, they vary in their methodological adequacy on other counts. (For a complete discussion of methodological errors in marital outcome research, see O'Leary & Turkewitz, 1978.) We will review these methodological considerations and explore their potential ramifications in this section.

*Small sample size.* Small sample sizes decrease power or the ability to detect treatment differences (O'Leary & Turkewitz, 1978). They also make negative results difficult to interpret. Many of the studies reviewed here, though controlled and adding information to the field, had small sample sizes. This fact may cause us to question what some of the null findings actually mean. It could be with larger sample sizes a difference between groups would have been found. On the other hand, small sample size can cause us to raise questions even when significant differences were found, because some statistical tests are more prone to false positives with small sample sizes.

*YAVIS samples.* There is a tendency in the studies reviewed for the subjects to be young. Whether or not they are also attractive, intelligent, and successful (i.e., YAVIS) (Williams, 1956) is difficult to ascertain from the reported demographics. However, given the potential moderating effects of these variables (e.g., Turkewitz & O'Leary, 1981), samples should include a wide range of age or else conclusions should be restricted to the particular age group in the study.

*Unspecified subject characteristics.* Most although not all the studies reviewed here specified the method of subject recruitment, inclusion and exclusion criteria, age, and number of years

married. Less often reported were number of children, educational level, length of distress, and specific problem areas. Specification of these variables is important so that other researchers can attempt replication of the research and clinicians can discern if the treatment program described is likely to have similar effects for their client population.

*Small therapist samples.* The studies we have reviewed vary widely on the number of therapist used (from one to six). This issue is important because of its likely impact on generalizability of the results. However, it is probably more important to specify therapist characteristics (e.g., marital status, training, educational background, etc.). This type of information is important both for future replication of the findings and to give some guidelines to clinicians about the potential necessary prerequisites of conducting the therapy (Beach & O'Leary, 1985).

*Multiple outcome criteria.* When communication change and other behavior is measured through both self-report and observational measures, the converging evidence across measurement methods increases our confidence that the changes detected by both measures are assessing the variables intended (see Campbell & Fisk, 1959). Not all studies reviewed here used more than one measure of change, nor did all use well-validated and standardized measures. This lack of associated validity data becomes a problem when changes on the measure are nonsignificant, but most of all it presents serious problems for comparison across studies even when the findings are significant.

*Comprehensive assessment.* Marital therapy outcome is composed of three relatively distinct outcomes: the outcome for the relationship, the outcome for the husband, and the outcome for the wife. Assessment of each of these outcomes may provide information which is clinically important and distinct from the

information which is provided by the other two. This information is relatively indistinguishable for the studies reviewed here, because all the studies focused on the combined data of the spouses (c.f., Baucom, Sayers, & Sher (1990)).

Marital quality is generally conceptualized as a multiple construct. Marital adjustment and happiness are not the only variables of interest of the clinician attempting to increase marital quality. Long-term commitment to marriage and marital stability are also important to assess posttherapy and at follow-up.

*Treatment specification.* Failure to specify the therapeutic procedures and training received makes replication of the treatment in future research or in clinical practice almost impossible. Therefore, for any treatment past the preliminary stages of outcome work, it is important to specify the treatment in detailed manuals.

#### Conclusions from the Outcome Literature

It is possible to say both that there is a firm empirical foundation for the increasing concern with enhancing or maintaining marital health and for the selection of certain marital therapy techniques. Persons charged with the responsibility to make treatment recommendations or to implement marital interventions have an ethical responsibility to choose the one most likely to lead to enhanced functioning for the couple. Fortunately, there are readily available sources of information about the approaches which are currently the best tested and apparently most efficacious.

#### Implications for Employee Assistance Programs

Marital therapy can be effective, particularly when it is directive and focussed. Detailed manuals are available which provide an introduction to the ap-

proaches which have been documented to be effective, and therapists specializing in these approaches are increasingly available in most communities. However, marital therapy is not typically covered by third party payers and this limits its availability to many persons who might otherwise benefit. In addition, no research to date has focussed on the best institutional framework for administering marital therapy. Indeed, it has only been in the last several years that researchers even began to ask about the possible importance of follow-up for long term maintenance. Nevertheless, recent evidence suggests that outcomes may be less favorable at two years and longer past the end of therapy (Jacobson, 1989; Snyder & Wills, 1989; Snyder, Wills, & Grady-Fletcher, 1991), prompting calls for greater attention to the problem of maintenance.

It seems likely that employee assistance programs are uniquely well situated to provide follow-up after marital therapy and so potentially enhance the maintenance experienced by couples. In some cases it may be as simple as asking spouses if they have recently thought about or used any of the strategies or skills they discussed in therapy. For many couples this is likely to be a sufficient prompt to reinstate the relationship enhancing behaviors which produced positive change in therapy. For other couples it may be necessary to suggest follow-up sessions with their marital therapist (cf. Jacobson, 1989). In either case, the EAP professional could monitor couples for a longer period than is typically feasible by therapists in private practice, and prompt appropriate action at a stage when intervention is most likely to be useful. Clearly, research on the best way to involve EAPs in the process of following couples after the completion of formal marital therapy is needed.

### Summary

In this paper we have argued that EAP professionals are likely to find themselves confronted with persons experiencing marital problems often. If these problems are ignored or dealt with lightly, they are unlikely to go away and are quite likely to precipitate various health or "individual" psychological problems such as depression. From the standpoint of optimal health care, secondary prevention, or cost containment, appropriate referral for marital therapy seems wise. We have also argued that several of the current approaches to marital therapy have sufficient evidence supporting their effectiveness that they should be considered reasonably effective. We reviewed in detail the primary data which provide the basis for this conclusion, as well as reviewing briefly the various methodological considerations which are important in examining the primary literature. Of course, the field of marital therapy is still developing and most marital therapists agree that it should be possible to further improve marital therapy. One area which has recently been a focus of calls for improvement is the area of maintenance of gains. And it is in this area which EAP professionals may provide a unique contribution to the enhancement of long term marital therapy outcome. Hopefully the next several years will see greater attention paid to the potential power of EAPs in enhancing marital therapy outcome.

### REFERENCES

- Alberti, R.E., & Emmons, M.L. (1974). *Your Perfect Right* (2nd ed.). San Luis Obispo, CA: Impact.
- Azrin, N.H., Naster, B.J., & Jones, R. (1973). Reciprocity counseling: A rapid learning based procedure for marital counseling. *Behavior Research and Therapy*, 11, 365-362.
- Barlow, D.H., O'Brien, G.T., & Last, C.G. (1984). Couples treatment of agoraphobia. *Behavior Therapy*, 15, 41-58.
- Barnett, L.R., & Nietzel, M.T. (1979). Relationship of instrumental and affectional behaviors and self-esteem to marital satisfaction in distressed and nondistressed couples. *Journal of Consulting and Clinical Psychology*, 47, 946-957.
- Barrett-Lennard, G.T. (1962). Dimensions of therapist response as causal factors in therapeutic change. *Psychological Monographs*, 76 (43, 562).
- Baucom, D.H. (1982). A comparison of behavioral contracting and problem solving/communications training in behavioral marital therapy. *Behavior Therapy*, 13, 162-174.
- Baucom, D.H. (1989). The role of cognitions in behavioral marital therapy: Current status and future directions. *The Behavior Therapist*, 12, 3-6.
- Baucom, D.H., & Epstein, N. (1990). *Cognitive-behavioral marital therapy*. New York: Brunner/Mazel.
- Baucom, D.H., Sayers, S.L., & Sher, T.G. (1990). Supplementing behavioral marital therapy with cognitive restructuring and emotional expressiveness training: An outcome investigation. *Journal of Consulting and Clinical Psychology*, 58, 636-645.
- Baucom, D.H. & Hoffman, J.A. (1986). The effectiveness of marital therapy: Current status and application to the clinical setting. In N.S. Jacobson, & A.S. Gurman (Eds.) *Clinical Handbook of Marital Therapy* (pp. 597-620). New York: Guilford.
- Baucom, D.H. & Lester, G.W. (1986). The usefulness of cognitive restructuring as an adjunct to behavioral marital therapy. *Behavior Therapy*, 17, 385-403.
- Baucom, D.H., & Sayers, S.L. (1988, November). *Expanding Behavioral Marital Therapy*. Paper presented to the 22nd Annual convention of the Association for Advancement of Behavior Therapy, New York.
- Beach, S.R.H., Arias, I., & O'Leary, K.D. (1987). The relationship of social support to depressive symptomatology. *Journal of Psychopathology and Behavioral Assessment*, 8, 305-316.
- Beach, S.R.H. & Bauserman, A.K. (1990). Enhancing the effectiveness of marital therapy. In F.D. Fincham & T.N. Bradbury (Eds.), *The Psychology of Marriage: Basic Issues and Applications*. New York: Guilford.
- Beach, S.R.H., Martin, J.K., Blum, T.C., & Roman, P.M. (in press). Effects of marital and coworker relationships on negative affect: Testing the central role of marriage. *American Journal of Family Therapy*.
- Beach, S.R.H., Sandeen, & O'Leary, K.D. (1990). *Depression in Marriage: A Model for Etiology and Treatment*. New York: Guilford Press.
- Beach, S.R.H. & O'Leary, K.D. (1985). Current status of outcome research in marital therapy. In L. L'Abate (Ed.) *The Handbook of Family Psychology and Therapy* (pp. 1035-1072). Homewood, IL: The Dorsey Press.
- Billings, A. (1979). Conflict resolution in distressed and nondistressed married couples. *Journal of Consulting and Clinical Psychology*, 47, 368-376.
- Billings, A., Kessler, M., Gromberg, C., & Weiner, S. (1979). Marital conflict-resolution of alcoholic and nonalcoholic couples during sobriety and experimental drinking. *Journal of Studies on Alcohol*, 3, 183-195.
- Birchler, G.R., Weiss, R.L. & Vincent, J.P. (1975). Multimethod analysis of social reinforcement exchange between maritally distressed and nondistressed spouse and stranger dyads. *Journal of Personality and Social Psychology*, 31, 349-360.
- Boelens, W., Emmelkamp, P., MacGillivray, D., & Markvoort, M. (1980). A clinical evaluation of marital treatment: Reciprocity counseling versus system-theoretic counseling. *Behavioral Analysis and Modification*, 4, 85-96.
- Brown, G.W., & Andrews, B. (1986). Social support and depression. In M.H. Appley & R. Trumbull (Eds.), *Dynamics of Stress* (pp. 257-282). New York: Plenum Press.
- Brown, G.W., & Harris, T. (1986). Establishing causal links: The Bedford College Studies of depression. In H. Katschnig (Ed.), *Life Events and Psychiatric Disorders: Controversial Issues*. Cambridge, UK: Cambridge University Press.
- Campbell, D.T., & Fiske, D.W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*.
- Campbell, D.T., & Stanley, J.C. (1966). *Experimental and Quasi-Experimental Designs for Research*. Chicago: Rand McNally.
- Christensen, A. (1987). Detection of conflict patterns in couples. In K. Hahlweg & M.J. Goldstein (Eds.), *Understanding Major Mental Disorder: The Contribution of Family Interaction Research*. New York: Family Press.
- Crowe, M.J. (1978). Conjoint marital therapy: A controlled outcome study. *Psychological Medicine*, 8, 623-636.
- Ely, A.L., Guernsey, B.G., & Stover, L. (1973).

- Efficacy of the training phase of conjugal therapy. *Psychotherapy: Theory, Research and Practice*, 10, 201-207.
- Emery, R.E. (1988). *Marriage, Divorce, and Children's Adjustment*. Newbury Park, Ca.: Sage.
- Epstein, N., & Baucom, D.H. (1989). Cognitive-Behavioral marital therapy. In A. Freeman, K. M. Simon, L. E. Beutler, & H. Arkowitz (Eds.), *Comprehensive Handbook of Cognitive Therapy*. New York: Plenum.
- Epstein, N., & Jackson, E. (1978). An outcome study of short term communication training with married couples. *Journal of Consulting and Clinical Psychology*, 46, 207-212.
- Falloon, I.R.H., Boyd, J.L., McGill, C.W., Ranzani, J., Moss, H.B., & Gilderman, A.M. (1982). Family management in the prevention of exacerbations of schizophrenia. *New England Journal of Medicine*, 306, 1437-1440.
- Fincham, F.D., Beach, S.R.H., Nelson, G.M. (1987). Attribution process in distressed and nondistressed couples: 3. Causal and responsibility attributions for spouse behavior. *Cognitive Therapy and Research*, 11, 71-86.
- Floyd, F., & Markman, H. (1983). Observational biases in spouse observation: Toward a cognitive-behavioral model of marriage. *Journal of Consulting and Clinical Psychology*, 51, 450-457.
- Frenken, J. (1976). *Afkeer van Sexualiteit*. Deventer: Van Loghumd Slaterus.
- Geiss, S.K., & O'Leary, K.D. (1981). Therapist ratings of frequency and severity of marital problems: Implications for research. *Journal of Marriage and Family Therapy*, 7, 515-520.
- Glenn, N.D. (1991). The recent trend in marital success in the United States. *Journal of Marriage and the Family*, 53, 261-270.
- Glick, P.C. (1984). How American families are changing. *American Demographics*, 6, 20-27.
- Goldman, A. (1987). *Systematically and Emotionally Focused Marital Therapies: A Comparative Outcome*. Unpublished doctoral dissertation. University of British Columbia, Vancouver, BC., cited by Greenberg & Johnson, 1988.
- Greenberg, L.S. & Johnson, S.M. (1988). *Emotionally Focused Therapy for Couples*. New York: Guilford.
- Gottman, J.M. (1979). *Marital Interaction: Experimental investigations*. New York: Academic Press.
- Gottman, J.M., Markman, H., Notarius, C. (1977). The topography of marital conflict: a sequential

- analysis of verbal and nonverbal behavior. *Journal of Marriage*, 39, 461-477.
- Gurman, A.S. (1981). Integrative marital therapy: Toward the development of an interpersonal approach. In S.H. Budman (Ed.), *Forms of Brief Therapy*. New York: Guilford.
- Hahlweg, K. (1979). Konstruktion und Validierung des Partnerschaftsfragebogens. *PfB. Z. Klin. Psychol.*, 8, 17-40.
- Hahlweg, K., Baucom, D.H., & Markman, H. (1988). Recent advances in therapy and prevention. In I.R.H. Falloon (Ed.), *Handbook of Behavioral Family Therapy* (pp. 413-448). New York: Guilford.
- Hahlweg, K., Kraemer, M., Schindler, L., & Revenstorf, D. (1980). Partnerschaftsprobleme: Eine empirische analyse. *Z. Klin. Psychol.*, 9, 159-169.
- Hahlweg, K., Revenstorf, D. & Schindler, L. (1982). Treatment of marital distress: Comparing formats and modalities. *Advances in Behavior Research and Therapy*, 4, 57-74.
- Hickman, M.E., & Baldwin, B.A. (1971). Use of programmed instruction to improve communication in marriage. *Family Coordinator*, 20, 121-125.
- Hooley, J.M. (1986). Expressed emotion and depression: Interactions between patients and high- vs. low-expressed-emotion spouses. *Journal of Abnormal Psychology*, 95, 237-246.
- Hops, H., Wills, T.A., Patterson, G.R., & Weiss, R.L. (1971). Marital interaction coding system. Eugene: University of Oregon and Oregon Research Institute. (Order from ASIS/NAPS, c/o Microfiche Publications, 305 e. 46th Street, New York, N.Y. 10017.)
- Hops, H., Wills, T.A., Patterson, G.R., & Weiss, R.L. (1972). Marital interaction coding system. Unpublished manuscript, University of Oregon and Oregon Research Institute. (See NAPS Document 02077 for 29 pages of supplementary material. Order from ASIS/NAPS, c/o Microfiche Publications, 440 Park Avenue South, New York, N.Y. 10016.)
- Jacobson, N.S. (1977). Problem solving and contingency contracting in the treatment of marital discord. *Journal of Consulting and Clinical Psychology*, 45, 92-100.
- Jacobson, N.S. (1978). Specific and non-specific factors in the effectiveness of a behavioral approach to the treatment of marital discord. *Journal of Consulting and Clinical Psychology*, 46, 442-452.

- exchange. *Journal of Personality and Social Psychology*, 45, 587-597.
- Liberman, R.P. (1970). Behavioral approaches in family and couple therapy. *American Journal of Orthopsychiatry*, 40, 106-118.
- Locke, H., & Wallace, K. (1959). Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 21, 251-255.
- Margolin, G. (1981). Behavior exchange in happy and unhappy marriages: A family cycle perspective. *Behavior Therapy*, 12, 329-343.
- Margolin, G. (1987). Marital therapy: A cognitive-behavioral-affective approach. In N.S. Jacobson (Ed.) *Psychotherapists in Clinical Practice* (pp 232-285). New York: Guilford.
- Margolin, G. & Wampold, B.E. (1981). Sequential analysis of conflict and accord in distressed and nondistressed marital partners. *Journal of Consulting and Clinical Psychology*, 49, 554-567.
- Marital Studies Center (1975). Marital interaction coding system. Unpublished manuscript, University of Oregon.
- Melman, S.K., Baucom, D.H., & Anderson, D. (1983). Effectiveness of cotherapists versus single therapists and immediate versus delayed treatment in behavioral marital therapy. *Journal of Consulting and Clinical Psychology*, 51, 258-266.
- Noller, P., & Venardos, C. (1986). Communication awareness in married couples. *Journal of Social and Personal Relationships*, 3, 31-42.
- O'Leary, K.D., Fincham, F., & Turkewitz, H. (1983). Assessment of positive feelings toward spouse. *Journal of Consulting and Clinical Psychology*, 51, 949-951.
- O'Leary, K.D. & Turkewitz, H. (1978). Methodological errors in marital and child treatment research. *Journal of Consulting and Clinical Psychology*, 46, 747-758.
- O'Leary, K.D. & Wilson, G.T. (1987). *Behavior therapy: Application and outcome*, pp. 253-267. Englewood Cliffs, NJ: Prentice Hall. 2nd ed.
- Patterson, G.R., & Reid, J.B. (1970). Reciprocity and coercion: Two facets of social systems. In C. Neuringer & J.L. Michael (Eds.), *Behavior Modification in Clinical Psychology*. New York: Appleton-Century-Crofts.
- Revenstorf, D., Hahlweg, K., Schindler, L., & Vogel, B. (1984). Interaction analysis of marital conflict. In K. Hahlweg & N.S. Jacobson (Eds.), *Marital Interaction: Analysis and Modification*. New York: Guilford.
- Jacobson, N.S. (1984). A component analysis of behavioral marital therapy: The relative effectiveness of behavior exchange and communication/problem-solving training. *Journal of Consulting and Clinical Psychology*, 52, 295-305.
- Jacobson, N.S. (1989). The maintenance of treatment gains following social learning-based marital therapy. *Behavior Therapy*, 20, 325-336.
- Jacobson, N.S., Follette, V.M., Follette, W.C., Holtzworth-Monroe, A., Katt, J.L., & Schmalting, K.B. (1985). A component analysis of behavioral marital therapy: 1-year follow-up. *Behavior Research and Therapy*, 23, 549-555.
- Jacobson, N.S., Follette, W.C., & McDonald, D.W. (1982). Reactivity to positive and negative behavior in distressed and nondistressed married couples. *Journal of Consulting and Clinical Psychology*, 50, 706-714.
- Jacobson, N.S., & Margolin, G. (1979). *Marital Therapy: Strategies Based on Social Learning and Behavior Exchange Principles*. New York: Brunner/Mazel.
- Jacobson, N.S., Schmalting, K.B., & Holtzworth-Monroe, A. (1987). Component analysis of behavioral marital therapy: 2-year follow-up and prediction of relapse. *Journal of Marital and Family Therapy*, 13, 187-195.
- Jacobson, N.S., Follette, W.C., Revenstorf, D., Baucom, D.H., Hahlweg, K., & Margolin, G. (1984). Variability in outcome and clinical significance of behavioral marital therapy: A reanalysis of outcome data. *Journal of Consulting and Clinical Psychology*, 52, 497-504.
- Jacobson, N.S., Waldron, H., & Moore, D. (1980). Toward a behavioral profile of marital distress. *Journal of Consulting and Clinical Psychology*, 48, 696-703.
- Johnson, S.M., & Greenberg, L.S. (1985a). The differential effects of experiential and problem-solving interventions in resolving marital conflict. *Journal of Consulting and Clinical Psychology*, 53, 175-184.
- Johnson, S.M., & Greenberg, L.S. (1985b). Emotionally focused marital therapy: An outcome study. *Journal of Marital and Family Therapy*, 11, 313-317.
- Koren, P., Carlton, K., & Shaw, D. (1980). Marital conflict: Relations among behaviors, outcomes, and distress. *Journal of Consulting and Clinical Psychology*, 48, 460-468.
- Levenson, R.W., & Gottman, J.M. (1983). Marital interaction: Physiological linkage and affective

- Sager, C.J. (1976). *Marriage Contracts and Couple Therapy*. New York: Brunner/Mazel.
- Sager, C.J., Gundlach, R., Kremer, M., Lenz, R., & Royce, J.R. (1968). The married in treatment: Effects of psychoanalysis on the marital state. *Archives of General Psychiatry*, 19, 205-217.
- Schutz, W.C. (1967). Mate, a Firo scale; husbands's form, wife's form. Palo Alto, CA.
- Skyner, A.C.R. (1969). A group analytic approach to conjoint family therapy. *Journal of Child Psychology and Psychiatry*, 10, 81-106.
- Skyner, A.C.R. (1976). *One Flesh, Separate Persons: A Systems Approach to Family Therapy*. New York: Grune & Stratton.
- Skyner, A.C.R. (1981). An open-systems, group-analytic approach to family therapy. In A.S. Gurman & D.P. Kniskern (Eds.), *Handbook of Family Therapy*. New York: Brunner/Mazel.
- Smith, D.A., Vivian, D., & O'Leary, K.D. (1990). Longitudinal prediction of marital discord from premarital expressions of affect. *Journal of Consulting and Clinical Psychology*, 58, 790-798.
- Snyder, D.K. & Wills, R.M. (1989). Behavioral versus insight oriented marital therapy: Effects on individual and interspousal functioning. *Journal of Consulting and Clinical Psychology*, 57, 39-46.
- Snyder, D.K., Wills, R.M., & Grady-Fletcher, A. (1991). Longterm effectiveness of behavioral versus insight-oriented marital therapy: A 4-year follow-up study. *Journal of Consulting and Clinical Psychology*, 59, 138-141.
- Somers, A.R. (1979). Marital status, health, and the use of health services. *Journal of Marriage and the Family*, 41, 267-285.
- Stuart, R.B. (1969). Operant-interpersonal treatment for marital discord. *Journal of Consulting and Clinical Psychology*, 33, 675-682.
- Stuart, R.B., & Stuart, F. (1973). *Marital Pre-counseling Inventory*. Champaign, IL: Research Press.
- Stuart, R.B. (1980). *Helping Couples Change: A Social Learning Approach to Marital Therapy*. New York: Guilford.
- Turkewitz, H. & O'Leary, K.D. (1981). A comparative outcome study of behavioral marital therapy and communication therapy. *Journal of Marital and Family Therapy*, 7, 159-169.
- Watzlawich, P., Weakland, J., & Fisch, R. (1974). *Change: Principles of Problem Formation and Problem Resolution*. New York: W.W. Norton.
- Weiss, R.L. & Heyman, R.E. (1990). Marital distress and therapy. In A.S. Bellack, M. Hersen, & A. Kazdin (Eds.) *International Handbook of Behavior Modification* (2nd ed.). New York: Plenum.
- Weiss, R.L., Hops, & Patterson, G.R. (1973). A framework for conceptualizing marital conflict, a technology for analyzing it, some data for evaluating it. In L.A. Hamerlynck, L.C. Handy, & E.J. Mash (Eds.), *Behavior Change: Methodology, Concepts and Practice* (pp. 309-342). Champaign, IL: Research Press.
- Williams, W.S. (1956). Class differences in the attitudes of psychiatric patients. *Social Problems*, 4, 240-244.

**ACKNOWLEDGEMENTS.** Preparation of this manuscript was made possible by NIMH Grant# 41487-05.

*Direct correspondence to:* Dr. Steven Beach, Department of Psychology, University of Georgia, Athens, Ga. 30602-3013.