To Arrive Where We Began: A Reappraisal of Cognition in Marriage and in Marital Therapy

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The explosion of research on cognition in marriage and in marital therapy has had little impact on everyday interventions with couples. To examine how research can contribute more directly to clinical practice, the evolution of marital cognition research is traced and its contribution to enhancing marital therapy is evaluated. Although several desiderata are offered to improve current research on cognitive interventions, it is concluded that a more complete understanding of the role of cognition in marriage and marital therapy requires reappraisal of the assumptions made about cognition. An analysis is therefore offered of the domain of cognition, and its implications for evaluating the efficacy of cognitive interventions are outlined.

"Would you tell me, please, which way I ought to go from here?" "That depends a good deal on where you want to get to," said the Cat.

Alice in Wonderland

Marital and family therapists recognized long ago the importance of cognitive factors such as expectations and interpretations in the generation, maintenance, and alleviation of relationship dysfunction (e.g., Dicks, 1953). In fact, Wile (1981, p. 3) noted that "The need to challenge fantasy based

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expectations and to reorient relationships on more rational grounds" is the one issue on which marital therapists of diverse orientations tend to agree, a sentiment reinforced by O'Leary and Turkewitz's (1978, p. 247) observation that consideration of expectations comprises "much of what occurs in good marital therapy." Until recently, however, claims regarding the role of cognitive factors in relationship dysfunction and in marital and family therapy were based largely on intuition and/or clinical observation. Although important as sources of knowledge in both research and therapy, the contribution of intuition and clinical observation to a science of family functioning will not be realized fully in the absence of empirical evaluation.

The past decade has been important in this regard because it witnessed the beginning of systematic investigation of cognition in marriage. Following recognition of the potential value of psychological research and theory on cognition for understanding marital dysfunction (e.g., Jacobson & Margolin, 1979; Strayhorn, 1978), numerous specific recommendations for enhancing marital therapy emerged (e.g., Berley & Jacobson, 1984; Epstein, 1982; Fincham, 1983; Weiss, 1981). The number of studies of cognition in marriage also mushroomed and a large literature on this topic is now available (for reviews, see Bradbury & Fincham, 1990; Fincham, Bradbury, & Scott, 1990). These developments have begun to advance our understanding of marital dysfunction and to provide an empirical foundation for cognitive interventions with couples (cf. Baucom & Epstein, 1990).

Despite increased knowledge about cognition in marriage, it does not appear that the recent burst of empirical activity has improved the practice of marital therapy. The flurry of recent research may enhance clinicians' confidence that their clinical activity has some scientific basis, but it has provided little guidance for hands-on clinical activity. Although this circumstance may be considered discouraging, we see it as an opportunity to ask how research can contribute more directly to clinical practice. To address this issue, the first section of the article offers a brief analysis of the evolution of research on cognition in marriage and its contribution to enhancing interventions with couples. This serves as a useful springboard for the second section in which we reappraise fundamental assumptions made about cognition in marriage might best inform marital therapy. The article concludes with a summary of our main arguments.

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COGNITION AND MARITAL THERAPY: CURRENT STATUS

Many factors undoubtedly have contributed to the discrepancy between research and clinical practice. We focus on one of these factors, the nature of research on cognition in marriage. It is our view that when research relates only indirectly to the process and practice of therapy, it is unreasonable to expect direct correspondence between the empirical literature and the ongoing practice of marital therapy. Thus, until research on cognition in marriage speaks more directly to the everyday needs of clinicians, we see little need to address other possible causes of the discrepancy between research and clinical practice. To understand where research and clinical interests diverged, we examine how research on cognition in marriage evolved.

Evolution of Systematic Research on Cognition in Marriage

The evolution of research on cognition in marriage is a function of a variety of forces, many of which also have shaped the emergence of family psychology. Two of the more immediate influences were the impact of the "cognitive revolution" on clinical psychology and dissatisfaction with the purely behavioral account of marriage that dominated research in the 1970s (for a more complete historical account, see Fincham & Bradbury, in press-a). Such forces led to the emergence of two lines of research at the turn of the decade.

First, Epstein (Epstein & Eidelson, 1981; Eidelson & Epstein, 1982) began a productive research program which showed that unrealistic relationship beliefs predicted expectations of therapy outcome, preference for maintaining rather than terminating the relationship, and marital satisfaction. The second line of inquiry investigated spouses' attributions or explanations for marital events and documented an association between attributions and marital satisfaction, showed that attributions predict satisfaction 12 months later, demonstrated that these are reliable, marital phenomena rather than an artifact of individual psychopathology (e.g., depression) or methodology (e.g., the association occurs for spontaneous and experimenter-elicited attributions, for hypothetical and real partner behaviors), and established a relationship between attributions and behavior (for a review of these two areas of research, see Fincham et al., 1990).

In both cases the research was stimulated by clinical observation and was intended to speak directly to the needs of practicing clinicians. For example, Epstein devised an instrument that could be used clinically, and attribution research was guided initially by what appeared to be a useful clinical application of attribution theory, the attributional reformulation of the learned helplessness model of depression (this model held that the cognitive,

motivational, affective, and behavioral deficits found after exposure to uncontrollable events were a function of the individual's explanations for the event). In both areas, however, the immediate everyday clinical concerns that stimulated the research faded as more basic research on beliefs, attributions, and marital satisfaction assumed center stage. This has been an important development because it has stimulated the accumulation of a body of knowledge about these cognitive variables in marriage that has the potential to inform more applied research.

Greater understanding of the role of cognition in marriage may be a prerequisite for research that speaks more directly to the needs of practicing clinicians, and some treatment outcome researchers have noted recently that the relative paucity of basic knowledge about cognition in marriage has hampered their research (e.g., Emmelkamp, Van Linden van den Heuvell, Sanderman, & Scholing, 1988). Nevertheless, several treatment outcome studies are already available. We therefore examine briefly studies that investigate the effectiveness of cognitively oriented interventions with couples before turning to a reappraisal of assumptions made in research on cognition in marriage.

Do Cognitive Interventions Enhance Marital Therapy Outcome?

Five published outcome studies (Baucom & Lester, 1986; Baucom, Sayers, & Sher, in press; Emmelkamp, Van Linden van den Heuvell, Ruphan et al., 1988; Huber & Milstein, 1985; Margolin & Weiss, 1978) and at least one unpublished study (Epstein, Pretzer, & Fleming, 1982) have evaluated the effectiveness of cognitive interventions in marital therapy. Half of the studies examine the effectiveness of a self- contained cognitive treatment (Emmelkamp, Van Linden van den Heuvell, Ruphan, et al., 1988; Epstein et al., 1982; Huber & Milstein, 1985), and the remainder investigate whether the addition of a cognitive component to skills-oriented interventions improves outcome. Because behavioral marital therapy is the only treatment approach whose effectiveness has been thoroughly documented (although there are signs that this has begun to change; see Beach & Bauserman, 1990), it is not surprising that cognitive interventions have been investigated in relationship to skills-oriented treatments, usually communication training (see Huber & Milstein, 1985, for an exception).

This small body of literature appears to offer a clear answer to the question posed in the title of this section: Cognitive interventions are not more effective than standard behavioral treatments, and their addition to such treatments does not increase treatment efficacy. The only contrary evidence comes from a study conducted prior to the explosion of interest in cognition

in marriage and which does not include an assessment of cognitive variables. Margolin and Weiss (1978) assigned distressed couples to a control group receiving nonspecific supportive counseling or one of two treatment groups: communication skills training or communication skills training combined with cognitive restructuring designed to help spouses "to abandon blaming attributions, to accept greater personal responsibility for relationship failure, and to be more accepting of their partners' positive efforts" (Margolin & Weiss, 1978, p. 1485). They found that the group receiving the cognitive intervention had a higher mean satisfaction score than the other two groups at the end of treatment and showed more increases in positive communication behaviors and positive daily behaviors over the course of treatment.

Where does this leave us? It would be easy to conclude that the consistency of findings is compelling and that demonstrating the importance of cognition in clinical practice is a search for the holy grail. Perhaps we will find that cognitive interventions add little to available treatments. However, we agree with Baucom et al. (in press) that it would be premature to draw this conclusion. Rather, the literature points to the need to conduct outcome studies that will allow us to draw firmer conclusions about the efficacy of cognitive interventions in marital therapy and to the need to reappraise the assumptions made about cognition in marital research lest they necessarily yield an incomplete picture of the potential role of cognition in marriage and in marital therapy. In the remainder of this section we address the first of these concerns before offering, in the next section, a broader perspective on the role of cognition in marriage and in marital therapy.

Improving outcome research. What can be done to improve the current generation of outcome research? One of the most serious problems concerns statistical power. Most outcome studies have sufficient power to detect moderate differences between treatments (e.g., the difference between a treatment that is effective and one that is ineffective). It is rare, however, for outcome studies to have sufficient power to detect a difference between two treatments that differ only in degree of effectiveness. Because cognitive interventions are typically evaluated in terms of their ability to increase the utility of already effective interventions or in comparison to such interventions, it is quite likely that any increments in efficacy will not be detected.

A second problem relates to the assessment of cognitive variables. In order to show that cognitive changes account for gains in marital therapy, outcome studies must include thorough assessments of cognition. However, this has not occurred in the outcome research conducted to date. For example, only one of the six studies (Epstein et al., 1982) attempted to assess attributions, and thus it is not possible to determine from most studies whether presumed

changes in attribution took place following the cognitive intervention (or whether they occurred in all treatment groups). In contrast, most of the studies assessed beliefs but the assessments were limited to two inventories, the Irrational Beliefs Test (IBT; Jones, 1968) and the Relationship Belief Inventory (Epstein & Eidelson, 1981). The latter was offered to provide a measure more relevant for marital research than the individually focused IBT, but even its utility has recently been questioned (Emmelkamp, Van Linden van den Heuvel, Sanderman, & Scholing, 1988). Whatever the status of these particular measures, no two instruments can constitute the sole criteria against which one can evaluate the importance of cognition in therapy, especially when the provide very limited coverage of the construct in question.²

A third problem that needs to be addressed in future outcome research concerns the analytic strategies required to infer that cognitive changes lead to therapy gains. Evidence that cognition and marital satisfaction change following a cognitive intervention does not necessarily mean that the cognitive changes produced increased marital satisfaction. Greater confidence could be placed in this inference if it were shown that cognitive changes correlated with changes in satisfaction. Although routine computation of such correlations would advance outcome research, stronger grounds for drawing conclusions about the status of cognition would emerge if formal tests were conducted to evaluate its presumed role as a mediator of therapy outcome. Briefly stated, these tests involve demonstrating that (a) the treated group shows greater satisfaction than does the untreated group following intervention (i.e., the cognitive intervention works); (b) the treated group shows more benign cognitions than does the untreated group (i.e., the cognitive intervention changes cognitions); and (c) when both treatment condition and cognition are used simultaneously to predict satisfaction, the previously significant relationship between treatment condition and satisfaction is no longer significant (i.e., changes in cognition account for the impact of therapy on satisfaction; for further discussion, see Beach, in press).

Several other factors need to be addressed in future outcome research. These include (a) the use of a modular approach whereby cognitive and behavioral interventions are rigidly distinguished across sessions rather than integrated within sessions, (b) the lack of attention to matching client needs to treatment, and (c) the limited nature of the cognitive interventions used to date. The concerns expressed thus far accept the assumptions made about cognition in marital research and how to study cognition in marital therapy. Some of our strongest reservations regarding conclusions about the role of cognition in marital therapy based on available outcome studies reflect concern about these assumptions. These will become apparent in the next

section where we provide a broader perspective on cognition than that adopted thus far in marital research. Before turning to this task, however, we offer some summary comments about available outcome research.

Lest it appear otherwise, we believe that existing treatment outcome studies on cognition have made valuable contributions. They have identified an important domain that requires systematic investigation in marital therapy and have provided a starting point for such research. Furthermore, they highlight important gaps in basic research on marital cognition (e.g., the need for assessment instruments). Finally, and perhaps most important, they demonstrate the need for a more complete conceptual analysis of cognition and its possible role in therapy, a task that has the potential to foster links with basic research on one hand, and clinical observation, on the other. It is to this task that we now turn.

COGNITION IN MARRIAGE AND MARITAL THERAPY: A REAPPRAISAL

Although not always discussed in terms of "cognition," the clinical literature abounds with anecdotal observations about cognition in marriage and marital therapy. The scope of these observations, ranging from a spouse's discrete thought that impedes a specific change in behavior to his or her overall understanding or construction of a marital problem, hints at an important fact about cognition. Simply stated, cognition is omnipresent in human relations. Just as systems theorists have noted that it is impossible to not communicate (Watzalwick, Beavin, & Jackson, 1967, pp. 48-50), so to it is impossible to avoid cognition in marriage and in marital therapy. Indeed, cognition is integral to communication (see Scott, Fuhrman, & Wyer, in press).

Why state the seemingly obvious? In our judgment, it is its very obviousness that has blinded us to much that is important about cognition. There is more to cognition than the beliefs and attributions studied in marital research, and there are many more ways to evaluate cognitive interventions than those found in outcome research. In the remainder of the article we elaborate on these two issues.

The Domain of Cognition

Because of its pervasiveness, statements about cognition often draw on unarticulated assumptions shared by reader and writer. Unfortunately, the assumptions used by each are not always the same resulting in the belief of a shared understanding where little exists. This has occurred, for example, in research on attributions in marriage. Careful examination shows that

implicit assumptions about the domain of inquiry vary across researchers, leading to such unfortunate consequences as a lack of attention to different types of attributions, the dimensions underlying each type of attribution, and so on (see Bradbury & Fincham, 1990). The same problem is endemic in clinical writings. This is a particularly invidious phenomenon and leads us to emphasize the importance of denoting explicitly the referent for "cognition." To this end we offer two important considerations: (a) the subject matter of a spouse's cognitions and the level at which it is conceptualized and (b) the differences among cognitive content, cognitive processes, and cognitive structures.

Expanding cognitive contents and the level at which they are conceptualized. The content or subject matter of cognition can vary widely, and there is a clear need to expand the scope of cognitive contents studied in marriage. Baucom, Epstein, Sayers, and Sher (1989) have taken a noteworthy step in this direction and argued that five categories of cognitive content are important for understanding marriage—namely, assumptions, standards, selective attention, attributions, and expectancies.³ Within these broad categories, further important distinctions can be drawn (e.g., between causal attributions and responsibility attributions, outcome expectancies and efficacy expectancies). The attempt to include cognitive contents that are particularly relevant for understanding marital dysfunction augers well for research that addresses practitioners' needs more directly.

The referent level of cognitive contents also varies, ranging from the microscopic (e.g., an attribution for a particular behavior, "He was rude to me because he is tired") through more general appraisals of an interaction (e.g., "That discussion made me feel closer to her") to an overall construction of the nature of the relationship or the partner (e.g., "We have a very traditional relationship"). In each of the latter two examples, the statements may be elaborated in great detail. Thus far, marital researchers have tended to limit themselves to the study of more specific cognitive contents (e.g., attributions for particular behaviors, beliefs about a specific aspect of marriage) and have yet to examine more elaborate contents such as the storylike accounts given for a marital event (that may include numerous specific attributions) or the general understanding of dysfunctional behavior patterns.

Attention to these more general cognitive contents holds considerable promise for two reasons. First, it has the potential to integrate insights from systems theory that tend to be couched in more general terms relating to the family's construction of dysfunctional behavior and subject them to empirical evaluation, a goal that has remained elusive (these constructions are necessarily held by individuals and thus systems theories implicitly entail an

individual level of analysis, whatever their claims to the contrary; see also Wile, 1981). In a similar vein, insights from psychodynamic approaches might prove useful (e.g., object relations schemata) and similarly obtain overdue empirical scrutiny. We also view such an integration as an important corrective because the recent cognitive accounts of marital dysfunction reflect mainly a behavioral orientation toward therapy.

We would be less sanguine about the above suggestions were it not for the second reason that attention to more general cognitive contents is likely to prove useful. In addition to integrating clinical observations and reflecting a wider variety of clinical orientations, this task is likely to inform, and be informed by, basic research in social and cognitive psychology. For example, social psychologists have begun to study accounts in close relationship (e.g., Harvey, Orbuch, & Weber, in press) and are developing methodologies to deal with the qualitative, rich material involved (see Antaki, 1988). Cognitive psychology also has much to offer because the study of knowledge structures (e.g., scripts) that, inter alia, give rise to such accounts has been underway for some time (see Abelson & Black, 1986). In sum, expanding the level of cognitive content studied in marriage has the potential to integrate more fully clinical observation and basic psychological research, a cherished goal since the emergence of the scientist-practitioner model envisaged at the Boulder Conference on clinical training.

Cognitive content, cognitive structure, and cognitive process. Simply expanding the cognitive contents studied in marriage is insufficient because any understanding of marital cognition based solely on content rests on a dubious assumption, namely, that the study of phenomenal experience is sufficient to understand cognition. As any marital therapist knows, behavior in marital interactions is often overlearned, unfolds at an astonishing speed, and appears to proceed without much thought. This does not deny the importance of cognitive antecedents to behavior, it simply suggests that the kind of deliberate and effortful cognitions studied thus far by marital researchers are unlikely to dominate interaction sequences. Even in reflective moments spouses may find themselves thinking about an interaction or something about their marriage without having made a deliberate effort to do so. It therefore behooves us to remember that the cognitive domain should not be equated with deliberate or effortful, conscious thought.

People simply do not have access to the vast majority of cognitive processes (e.g., retrieval of material from memory) and cognitive structures (e.g., schema, prototypes) that underlie conscious thoughts even though they may become aware of some of the products or contents to which they give rise. Greater attention therefore needs to be paid to the nonconscious con-

struction of phenomenal experience. Because these distinctions and their implications for research and clinical application are discussed in detail elsewhere (for individual therapy, see Fincham & Bradbury, in press-b; for marital therapy, see Fincham et al., 1990), we limit ourselves to a brief illustration of their importance for understanding dysfunctional cognition in marriage.

Consider the cognitive process of *priming* whereby information made salient in one context influences processing of unrelated material in a different context. A spouse, having just watched a news report that documents the neglect of homeless persons, may be primed to process a subsequent partner behavior (e.g., partner's critical comment) in terms of the constructs evoked or primed by the report (e.g., uncaring). That is, the probability of a given partner behavior leading to a particular cognitive response may vary as a function of the spouse's current psychological context.

In addition to influencing immediate judgments, priming may affect later cognitions. This is because what is stored in memory following processing of the behavior is the event to which the spouse is exposed (e.g., partner criticism) as well as an abstracted summary, judgment, or inference about the event (e.g., partner was uncaring). When further judgments are made, the abstracted representation, rather than the original event, is often recalled (Wyer & Srull, 1989). In fact, with the passage of time the spouse might be able to recall that the partner was uncaring but not be able to recall the behavior upon which this judgment was initially based. The accessibility of this construct can, in turn, serve as a retrieval cue and influence recall of other material. Thus the spouse may end up using a biased data base in making further judgments about his or her partner/marriage. This example suggests why changing partner behavior can be insufficient for increasing a spouse's satisfaction (partner behavior is processed in terms of chronically accessible, negative constructs) and suggests that the role of cognition in therapy may be more complex than portrayed to date.

Evaluating the Efficacy of Cognitive Interventions

The manner in which we conceptualize cognition has profound implications for evaluating its role in therapy and for the derivation of cognitive interventions. Each of these issues is therefore addressed.

The role of cognition in therapy. As mentioned earlier, cognition is omnipresent in human relations, and it is difficult to imagine a therapy in which cognition did not play a role. Thus the issue is not one of whether cognition is important in therapy but whether there is anything to be gained from making spouses' cognitions an explicit target for intervention. Precisely

what might be gained will vary as a function of the level at which one conceptualizes cognition, a crucial observation that has been overlooked.

When it is recognized that cognition may play a variety of roles in therapy, it is no longer sufficient to evaluate the effectiveness of cognitive interventions solely in terms of changes in overall marital satisfaction. In fact, the conditions under which cognitive interventions alone can play this role are likely to be quite limited. Rather, cognitive interventions may play a variety of roles at different points in therapy and with regard to different goals. Cognitive interventions may be most likely to carry the primary burden of increasing satisfaction when cognition is construed in terms of the couple's understanding of their problem. Such understanding may reflect a rich mosaic of assumptions, attributions, beliefs, and so on. It is this "construction" or "paradigm" that systems theorists of differing orientations seem to address, albeit sometimes implicitly. Although such theorists would explain their actions differently, we interpret several interventions derived from systems theory (e.g., reframing, paradoxical strategies) as ones that change family members' understanding, that is, as cognitive interventions.

The importance of cognition in therapy is even more likely to become apparent when a more diverse set of therapeutic goals is considered. Client couples seldom present in therapy requesting improved "global marital adjustment," a summary fiction that has served clinical researchers well for many years. It may be time to incorporate a family of more specific goals that actually reflect real outcomes desired by couples to maximize the clinical utility of outcome research. Such goals might include, but not be limited to, decreased anger and blame, enhanced sexuality, greater intimacy and confiding, better support in time of stress, enhanced affective exchange, as well as more traditional goals such as greater ability to discuss disagreements more productively, or insight into the deeper causes of marital problems. Developing a more diversified set of possible goals would serve the dual purpose of better reflecting clinical reality and at the same time make it easier to see that different cognitive interventions might be associated with change relating to different specific goals or problem areas. In sum, cognitive interventions might be best evaluated in terms of their impact on specific target problems rather than in relation to "global" marital adjustment.

Finally, cognitive interventions may play a more important role when considered in relationship to three goals that do not address therapeutic outcome directly. First, cognitive interventions can play an important role in setting the stage for therapy. Often, more general marital problems (e.g., communication problems, unmet dependency needs) that need to be addressed, are secondary to a profound sense of blame and mistrust when a

couple presents for therapy. Interventions that help the couple move beyond blame and back toward rebuilding their relationship seem most appropriate at this stage and pave the way for further therapeutic work (for strategies to deal with such blame, see Beach, in press; Fincham & Bradbury, in press-c).

Second, cognitive interventions may play an important role in facilitating some of the noncognitive mediating goals of therapy. Perhaps the most important mediating goal in therapy is compliance with therapist directives. Although noncompliance is not the most exciting reason for therapeutic failure, it is possibly the most ubiquitous. Beach and Bauserman (1990) provide a detailed discussion of how cognitive interventions can be used to deal with noncompliance. It suffices to note that such interventions had been discussed widely in marital circles long before the advent of techniques labeled as "cognitive." For example, marital therapists invariably provide (with varying degrees of consciousness) an alternative explanation for a couple's conflict, whether it be a skills deficit explanation, one that appeals to family rules, or one that points to experiences in past relationships. Indeed, it is our impression that the couple's acceptance of the philosophy underlying this alternative explanation may be an important factor in the success of the therapeutic relationship and in therapeutic compliance. Likewise, changes in dysfunctional beliefs and implicit contracts may be important for helping couples change problematic interaction patterns. Helping spouses view partner changes as positively motivated and creditworthy may be critical for maximizing their expressions of satisfaction to their partner and thereby reinforcing partner changes. These examples highlight the possibility that cognitive interventions may be useful in furthering important noncognitive changes in marital therapy.

Third, cognitive interventions may play a role in the maintenance of therapeutic gain following the termination of therapy. In particular, it is reasonable to expect relapse to occur for a sizable percentage of couples. Attention to the spouses' construal of the processes leading to therapeutic change, to specific situations and stressors likely to be associated with a return to marital discord, and to the tendency to revert to prior habitual behaviors when an argument occurs, could prove useful in helping couples keep a marital dispute from bringing about a return to baseline levels of marital distress. In addition, knowledge of strategies to deal with future marital stressors may itself constitute a cognitive intervention that transforms the perception of the stressor when it occurs and may enhance maintenance in the absence of the coping strategies ever being implemented.

The derivation of cognitive interventions. Our observations about the role of cognition in therapy suggest the need for a variety of cognitive interven-

tions varying in terms of the specificity of their target (e.g., attribution for a specific behavior vs. account of marital problem) and the nature of the target (e.g., cognitive structure vs. manner of processing information). It seems likely that the nature of the target will influence the derivation of the intervention. For example, an intervention aimed at influencing cognitive processing is more likely to be informed by a formal model of such processes than are attempts to change an explanation for a specific partner behavior. Whatever their target, the derivation of a cognitive intervention requires careful consideration.

Thus far, cognitive interventions used in marital therapy have been derived mainly from individually oriented psychotherapy (e.g., rational emotive therapy, cognitive therapy) or from clinical observation/intuition. Both sources are valuable ones but their limitations need to be recognized clearly. For example, the importation of cognitive techniques used in individual psychotherapies makes a questionable assumption, namely, that cognitive factors which bring about therapeutic gain in individual therapy will also do so in marital therapy. However, existing evidence does not support this view. For example, cognitive therapy for depression does not ameliorate marital discord when administered to depressed, distressed wives (Beach, Sandeen, & O'Leary, 1990). Thus any cognitive techniques imported from individual therapies need to be carefully modified to ensure that they address cognition in a dyadic context and not simply cognition as it relates to the individual.

Clinical observation and intuition are similarly important sources for the derivation of cognitive interventions. Although such observations are necessarily influenced by biased sampling and such factors as salient but unrepresentative material and extraneous information, greater use of these sources is likely to prove fruitful and to speak more directly to practicing clinicians. Indeed, they may initially be the most readily applicable source of ideas for cognitive interventions. However, their long-term potential for systematic research to increase the effectiveness of cognitive interventions is less clear. Scientific inquiry is best served by the use of theory, and the implicit theories underlying clinical observation are rarely articulated. When assumptions are made explicit, they seldom attain sufficient detail to serve as a model for programmatic research.

In view of these observations, we believe that a third complementary source is needed to optimize the derivation of cognitive interventions—namely, models from the empirical literature. Drawing on well-worked-out and experimentally tested models has a number of desirable properties. Most important, they can help specify mediating goals of therapy that are

amenable to manipulation by an external agent and thereby identify points of therapeutic intervention (Beach, Abramson, & Levine, 1981). In addition, they can specify processes that are not confounded by the particulars of the therapeutic relationship or nonspecific treatment factors. Thus they are capable of providing surprising implications and suggesting interventions that might not be gleaned simply through increased experience in marital therapy. Beach (Beach, in press; Beach & Bauserman, 1990) has provided detailed illustrations of how three models from social psychological research can be used to derive cognitively oriented therapeutic interventions.

Although necessary for increasing the efficacy of cognitive interventions in the long term, clearly specified models are not sufficient for achieving this goal. Clinical expertise is also necessary for deriving optimal cognitive interventions. Implications drawn from empirically driven models need to be evaluated carefully to see if they make clinical sense: The translation of insights contained in an experimental model is often not straightforward. Again, this may appear to be stating the obvious, but until interventions routinely reflect such integration, it bears repetition.

To conclude, our observations lead us to call for a new generation of outcome research that moves well beyond the development of yet more self-contained intervention modules for marital therapy. In particular, we need to (a) expand cognitive interventions to reflect the broader conception of cognition offered earlier (i.e., include additional cognitive contents that vary in degree of specificity and target cognitive contents, processes, and structures for intervention), (b) focus on the processes that mediate change and address these processes throughout therapy rather than in a self-contained "cognitive intervention" module, and (c) ensure that interventions are clinically sophisticated derivations from models of cognition in marriage. In short, our call for a new generation of outcome research stems from the belief that it will remedy many of the problems confronting initial attempts to determine the efficacy of cognitive interventions in marital therapy and will yield more clinically relevant findings.

CONCLUSION

We have traversed a considerable amount of territory providing a panoramic view of the places visited rather than a detailed map of each. Starting with the observation that the flurry of research on cognition in marriage provides little concrete guidance to practicing clinicians, we offered an analysis of why this might be, focusing on the nature of research conducted to date. Although interest in the area was stimulated by clinical observation, only a small portion of the available studies address directly clinical concerns. Our analysis of the few outcome studies showed that it would be premature to draw any firm conclusions on the basis of the evidence that they offer. This conclusion reflects, in part, the limited conception of cognition used in research on marriage and the limited role accorded cognitive interventions in marital therapy, issues that we went on to address in the latter part of the article.

Strangely, we appear to have ended where we began—wondering about the role of cognition in marital therapy. However, we have a much better sense of this landscape. Far from being wasteful, extant research has been most helpful in allowing us to see more clearly the roads that lie ahead. There are different destinations, to be sure, and the success of our travels should be evaluated in terms of progress toward our particular destinations. We therefore agree with Alice that "all have won and all must have prizes." However, it is equally clear that the roads also intersect at various points and that travelers on different routes must inform each other of their experiences to provide a complete map of the domain.

In this article, we have emphasized the need for researchers to incorporate studies that will allow them to communicate more directly with travelers on the clinical route. For the field to advance, however, practitioners have a complementary responsibility: to be open to the possibility that research can speak to their needs and to therefore be active participants in the communication. We recognize that the drumbeat of clinical reality is much louder and faster than that of research and that clinicians can never be in a position where all their actions rest on a firm foundation of empirical research. This does not mean, as is all too often assumed, that no actions can rest on such a foundation or that the empirical literature cannot offer guidance for much of what occurs in marital therapy. In isolation, practitioners and researchers will surely travel roads to "somewhere." This may satisfy Alice but can we—and more important, the couples who look to us for help—afford such nonchalance?

NOTES

- 1. A parallel body of systematic research on cognition in the broader context of the family does not yet appear to have emerged despite some exemplary individual research programs (e.g., Reiss, 1981). Although there are signs that this may soon change (see Ashmore & Brodzinsky, 1986; Grych & Fincham, in press), our discussion will focus on cognition relating only to the marriage.
- 2. The Epstein et al. (1982) study does attempt a broader assessment of cognition than do other studies, but it is not readily accessible (it remains unpublished) and is subject to a number of methodological problems (e.g., nonindependent observations, inflated Type I error rate, small samples). The results should therefore be viewed with caution until replicated.

3. Although selective attention is defined as cognitive process, Baucom et al.'s (1989) discussion focuses on judgments about behavior (cognitive content) and does not address process per se. Similarly, even though they are construed as knowledge structures or schemata, the description of these categories focuses on cognitive content, and hence the implications of principles governing their representation and organization, interaction with cognitive processing, and so on are not elaborated.

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