In commenting on the Emmelkamp, van Linden van den Heuvel, Rüphän, Sanderman, Scholing, and Stroink study reported in this issue, Epstein and Baucom consider a number of parameters of outcome studies of cognitive marital therapy and make a number of recommendations. We wholeheartedly agree with nearly all of their recommendations, most of which were followed in the Emmelkamp et al. study, so we will limit our comment to a clarification of a few issues and a brief discussion of the only issue on which we seem to disagree: the reliable assessment of cognitions in outcome studies.

COGNITIVE VARIABLES
ADDRESSED IN THERAPY

As Epstein and Baucom note, studies of cognitive-marital therapy have focused on two types of cognitive variables: irrational beliefs, or unrealistic expectations that spouses hold about the nature of intimate relationships, and attributions that spouses make about the determinants of their marital problems. They wonder why we did not assess attributions when modification of attributions was a major goal of our cognitive therapy. It should be noted that all studies conducted so far investigating cognitive-marital therapy did not assess such attributional processes (Baucom & Lester, 1986; Epstein, Pretzer, & Fleming, 1982; Huber & Milstein, 1985). These researchers probably had as good reasons as we had not to assess attributional style of the couple given the psychometric status of such measures and conceptual problems involved. At the time we started our study there were no marital
attributional measures available. Further, studies conducted at our department had also questioned the validity of well-known measures of attributional styles (Arntz, Gerlsma, & Albersnagel, 1985; Schaufeli, 1988).

In spite of a decade of research on causal attributions and depression, the relation between the two is complex and still not understood (Brewyn, 1988). In our view, Epstein and Baucom are over-optimistic with respect to the status of research on causal attributions and marital distress, where research is just beginning. Although a few studies have investigated whether attributions for relationship events are related to marital distress, these studies are limited to demonstrating only a concurrent relationship between attribution and marital distress (Fincham & Bradbury, 1988). Research into causal attributions and marital distress has mainly focused on private attributions. Attention has been drawn, however, to the social context in which attributions are made (Fincham & Bradbury, 1988; Munton & Antaki, 1988). Fincham and Bradbury (1988) hold that communicated attributions are probably much more relevant with respect to marital distress than the private attributions that typically have been assessed in previous studies.

Further, the emphasis in these studies upon the consequences of attributional processes for marital satisfaction seems to suggest that attributional processes play a primary role and are causal in instigating or at least maintaining marital distress. Such one-way causation is unlikely, however, since affect also influences attributional processes (Bradbury & Fincham, 1987), thus contaminating scores on attributional scales. Individuals' responses on attributional style measures may reflect a general affective appraisal of the marriage, rather than a specific attributional style. In our view, the use of items concerning attributional style is not justified from this perspective because such questions will not consistently measure what one intends to measure. Further, scores on attribution questionnaires may be affected by the actor-observer phenomenon (Berley & Jacobson, 1984). In addition, distressed couples have been shown to have a lower agreement when they observe each other's behavior compared to happy couples (e.g., Christensen, Sullaway, & King, 1983). In other words, a bias in the observation of the behavior of the partner may confound assessment of attributional processes. Thus, in contrast to Epstein and Baucom, who hold that reliable and valid self-report measures of marital attributional style are available, we are more critical about the value of such measures to assess outcomes of cognitive marital therapy. In our view, much more
basic research is needed before such measures can be used reliably in outcome studies.

Our concerns over the assessment of relationship beliefs by means of the RBI need some clarification. First, "sentiment override"—the general affective appraisal of the marriage—may also affect scores on the RBI. Further, a recent study (Emmelkamp, Krol, Sanderman, & Rüphans, 1987) failed to support the discriminant validity of the RBI. On three out of five scales the RBI results were contrary to expectations; that is, clinically distressed couples scored less irrationally than their normal counterparts. On the two scales that differentiated distressed from nondistressed couples in the expected direction, differences between groups were not particularly high. Thus discriminant validity of the RBI is poor.

STANDARDIZATION OF TREATMENT

We underscore the need for standardization of treatment and the use of treatment manuals. Actually, detailed treatment manuals had been developed for use in the Emmelkamp et al. study reported in this issue. The degree to which therapists adhered to these treatment protocols was continuously monitored during the study. An abbreviated version of our treatment protocol for the cognitive marital therapy has been published elsewhere (Sanderman & Rüphan, 1987). As recommended by Epstein and Baucom, therapists in the Emmelkamp et al. study were trained before the start of the project to apply the interventions according to the treatment protocols. Thus, although the therapists were not highly experienced, they possessed the therapeutic skills involved in the communication training and cognitive marital therapy. We recommend that other researchers also make their treatment protocols available to enable cross-study comparisons.

INTERPRETATION OF RESULTS

Epstein and Baucom warn that results of outcome studies should be interpreted with caution, and they challenge one of our conclusions: that there is little evidence that the effects of cognitive therapy are mediated by changes in cognitive processes. They correctly note that changes on cognitive and behavioral measures for couples receiving either type of therapy do not determine which variable may have mediated changes in the other, and they note that looking at mean changes only can be misleading "because the couples who changed on cognitive variables,
TABLE 1  PM Correlation Coefficients Among Changes in Dependent Measures Between Pretest and Posttest

<table>
<thead>
<tr>
<th></th>
<th>MMQ and RBI</th>
<th>MMQ and C30</th>
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<tbody>
<tr>
<td></td>
<td>Cognitive</td>
<td>Skills</td>
</tr>
<tr>
<td>Males</td>
<td>.25</td>
<td>.38</td>
</tr>
<tr>
<td>Females</td>
<td>.40</td>
<td>.53*</td>
</tr>
</tbody>
</table>

NOTE: MMQ = Maudsley Marital Questionnaire—Marital adjustment; RBI = Relationship Beliefs Inventory; C30 = Communication Questionnaire.
*p < .05; **p < .01; ***p < .001.

for example, might not be the same couples who increased in marital adjustment." They suggest that correlating the degree of change in cognitive and behavioral variables with the degree of change in marital adjustment within a given treatment condition would clarify whether they covary. Results of these correlations are presented in Table 1.

These correlations support our original conclusion that there is little evidence that effects of cognitive therapy are mediated by changes in cognitive processes. Actually, in the cognitive condition, the correlation between changes in irrational relationship beliefs and marital satisfaction appears to be rather low, even lower than in the communication skills condition. The correlation between changes in communication and improvement in marital satisfaction proved to be more substantial. Again, improvement does not seem to be related to the specific treatment couples received, since the connection between improvement on the MMQ and improvement on the communication questionnaire was highest for the couples who had received cognitive therapy.

It should be noted, however, that these correlational analyses should also be interpreted cautiously. Even if a correlational analysis had shown a much stronger connection between improvement in marital satisfaction and changes in irrational relationship beliefs, such data would not allow a clear interpretation in causal terms. Since cognitions may affect marital satisfaction and vice versa, it would probably be unwise to assume one-way causation in either direction.

In sum, we underscore the need for development of better cognitive measures and more basic research on attributional processes. We recommend studies that simultaneously evaluate attributional processes and spouse observation, while partialing out the influence of affect on these measures.
As yet, there is little evidence for the specific role of cognitions in the process of change during both cognitive and behavioral marital therapy. Studies to develop reliable and valid assessment procedures are therefore badly needed in order to increase our knowledge regarding cognitive processes involved in marital distress and in the process of marital therapy.

REFERENCES


