

Effects of Therapist Adherence and Competence on Patient Outcome in Brief Dynamic Therapy

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The authors examined the relation between therapist process variables (adherence and competence) and subsequent symptomatic change in patients. Twenty-nine depressed patients were seen in 16 sessions of weekly supportive expressive (SE) dynamic psychotherapy. Change in depression from intake to Session 3 predicted higher ratings of adherence to expressive (interpretative) techniques during Session 3 but not their competent delivery. Partialling pretreatment psychiatric severity, therapists' adherence to use of expressive techniques, and previous symptomatic improvement, relatively competent delivery of SE-specific expressive techniques predicted subsequent improvement in depression. Secondary analyses addressing alternative explanations (such as the role of either therapeutic alliance or general therapeutic skills) did not change the results.

Research on the relation between variables assessing the technical aspect of the psychotherapeutic process and treatment outcome has yielded inconsistent findings (for a comprehensive review, see Orlinsky, Grawe, & Parks, 1994). The lack of strong and consistent findings has contributed to the ongoing debates concerning the role of specific versus nonspecific ingredients in psychotherapy. Recent reviews of the relation between interpretations and outcome in dynamic psychotherapy (Henry, Strupp, Schacht, & Gaston, 1994; Piper, Joyce, McCallum, & Azim, 1993) indicate that the appropriateness or competent delivery of interpretations such as their accuracy (Crits-Christoph, Cooper, & Luborsky, 1988) or correspondence (Piper et al., 1993) predict outcome.

Findings from studies examining the relation between measures of adherence–competence and outcome have also been mixed (Luborsky & Barber, 1993). DeRubeis and Feeley (1990) demonstrated that adherence to concrete techniques at Session 2 predicted subsequent change in depression and was not accounted for by previous change in depression in a group of cognitive therapy trainees. These findings were not replicated with well-trained therapists (Elkin, 1988). Similarly, competence seems to predict outcome in some studies (Luborsky, McLellan, Woody, O'Brien, & Auerbach, 1985; O'Malley et al., 1988) but not in others (Sandell, 1985). In one study it was

even shown that increased competence predicted worse outcome (Svartberg & Stiles, 1994). O'Malley et al. (1988) have shown that competent delivery of treatment predicts outcome beyond patients' pretreatment variables in interpersonal therapy.

Our goals in the present study were to test whether adherence–competence to the specific and theoretically relevant techniques of supportive–expressive (SE) dynamic therapy (Luborsky, 1984) was associated with change in symptoms beyond patients' variables. The main techniques of SE therapy are expressive (interpretative) and supportive techniques, yet no study has directly investigated whether adherence or competence in the delivery of such techniques predict outcome. Our goal was to examine the relations of adherence and competence to expressive versus supportive techniques to outcome. As in DeRubeis and Feeley (1990), change in symptoms was assessed from the time that the predictor variable was assessed to termination. Predicting change in outcome variables from intake to termination from a variable measured at least several weeks after the treatment had begun and at a time when some therapeutic gains were already achieved is problematic because the extent to which those early symptomatic gains are associated with the predictor variables remains unclear. For that reason, we examined the relative contribution of the different SE techniques to predict further change in depression. To take into consideration patients' psychiatric severity, we used the Health–Sickness Ratings Scale (HSRS; Luborsky et al., 1993), which has been shown to predict treatment outcome. Finally, we present additional secondary analyses to rule out some potential third variable alternative explanations.

Method

Patients

Twenty-nine patients who had received a Research Diagnostic Criteria diagnosis of major depression on two different occasions (1 week apart) were treated by four therapists as part of a treatment development and therapist training study (see Diguier, Barber, & Luborsky,

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1993; Luborsky, Hole, Popp, Goldsmith, & Cacciola, 1995). The tapes of the first 33 patients who had participated in the 16 weekly sessions of SE psychotherapy study and who reached Session 3 were rated for adherence–competence, but 4 of those patients had received medication and were excluded from the present report because their improvement could not be clearly attributed to therapy.

Adherence–Competence Judges

The judges were two doctoral-level clinical psychologists with more than 7 years of postdoctoral clinical experience. One of the judges had extensive experience in SE, whereas the other had just begun training as an SE therapist. Although judges were blind to patient outcome and to therapists' identity, the senior judge may have been able to identify the therapists.

Measures

The Penn Adherence–Competence Scale for Supportive–Expressive therapy (PACS-SE; Barber & Crits-Christoph, 1996) is a 45-item rating scale that assesses the extent to which Luborsky's (1984) recommendations for therapeutic interventions have been carried out in a session. Each item is rated on a 7-point Likert scale for both frequency of therapists' interventions and the competent implementation of the intervention. There are three major theoretically derived subscales: (a) general therapeutic skills (9 items); (b) supportive skills (9 items); and (c) expressive skills (21 items). The general therapeutic subscale includes items relevant to many forms of verbal psychotherapy (e.g., "The therapist listens . . . before giving a response"). The supportive subscale includes items considering therapists' actions that are likely to be experienced as supportive by patients (e.g., "The therapist conveys a sense of respect . . . to the patient") and techniques thought to foster therapeutic alliance. The expressive subscale refers to techniques that are most specific to dynamic psychotherapy, especially to SE, such as addressing aspects of the Core Conflictual Relationship Theme (CCRT; Luborsky, 1984).

Interjudge reliability coefficients as measured by intraclass correlations for two pooled random judges rating one session from each of 33 SE patients (including the ones participating in the present study) and from each of seven cognitive therapy patients were .38 for adherence supportive; .70 for adherence expressive; .50 for competence supportive; .69 for competence expressive; .65 for adherence general therapeutic skills; and .77 for competent general therapeutic skills.

The Helping Alliance questionnaire (HAQ; Luborsky et al. 1985) is an 11-item self-report measure of the helping alliance. For this study, we used only the six items that do not assess symptomatic improvement (see Barber & Crits-Christoph, 1996). Cronbach alpha for the six items was .90 for Session 3.

The other measures we used are well known; they are the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and the HSRS.

Procedure

Audiotapes of Session 3 were selected for each patient. (Whenever a tape was not available or inaudible, the one from the previous or following session was used.) The judges independently listened to and rated entire audiotapes. Depression, as measured by the BDI, was assessed at intake and termination, and at the same session the adherence–competence ratings were made. The mean (and standard deviation) BDI score at intake, Session 3 (or the session when adherence and competence were rated), and termination were 28.3 (7.01), 23.9 (8.3), and 12.8 (9.8), respectively. The correlation between the session BDI and termination BDI was .31 ($p = .05$).

Table 1

Relation of Adherence and Competence to Change in Depression, Controlling for Psychological Health

Measure	Termination BDI
Regression 1: Adherence	
HSRS (intake)	-.46*
Adherence supportive	-.13
Adherence expressive	-.16
Regression 2: Competence	
HSRS (intake)	-.57***
Competence supportive	.21
Competence expressive	-.53**

Note. Coefficients are partial correlations (each variable controlling for the others and for Session 3 BDI). BDI = Beck Depression Inventory; HSRS = Health–Sickness Rating Scale.

* $p < .05$. ** $p < .01$. *** $p < .005$.

Results and Discussion

Predicting Outcome From Adherence to Supportive Versus Expressive Techniques

Partialling intake HSRS, we found that adherence to supportive or expressive techniques did not predict further change in depression (i.e., residualized BDI score from Session 3 to termination; see Table 1). The finding that frequency of expressive techniques was not related to change in symptom is consistent with previous findings (e.g., Henry et al., 1994; Piper et al., 1993).

Predicting Outcome From Competence to Supportive Versus Expressive Techniques

Partialling intake HSRS, we found that relatively competent application of expressive techniques predicted subsequent decrease in depression (see Table 1), whereas competent use of supportive techniques did not.

Does Prior Symptomatic Change Lead to Adherence or Competence?

We conducted four separate multiple regressions to examine whether earlier change in BDI (from intake to Session 3) contributed to levels of adherence and competence. Early symptomatic improvement predicted only adherence on expressive interventions (partial $r = -.48, p < .01$); that is, the less symptomatic improvement by Session 3 (i.e., more depressed on the BDI), the less adherence to expressive interventions was evident in Session 3. The partial correlation between prior change in depression and competent delivery of expressive techniques was $-.25$ (ns). These results support the clinical impression that the more the patient benefits from treatment, the easier it is, relatively, for the therapist to adhere to the SE treatment manual, although not necessarily to conduct competent therapy.

Controlling for the Overlap Between Adherence and Competence and Prior Symptomatic Improvement

Previous symptomatic improvement (intake to Session 3) may contribute to either subsequent symptomatic improvement or levels of competence (or both). To rule out the possibility of this spurious correlation between competence and outcome, it is necessary to partial out early symptomatic improvement from intake to Session 3. We also decided to take into consideration the tendency of adherence and competence scores to be correlated (.50 for general skills, .62 for supportive skills, and .58 for expressive skills). Partialling early symptomatic improvement, HSRS, and adherence to expressive techniques, the partial correlation between competent expressive techniques and subsequent change in depression was $-.57$ ($p < .005$).

The sequence of data collection and the nature of the data analysis in this study, like in DeRubeis and Feeley's (1990), lend somewhat greater confidence to the conclusion that relative competence in expressive skills may play a role in subsequent BDI improvement. Our confidence is increased because competence was rated before the change in depression and because we have shown that competence is not the result of previous, earlier change in depression. We also ruled out that patients' level of psychiatric severity mediates the relation between therapist competence and patient outcome, replicating for the first time in brief dynamic psychotherapy O'Malley et al.'s (1988) finding that competence predicts better outcome after partialling out patient variables.

Secondary Analyses

To address further alternative accounts of the present results, we performed the same analyses as above with the addition of more variables to tentatively rule out additional alternative explanations. These analyses should be seen as secondary and exploratory, because they require the addition of one or more variables in the regression analyses which increases the number of predictors in a relatively small sample size. Also conducting multiple analyses increases the potential for Type 1 error.

Nonindependence. To address the issue of the nonindependence of data from four therapists treating 29 patients, we residualized the expressive scores using the relevant mean score for each therapist and found a partial correlation of $-.43$ ($p < .05$) between competent expressive technique and subsequent change in depression partialling the same variables as given earlier.

Interaction between psychiatric severity and techniques. We conducted additional hierarchical regression analyses to test for the interaction between HSRS and techniques and found no significant interaction, perhaps because of a lack of power to detect these potential interactions.

General therapeutic skills. Partialling out earlier BDI improvement (from intake to Session 3), HSRS, competent delivery of general therapeutic (another measure of nonspecific therapeutic interventions) and of supportive skills, we found that relatively competent delivery of expressive skills still predicted subsequent change in depression (partial $r = -.57$, $p < .005$). Competent delivery of neither general therapeutic skills nor supportive skills was associated with subsequent change in de-

pression when all other variables were partialled out (partial $r = .09$, $n s$, and $r = .25$, $n s$, respectively).

Poor reliability of the supportive skills subscale. To address this issue, we kept only the four items for which there was at least a Pearson correlation coefficient of .2 and recalculated the subscale scores. The scores derived from the shortened scales were representative of the supportive scale because they correlated with it ($r = .91$ for adherence and $r = .67$ for competence, $n = 33$). The pooled judge intraclass correlation coefficients of reliability for the shorter supportive scales were somewhat improved and were acceptable for competent delivery of supportive techniques (.50 for adherence and .67 for competence, $n = 33$; if the 7 cognitive tapes were included, for a total of 40 audiotapes, these were .52 and .73, respectively.)

Using the revised supportive scales scores, we conducted the primary analyses and found no change in results. Repeating the general therapeutic skills secondary analysis with the new scales, we found that partialling out earlier symptomatic improvement, intake HSRS, and competent delivery of general therapeutic and supportive skills, relatively competent delivery of expressive skills predicted change in depression from Session 3 to termination significantly (partial $r = -.61$, $p < .003$), whereas competent delivery of revised supportive skills did not correlate with subsequent BDI change (partial $r = .28$, $n s$). The results concerning the adherence scales remained nonsignificant.

The role of the alliance. To address the relative contribution of therapeutic alliance to the present findings, we conducted the primary analyses with the addition of alliance at Session 3 entered before the techniques variables. Because 1 patient was an outlier on the alliance measure, the statistical analyses were performed without this participant's data. The magnitude of the partial correlations were somewhat smaller; nevertheless, the results remained essentially unchanged. For example, the partial correlation between competence expressive and subsequent change in depressive symptoms, partialling out HSRS, competence supportive, and alliance, was $-.44$ ($p < .05$). Adding therapist's level of competence in general therapeutic skills to the regression resulted in a partial correlation of $-.46$ ($p < .05$) between competent delivery of expressive techniques and subsequent change in depression.

Summary and Limitations

Our results indicate that it is the relatively competent delivery of expressive techniques rather than their frequency of use that predicts relative subsequent change in depression taking into consideration pretreatment psychological health. We have also shown that the relatively competent delivery of these techniques predicts subsequent symptomatic change even when one takes into account early symptomatic improvement. Our main results remain significant even after residualizing for therapist effects. This is the first report of these findings in short-term dynamic psychotherapy. Our results concerning the relative role of expressive versus supportive techniques are more preliminary because of the lower reliability of the supportive scale. Nevertheless, we have shown that competent delivery of expressive techniques predicted subsequent change in depression, taking into consideration the role of other "nonspecific" variables

(i.e., general therapeutic skills or alliance). These preliminary findings suggest that theoretically relevant skills are important in the conduct of brief dynamic psychotherapy beyond "non-specific" skills and therapeutic alliance.

The present findings are consistent with results of previous studies that have examined a specific aspect of competent delivery of expressive techniques, that is, the delivery of accurate (Crits-Christoph et al., 1988) or corresponding (Piper et al., 1993) interpretations. The ratings of competent expressive techniques include additional aspects of interpretations such as the timing, the quality of wording, the handling of resistances and defenses, and the connections drawn between underlying conflicts and symptoms. The covariance between accurate interpretations and competent delivery of expressive techniques remains to be examined.

The current study did not address which factors are responsible for the symptomatic change that occurred prior to Session 3. This early symptomatic improvement could be a function of adherence in Sessions 1 and 2, competence in those sessions, both factors, or neither of these factors (i.e., caused by some other factors). Session by session ratings of these variables may enable us to provide a more complete answer to this question. Of course, other patient variables or additional third variables could explain away the effect of competent delivery of expressive techniques on subsequent change. It is possible that having therapists-in-training for SE resulted in larger between-therapists variance on the expressive competent subscale than may be found when therapists are fully trained. Future studies should address some of these potential third variables as well as replicate our findings in a larger sample. Because of the relative large number of predictors, this result and results from the secondary analyses should be considered preliminary. The relatively large number of regression analyses conducted in the present study to address potential alternative explanations also increased the likelihood of Type I errors. Thus, replicating the findings in a different sample of patients is essential. However, the main finding that competent use of expressive technique predicts subsequent change in depression was highly significant.

The present results support the notion that therapist competence should be included as an important therapist variable in psychotherapy research. It remains unclear, however, whether the same judges should rate both adherence and competence. The results also support the clinical impression and the methodological consideration that therapist competence should be used as criteria for the selection, training, and certification of the therapists who participate in clinical trials.

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