Therapist Affect Focus and Patient Outcomes in Psychodynamic Psychotherapy: A Meta-Analysis

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Objective: The authors systematically examined the relationship between therapist facilitation of patient emotional experience/expression and outcome in psychodynamic psychotherapy.

Method: Computer and manual searches were conducted for relevant publications, and 10 independent samples of short-term dynamic psychotherapy were included in a meta-analysis. Data analysis included calculation of an overall effect size of the relationship between therapist affect focus and outcome, statistical significance, and test for homogeneity. In addition, moderator analyses were conducted to examine the potential impact of type of outcome construct used and the methodological quality of individual studies.

Results: The overall average weighted effect size across all outcome types was statistically significant ($r=0.30$), and the homogeneity statistic was nonsignificant. Moderator analyses indicated a statistically significant relationship between therapist facilitation of patient emotional experience/expression and outcome when more than one outcome construct was included but not when either a single or an unclear outcome construct was used. There were no significant relationships between methodological quality and the size of the effects, although use of audio- or videotaping for supervision demonstrated a moderate effect.

Conclusions: These data indicate that therapist facilitation of patient affective experience/expression is associated with patient improvement over the course of psychodynamic psychotherapy. Although the size of this relationship was not significantly related to methodological quality, results suggest the importance of close supervision of actual techniques through the use of audio- or videotapes. Additionally, results highlight the importance of defining outcome in a multidimensional way to properly assess theoretically relevant effects.

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among the various techniques or processes, psychodynamic-interpersonal therapy’s affective emphasis had the most empirical support. This distinctive feature of contemporary psychodynamic therapy finds explicit theoretical elaboration in the work of a number of contemporary writers, including Fosha (9), McCullough and colleagues (10), and Wachtel (11).

In this study, we sought to demonstrate more precisely the nature of psychodynamic therapy’s efficacy by examining the relationship between therapist facilitation of patient emotional experience/expression and outcome. In addition, we examined the potential contribution of moderator variables, including the methodological quality of individual studies and the type of outcome construct used.

Method

Procedure

We used a multistage process to conduct a comprehensive examination of the relevant empirical literature on psychodynamic psychotherapy. In the first step, we searched the PsycINFO database through 2006 (the final search was conducted on Feb. 20, 2006). We also examined reference sections of relevant articles to locate additional studies. In the second step, we examined individual psychodynamic psychotherapy process-outcome research reports in the 2005 issues of the following journals: American Journal of Psychiatry, American Journal of Psychotherapy, Archives of General Psychiatry, Journal of Abnormal Psychology, Journal of Clinical Psychology, Journal of Consulting and Clinical Psychology, Journal of Counseling Psychology, Journal of Nervous and Mental Disease, Psychotherapy, and Psychotherapy Research. We also reviewed a number of earlier years of these journals (a list is available from the first author). For the Journal of Psychotherapy Practice and Research, which was discontinued in 2001, we reviewed the 1999–2001 issues manually. In this step, we also examined relevant references from articles in these journals. In the third and final step, we examined a number of review articles and book chapters on relevant process-outcome research.

To be included in the meta-analysis, articles had to be published (dissertations and other unpublished studies were not included), be written in English, describe studies of individual adult psychodynamic psychotherapy with samples larger than 1, and present data relevant to therapist facilitation of patient emotional experience/expression and outcome, whether in terms of correlation results or group comparisons.

For the meta-analysis, we defined therapist facilitation of patient emotional experience/expression as therapist activity associated with the patient’s subjective experience or verbal/behavioral expression of emotion. As delineated by McCullough and colleagues (10), emotional experience refers to internal, subjective feelings, and emotional expression refers to the outer (interpersonal) manifestation of these feelings. Examples of therapist actions designed to facilitate a patient’s emotional experience and expression include saying, “I noticed that your voice changed a bit when we were talking about your relationship, and I wonder what you are feeling right now” and “In order to make these feelings more clear, it might help to try and focus in on exactly what you’re experiencing right now, at this moment.”

The meta-analysis included studies that directly measured therapist facilitative activity of patient emotion as well as studies that measured patient emotional experience/expression following various forms of therapist intervention/activity. Although we excluded unpublished data from the meta-analysis, we performed the additional statistical technique of file-drawer analyses to demonstrate the degree of confidence that we can maintain in our meta-analytic findings (12).

Coding Scheme

To assess the relationship between a study’s methodological quality and the effect size, we coded each of five moderator variables as present or absent (1 or 0) for each publication: sample size ≥20; use of treatment fidelity checks by measurement of adherence or competence; use of audio- or videotaping as part of supervision; use of a treatment manual; and active supervision of therapists during the study. These criteria are derived in part from Leichsenring’s discussion (3, 4) of important methodological variables in the study of psychodynamic psychotherapy. The variables were coded as present only if the criterion was explicitly mentioned in the publication; if it was unclear whether a criterion was present, it was coded as absent. We calculated a total score of methodological quality by summing the scores of each of these five items and used Pearson’s r to examine the relationship between scores on this 5-point scale and the associated effect sizes.

We also coded effect sizes for the type of construct used in the measurement of the outcome variable and then performed secondary meta-analyses to help clarify the potential differences between therapist facilitation of affective experience/expression and various outcome categories. We coded this variable according to eight categories derived in part from Hill et al. (13): depressive symptoms; general psychiatric symptoms; social or work functioning; positive functioning; individualized outcome; overall change; combination of more than one outcome construct; and unclear outcome construct.

Data Analyses

An effect size (r) was calculated for each study. If a study reported a Spearman rank-order correlation coefficient, that was used as the effect size (12). If only means and standard deviations were presented in a study, we first calculated Cohen’s d and then converted it to r following the guidelines provided by Meyer, McGrath, and Rosenthal (14). All effect sizes were assigned a positive value if they were consistent with the a priori predictions or a negative value if they were inconsistent with the a priori predictions. Only one effect size and p value was calculated for each study, in order to maintain the assumption of independence that is necessary for a meta-analysis. We performed within-study meta-analytic calculations to produce an overall weighted average effect size when multiple effects were presented in a single study, and the N size used in the between-studies calculations was the average N of the various subsamples.

For the between-studies meta-analysis, we used the Hunter-Schmidt random effects method (12) because it generally provides a more conservative estimate of the average weighted effect size (15). We also performed Hunter and Schmidt’s file-drawer analysis (12). Interpretation of the weighted average effect size followed the guidelines provided by Cohen (16) as well as the alternative suggestions offered by Hemphill (17). In addition, we present the binomial effect size display method proposed by Rosenthal (18) to produce a more easily understandable set of results.
TABLE 1. Summary of Articles Included in Meta-Analysis of Therapist Affect Focus

<table>
<thead>
<tr>
<th>Author, Year, and Reference Number</th>
<th>Treatment</th>
<th>Overall Effect Size and N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cozby 1991^a(20)</td>
<td>Time-limited psychoanalytic psychotherapy</td>
<td>r=0.11, N=29</td>
</tr>
<tr>
<td>Gaston and Ring 1992 (22)</td>
<td>Brief dynamic therapy</td>
<td>r=-0.47, N=10</td>
</tr>
<tr>
<td>Hill et al. 1988 (13)</td>
<td>Brief psychotherapy</td>
<td>r=0.81, N=5</td>
</tr>
<tr>
<td>Hilsenroth et al. 2003 (23)</td>
<td>Short-term psychodynamic psychotherapy</td>
<td>Mean r=0.57, N=21</td>
</tr>
<tr>
<td>Horowitz et al. 1984^b(24)</td>
<td>Time-limited dynamic psychotherapy</td>
<td>Mean r=0.09, mean N=29</td>
</tr>
<tr>
<td>Foreman and Marmar 1985^c(21)</td>
<td>Time-limited dynamic psychotherapy</td>
<td>Mean r=0.12, mean N=21</td>
</tr>
<tr>
<td>Jones et al. 1992^d(25)</td>
<td>Brief psychoanalytic psychotherapy</td>
<td>Mean r=0.26, mean N=16</td>
</tr>
<tr>
<td>Caspar et al. 2000^e(19)</td>
<td>Brief psychodynamically oriented psychotherapy</td>
<td>r=0.51, N=16</td>
</tr>
<tr>
<td>McCullough et al. 1991 (26)</td>
<td>Two forms of brief psychotherapy</td>
<td>r=0.59, N=19</td>
</tr>
<tr>
<td>Mintz 1981^f(27)</td>
<td>Brief psychoanalytic psychotherapy</td>
<td>r=0.59, N=4</td>
</tr>
<tr>
<td>Piper et al. 1987 (28)</td>
<td>Psychoanalytically oriented, short-term individual psychotherapy</td>
<td>r=0.59, N=4</td>
</tr>
<tr>
<td>Strupp 1980 (29, 30)</td>
<td>Time-limited psychoanalytic psychotherapy</td>
<td>r=0.59, N=4</td>
</tr>
</tbody>
</table>

^a A detailed version of this table is available in a data supplement that accompanies the online version of the article.
^b Foreman and Marmar 1985 (21) report data on a subsample of the larger sample reported in Horowitz et al. 1984 (24). The data from these two publications were therefore aggregated.
^c Caspar et al. 2000 (19) report data on a subsample of the larger sample reported in Jones et al. 1992 (25). The data from these two publications were therefore aggregated.
^d Part of the data included in Mintz 1981 (27) was originally published in Malan 1975 (31).

Results

The initial computer search yielded 789 articles. Each abstract was reviewed, and relevant articles were retrieved in full. Together with the manual search and the review of relevant reference sections, more than 500 articles were retrieved in full. Of the 66 articles among them that appeared to potentially meet inclusion criteria, 53 were eventually excluded. Of the remaining 13 publications (13, 19–30), some contained overlapping or identical samples, resulting in a total of 10 independent samples. Information about the 13 articles is briefly summarized in Table 1 (a more detailed description of the articles is provided in a data supplement that accompanies the online version of the article). The sample included in the meta-analysis consisted of a total of 150 participants, with a mean of 15 participants (SD=8) per independent sample.

Therapist facilitation of patient affective experience/expression was positively associated with treatment improvements, and this relationship most likely exists independently of the influence of other factors. The results suggest a 30% difference in success rate between patients who receive an affective therapeutic focus and those who do not (18, 32). The overall effect size, r=0.30 (p<0.01; a medium effect size [16]), falls in the top one-third to two-thirds of the effects reported in Hemphill’s review (17; 95% CI=0.11–0.48), and the homogeneity statistic was nonsignificant. Results of the binomial effect size display method (18, 32) indicate that therapist facilitation of patient affective experience/expression increased patient success rate from 35% to 65%.

Some critics have argued against the validity of meta-analyses generally, claiming that meta-analyses include only studies that have demonstrated positive findings, while negative findings are relegated to their experimenters’ file drawers and never enter the meta-analyst’s purview; based as they are on a biased sample of research studies, their results are questionable. To address this concern, we conducted file-drawer analyses to determine the number of unpublished null results necessary to challenge the meta-analytic findings (12, 18). The results suggest that we can be reasonably confident that the overall effect size hovers above r=0.10, but not necessarily above r=0.20. Only about five studies (with an average sample size of 15 or more) averaging null results would be needed to reduce the average weighted effect size to r=0.20, and approximately 20 studies (with an average sample size of 15 or more) averaging null results would be needed to reduce it to r=0.10. Since we were able to locate only 10 independent samples in the meta-analysis (out of more than 500 studies examined), none of which yielded null results and only one of which yielded a negative effect size, the existence of an additional 20 undetected studies averaging null results seems unlikely (33).

Although the homogeneity results (i.e., no statistical indication to presume heterogeneous, underlying populations of effects) might argue against the use of moderator analyses in these circumstances (12), we decided to examine the impact of two potentially important variables to provide information for future researchers: type of outcome construct and methodological quality.

Type of outcome construct consisted of two subcategories: samples that used more than one outcome construct and all other samples (i.e., those that used either a single outcome construct of depressive symptoms or overall change and those that used an unclear outcome construct). The meta-analysis for samples that combined more than one outcome construct yielded a total of six independent samples (13, 20, 21, 24, 26, 27, 29, 30) with a total sample size of 79 and an average sample size of 13 (SD=9). The average weighted effect size, 0.31 (95% CI=0.13–0.47), was statistically significant, and the test of homogeneity was not statistically significant at 3.89. The meta-analysis for the remainder of the samples (those that used a single outcome construct or an unclear outcome construct) had a total of four independent samples (19, 22, 23, 25, 28) with a total sample size of 71 and an average sample size of 18 (SD=5). The average weighted ef-
fect size, 0.29 (95% CI=−0.07 to 0.66), was not statistically significant, and the homogeneity statistic was significant at 10.69 (p=0.03).

To examine the potential impact of methodological quality on the overall meta-analytic results, we used ratings from the 5-point methodological quality coding scheme described earlier; the results were nonsignificant. We also conducted secondary analyses (point-biserial correlations, 0=absence, 1=presence) to examine the relationship between each of the individual items coded for methodological quality and the associated effect sizes. None of the correlations was statistically significant, although use of audio- or videotaping for supervision demonstrated the largest positive effect (r=0.29).

**Discussion**

Our results indicate that the more therapists facilitate the affective experience/expression of patients in psychodynamic therapy, the more patients exhibit positive changes. Although the results presented here are correlational, the effect size (r=0.30) resembles that in Smyth's meta-analysis (34; r=0.23), which examined the causal relationship between written emotional expression and health (reported physical health, psychological well-being, physiological functioning, general functioning, and health behaviors). The effect size we obtained in our meta-analysis resembles that reported by Martin et al. (33; r=0.22), who examined the relationship between therapeutic alliance and outcome. Safran and Muran (35) point out that “after approximately a half century of psychotherapy research, one of the most consistent findings is that the quality of the therapeutic alliance is the most robust predictor of treatment success” (p. 1).

The similarity between the effect size of the therapeutic alliance and this study's effect size suggests the potential importance of therapist affect facilitation as an additional powerful predictor of treatment success. This effect of therapist affect facilitation cannot be readily attributed to bias, even assuming the existence of unpublished studies with null results. Our results also indicate that this effect is independent of additional, potentially moderating variables.

We decided to examine the potential influence of two moderator variables even though the homogeneity statistic was nonsignificant, a decision that finds support in the meta-analytic literature (36). We found no significant influence of methodological quality on the relationship between affect focus and outcome. However, use of audio- or videotaping for supervision demonstrated a moderate effect size, which suggests the importance of observing actual therapist techniques in order to maximize these dynamic treatment effects. We also examined the potential influence of outcome construct types on the relationship between affect focus and outcome. These findings suggest that the utility of therapist facilitation of patient affective experience/expression may be most salient when examining outcome as a multidimensional construct.

Our findings suggest that researchers and clinicians need to pay greater attention to the therapist's role in facilitating patient affect. Of the 13 publications examined in the meta-analysis, only two (20, 26) appear to have considered the role of therapist facilitation of affect sufficiently significant to devise a study primarily around hypotheses related to affect facilitation techniques (J. Barber, personal communication, March 5, 2006). More research is needed to examine the role of these techniques as well as their limitations.

Our study indicates that therapist facilitation of patient affect experience/expression is associated with outcome improvements in short-term psychodynamic psychotherapy. The findings of the meta-analysis suggest that the use of affect-focused techniques to encourage adaptive emotional experience/expression has important therapeutic potential in short-term dynamic therapy. Our results also suggest the importance of defining outcome in a multidimensional way in order to properly assess theoretically relevant effects. Methodological quality was not significantly related to effect size, although use of audio- or videotaping for supervision demonstrated a moderate effect and suggests the importance of observing actual techniques or therapist action.

As indicated by the results of the file-drawer analysis, more research is needed on the relationship between therapist facilitation of patient affect and outcome in dynamic therapy. Future research should integrate findings from both published and unpublished studies (e.g., by searching Dissertation Abstracts International) and examine the impact of additional theoretically relevant moderator variables (e.g., presence of specific axis II disorders or features). Thus, for example, Vaillant (37) suggests that therapists refrain from encouraging defensive affect in histrionic patients. In addition, data from Horowitz and colleagues (24) indicate that greater therapist affect focus was associated with positive outcome for patients with higher ratings on a self-concept dispositional variable, while the opposite was true for patients with lower ratings (M.J. Horowitz, personal communication, Oct. 22, 2003). These findings indicate the importance of considering patient characteristics when formulating affect-focused interventions.

Nevertheless, our results suggest the general utility of facilitating patient affect for promoting change in short-term dynamic therapy, and they are notable in representing a step toward delineating specific interventions that are related to outcome (5). Our results do not simply point to patient improvement associated with short-term dynamic psychotherapy but instead help researchers and clinicians identify the specific relevance of affect-focused techniques or process in contributing to positive outcome. Thus, researchers should continue to investigate...
the utility of various interventions in promoting change in short-term psychodynamic and other forms of psychotherapy and further define the utility of facilitating patient affect by specifying which methods of affect facilitation work best, for which patients, and under what conditions.

References


35. Safran JD, Muran JC: Negotiating the Therapeutic Alliance: A Relational Treatment Guide. New York, Guilford Press, 2000