Psychotherapy Research

How Expert Clinicians' Prototypes of an Ideal Treatment Correlate with Outcome in Psychodynamic and Cognitive-Behavioral Therapy

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HOW EXPERT CLINICIANS' PROTOTYPES OF AN IDEAL TREATMENT CORRELATE WITH OUTCOME IN PSYCHODYNAMIC AND COGNITIVE-BEHAVIORAL THERAPY

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This study presents an innovative methodology for identifying the active ingredients in the process of psychotherapy. Panels of experts developed prototypes of psychodynamic and cognitive-behavioral therapy using the Psychotherapy Process Q-set. The prototypes were used to assess the extent to which treatments conformed to the prototypes in 3 archived treatment samples. The degree to which the treatments adhered to the prototypes was measured quantitatively and correlated with outcome. The psychodynamic prototype constructed by experts was consistently significantly correlated with positive outcome in both psychodynamic and cognitive-behavioral therapy. The cognitive-behavioral prototype was not consistently significantly correlated with positive outcome in either type of therapy.

It is widely acknowledged that psychodynamic and cognitive-behavioral theories prescribe very different techniques for therapy. In many instances, the two theories imply contradictory forms of intervention. In view of the fact that the two treatment strategies are very different, differences in the effectiveness of the approaches might be expected as well. However, this has not been the case. Studies of different types of treatment have not shown any systematic differences in the effects of the treatments (Smith, Glass, & Miller, 1980; Miller & Berman, 1983; Elkin et al., 1989). There is considerable research suggesting that although the content of different forms of therapy may be quite different, their outcomes, at least in brief therapies, are equivalent (Stiles, Shapiro, & Elliott, 1986; Kazdin & Bass, 1989). However, traditional outcome studies can only tell us if a patient has changed as a result of some intervention, but they are limited in explaining *how* the patient has changed (Persons, 1991).

One possible explanation for the lack of differences found in studies comparing the effectiveness of psychodynamic and cognitive-behavioral therapy may be that although the two approaches appear to be quite different, perhaps they share underlying common features that are responsible for the equivalent effects of the two treatments. For instance, it has been suggested that the presence of a "therapeutic or

working alliance" between patient and therapist is a common factor across different orientations that is responsible for promoting change in the patient (Frieswyck, et al., 1986; Gaston, 1990; Goldfried, 1991). It may also be possible that the factors responsible for predicting outcome are associated with or theoretically related to a particular form of therapy, but are actually being applied in other forms of therapy, and that these are responsible for predicting outcome. Without examining the therapy process, this possibility cannot be ruled out. In order to determine the specific factors that are responsible for promoting patient change, the treatment process itself must be studied.

A recent comparative study of psychotherapy process using the Psychotherapy Process Q-set (PQS), a descriptive measure of the psychotherapy process suitable for quantitative analysis, has identified extensive differences in the process in psychodynamic and cognitive-behavioral therapies (Jones & Pulos, 1993). When these process differences were related to outcome, differential effectiveness of the techniques were identified. A factor analysis yielded a process factor of 10 Q-items that appeared to be conceptually associated with psychodynamic technique. This process factor, labeled "psychodynamic technique," was significantly correlated with successful outcome in both psychodynamic and cognitive-behavioral therapies. A second factor of Q-items associated with the cognitive-behavioral approach, labeled "cognitive-behavioral technique," was not significantly correlated with successful outcome in either psychodynamic or cognitive-behavioral therapies. These provocative findings suggest that cognitive-behavioral therapists might be using psychodynamic strategies, and that it is these techniques that are responsible for promoting patient change. A limitation of the study was that the process factors termed "psychodynamic" and "cognitive-behavioral" technique were generated from the data set without an external criterion to establish whether the factors did in fact represent these two treatments in the way in which they are commonly applied. The present study applies prototypes developed by independent panels of experts to these same datasets as external standards of psychodynamic and cognitive-behavioral therapies to determine whether the original findings could indeed be confirmed.

The prototypes developed and applied in the present study represent an innovative methodology for identifying the active ingredients in the process of psychotherapy. These prototypes of an ideal psychodynamic and cognitive-behavioral therapy process were created using the PQS by panels of expert clinicians representing the two orientations. The prototypes are applied directly to hours of psychotherapy that have been rated using the same instrument. The degree to which a therapist adheres to the prototype in a given hour can be measured quantitatively and correlated with outcome in order to identify the active ingredients in the therapy process.

DEVELOPMENT OF PROTOTYPES

METHOD

Responses by expert psychodynamic and cognitive-behavioral therapists to a questionnaire form of the PQS were used to develop prototypes of the therapy process. The expert panels of psychodynamic ($N = 11$) and cognitive-behavioral therapists ($N = 10$) were comprised of leading theoreticians and practitioners of each perspective. All of the expert therapists were highly experienced and internationally

recognized for their expertise (years of post-graduate clinical experience: M = 28.4; SD = 10.2, M = 19.5; SD = 12.5, respectively). Each member of the expert panels was responsible for training therapists in their orientation and most had published work concerning their approach to psychotherapy.

The instrument used to create the prototypes, the PQS, furnishes a language for describing therapist-patient interaction in clinically relevant terms that can be analyzed quantitatively (Jones, Hall, & Parke, 1991). The PQS consists of 100 items that are tied to specific actions, behaviors, and statements. The PQS has demonstrated both reliability and validity across a variety of studies and treatment samples (Jones, Cumming, & Horowitz, 1988; Jones, Parke, & Pulos, 1992; Jones & Pulos, 1993) Since the PQS is pantheoretical, it is possible to create prototypes of different types of therapy using the same instrument, and then prototypes of different therapeutic approaches can be directly compared. Each member of the panel of expert therapists was asked simply to rate each of the 100 items of the Q-set questionnaire on a scale from 1 to 9, according to how characteristic each item was of their understanding of an ideally conducted course of therapy that adheres to the principles of their theoretical perspective. Each questionnaire yielded one score for each of the 100 items of the Q-set. After completing his or her ratings, each expert was asked to describe any important aspect of the therapeutic process that was not addressed by the 100 items of the PQS. The experts provided considerable feedback, and neither the psychodynamic or cognitive-behavioral experts indicated that any important domains of process were omitted, suggesting that the PQS has adequate coverage for the task of creating prototypes of both types of therapy process.

RESULTS

Coefficient alpha reliabilities demonstrated that the level of agreement of the expert therapists' ratings was high for both psychodynamic (.94) and cognitive-behavioral (.95) orientations. Prototypes were then created using a small sample statistical method for studying points of view, sometimes called "Q-technique" (Cattell, 1952; Stephenson, 1953; Nunnally, 1978; McKeown & Thomas, 1988). This strategy provides access to the structure of a discourse, defining segments of opinion and highlighting their similarities and differences. Respondents (in this case, the expert therapists) express viewpoints by ranking statements representing some domain of discourse. The correlations between the experts Q-sorts indicate the similarity (or dissimilarity) of the viewpoints those Q-sorts represent. Factor analysis of correlations among multiple Q-sorts defines an emergent typology of views. Factor loadings reflect the affiliation of Q-sorts with factors; factor scores indicate which statements contribute most and least to each factor. In contrast to the more familiar R-factor analysis, this approach to factor analysis correlates a smaller number of subjects over a larger number of items, in this case the 100 items of the PQS.

In order to perform this Q-type factor analysis, the data matrix was transposed so that the 21 expert therapists represented variables to be correlated over the 100 items of the PQS, so that N = 100. The expert therapists' ratings then were subjected to a principal components factor analysis. By using a Q-type factor analysis, the prototypes are defined according to the Q-factors or principal components that emerge from the correlations among the expert therapists from the two orientations. The factor analysis yielded two factors with Eigenvalues above 1.0 after varimax rotation, which together explained 69.3% of the variation in the correlations among the 21 expert

therapists. All 11 expert psychodynamic therapists had primary loadings on Factor 1 ("psychodynamic technique"), and all 10 expert cognitive-behavioral therapists had primary loadings on Factor 2 ("cognitive-behavioral technique"). The average primary factor loading for the psychodynamic and cognitive-behavioral therapists was .79 (range .69–.87) and .82 (range .64–.89), respectively. These results provide a further demonstration that the ratings of each expert were consistent with the ratings of the other experts from the same orientation. It also confirms that the psychodynamic and cognitive-behavioral experts have two, and only two, distinct conceptualizations of ideal therapy process.

Linear regressions were calculated to determine the contribution of each Q-item to the two factors. Factor scores represent the weighted sum of each Q-item. The items with the highest factor scores are most defining of the factor, and the items with the lowest factor scores are least defining of the factor. Tables 1 and 2 list a sample of the 20 items with the highest factor scores for the psychodynamic and cognitive-behavioral technique factors, respectively. These items also are described below. Although only those 20 items with the highest factor scores are displayed in the tables and described in the text, the entire factor array of factor scores on all 100 items of the PQS was used to comprise the Q-prototypes of ideal psychodynamic and cognitive-behavioral therapy process. These factor arrays are literally a description of each of the two factors (psychodynamic and cognitive-behavioral technique) that emerged from the expert therapists' ratings.

Q-prototype of ideal psychodynamic psychotherapy. According to the expert psychodynamic therapists, the therapist should be empathic and sensitive to the patient's feelings (Q 6) and convey a nonjudgmental sense of acceptance (Q 18) in ideal psychodynamic psychotherapy. In addition to being attuned to the patient, the prototype also suggests that it is important for the therapist to remain neutral (Q 93). The importance of the transference and countertransference in psychodynamic therapy is underscored by the prototype. According to the expert psychodynamic therapists, the therapy relationship should be a focus of the discussion (Q 98), and the therapist should draw connections between the therapeutic relationship and other relationships (Q 100). In terms of content of the sessions, memories or reconstructions of infancy and childhood (Q 91), self-image (Q 35), sexual feelings and experiences (Q 11), and dreams and fantasies (Q 90) are ideally a focus of the discussion. The therapist should communicate with the patient in a clear and coherent style (Q 46) and facilitate the patient speaking freely (Q 3). Key psychodynamic techniques for therapists include: pointing out the patient's use of defensive maneuvers (Q 36); interpreting warded-off or unconscious wishes, feelings, or ideas (Q 67); drawing attention to feelings regarded by the patient as unacceptable (Q 50); linking the patient's feelings or perceptions to situations or behavior in the past (Q 92); reformulating the patient's behavior during the hour in a way not explicitly recognized previously (Q 82); and identifying a recurrent theme in the patient's experience or conduct (Q 62). The therapist also should focus on the patient's feelings of guilt (Q 22) and comment on changes in the patient's mood or affect (Q 79). Ideally, the patient should achieve a new understanding or insight (Q 32) from the session.

Q-prototype of ideal cognitive-behavioral therapy. According to the expert cognitive-behavioral therapists, the therapist should adopt a supportive stance (Q 45) in ideal cognitive-behavioral therapy. The therapist should actively exert control over

TABLE 1. Rank Ordering of Q-items by Factor Scores on Psychodynamic Technique Factor

PQS #	20 Most characteristic items of ideal psychodynamic therapy Item description	Factor score
90	P's dreams or fantasies are discussed.	1.71
93	T is neutral.	1.57
36	T points out P's use of defensive maneuvers, e.g. undoing, denial.	1.53
100	T draws connections between the therapeutic relationship and other relationships.	1.47
6	T is sensitive to the P's feelings, attuned to the P; empathic.	1.46
67	T interprets warded-off or unconscious wishes, feelings or ideas.	1.43
18	T conveys a sense of nonjudgmental acceptance.	1.38
32	P achieves a new understanding or insight.	1.32
98	The therapy relationship is a focus of discussion.	1.28
46	T communicates with P in a clear, coherent style.	1.24
50	T draws attention to feelings regarded by P as unacceptable (e.g., anger, envy, or excitement).	1.17
11	Sexual feelings and experiences are discussed.	1.12
82	P's behavior during the hour is reformulated by T in a way not explicitly recognized previously.	1.12
35	Self-image is a focus of discussion.	1.11
91	Memories or reconstructions of infancy and childhood are topics of discussion.	1.08
92	P's feelings or perceptions are linked to situations or behavior of the past.	1.05
62	T identifies a recurrent theme in P's experience or conduct.	0.95
3	T's remarks are aimed at facilitating P's speech.	0.92
79	T comments on changes in P's mood or affect.	0.88
22	T focuses on P's feelings of guilt.	0.87

Note. Factor scores derived from expert psychodynamic therapists' ($N = 11$) ratings of the Psychotherapy Process Q-set. PQS = Psychotherapy Process Q-set; T = therapist; P = patient.

the interaction by introducing new topics and structuring the hour (Q 17), assume a didactic stance (Q 37), and explain the rationale behind his/her technique or approach to treatment (Q 57). The dialogue in ideal cognitive-behavioral therapy should have a specific focus (Q 23). The patient's treatment goals (Q 4) as well as specific activities or tasks for the patient to attempt outside of the session (Q 38) should be discussed. The discussion should also center on cognitive themes about ideas and belief systems (Q30), and the patient's current or recent life situation should be emphasized (Q 69). The cognitive-behavioral therapist should be confident and self-assured (Q 86), ask for more information and elaboration (Q 31), and accurately perceive the therapeutic process (Q 28). Key cognitive-behavioral techniques for therapists include: giving explicit advice and guidance (Q 27); encouraging the patient to try new ways of behaving with others (Q 85); presenting experiences or events in different perspectives (Q 80); and encouraging independence of action or opinion in the patient (Q 48). In ideal cognitive-behavioral therapy, the patient brings up significant issues (Q 88), is committed to the work of therapy (Q 73), understands the nature of therapy and what is expected (Q 72), and feels helped (Q 95).

TABLE 2. Rank Ordering of Q-items by Factor Scores on Cognitive-Behavioral Technique Factor

PQS #	20 Most characteristic items of ideal cognitive-behavioral therapy Item description	Factor score
38	There is discussion of specific activities or tasks for the P to attempt outside of session.	1.93
30	Discussion centers on cognitive themes, i.e. about ideas or belief systems.	1.68
4	P's treatment goals are discussed.	1.51
85	T encourages P to try new ways of behaving with others.	1.49
17	T actively exerts control over the interaction (e.g. structuring, introducing new topics).	1.45
45	T adopts supportive stance.	1.43
23	Dialogue has a specific focus.	1.38
31	T asks for more information or elaboration.	1.37
69	P's current or recent life situation is emphasized in discussion.	1.35
27	T gives explicit advice and guidance.	1.32
80	T presents an experience or event in a different perspective.	1.28
86	T is confident or self-assured (vs. uncertain or defensive).	1.21
37	T behaves in a teacher-like (didactic) manner.	1.17
73	P is committed to work of therapy.	1.14
57	T explains rationale behind technique or approach to treatment.	1.13
88	P brings up significant issues and material.	1.09
72	P understand the nature of therapy and what is expected.	1.08
95	P feels helped.	1.06
28	T accurately perceives the therapeutic process.	1.05
48	T encourages independence of action or opinion in P.	1.02

Note. Factor scores derived from expert cognitive-behavioral therapists' (N = 10) ratings of the Psychotherapy Process Q-set. PQS = Psychotherapy Process Q-set; T = therapist; P = patient.

APPLICATION OF PROTOTYPES

METHOD

The Q-prototypes then were applied to actual psychotherapy sessions that had already been rated using the PQS for previous studies in order to determine how close the treatments are to the ideal prototypes. Three sets of archived treatment samples, two of brief psychodynamic treatments (N = 30; N = 38) and one of cognitive-behavioral treatments (N = 32) that were obtained from other investigators were used in the analyses. By using these data, direct comparison with earlier research is possible in an attempt to replicate findings. The first psychodynamic treatment sample (M = 15.8 sessions) focused on a range of psychological disorders and was obtained from the Mount Zion Psychotherapy Research Group in San Francisco (Jones et al., 1992). The second psychodynamic treatment sample (M = 12.0 sessions) consisted of psychodynamic treatments for PTSD that were collected as part of a larger study on the effectiveness of brief manualized therapy for patients suffering from stress-response syndromes following a traumatic event or experience of loss (Horowitz, Marmar, Weiss, DeWitt, & Rosenbaum, 1984). The cognitive-behavioral therapy sample (M = 14.4 sessions) was collected as part of a study comparing the effectiveness of cognitive-behavioral therapy alone and in combination with tricyclic pharmacotherapy

in the treatment of unipolar depression (Hollon, et al., 1992). The characteristics of the treatment samples (both the patients and the therapists) are described in greater detail in previous studies (Jones et al., 1992; Jones et al., 1992; Jones & Pulos, 1993).

Verbatim transcripts of selected therapy sessions for each patient in the samples described above were rated using the PQS. When multiple sessions for a given patient were rated, the Q-ratings were averaged across sessions to obtain one score per Q-item for each patient. Q-ratings were completed by advanced doctoral students in clinical psychology and professional-level psychologists who were trained in the application of the Q-technique. The judges represented a range of theoretical perspectives, including psychodynamic and cognitive-behavioral, although most were eclectic in their clinical orientations. When reliability was below .50 (Pearson product-moment correlation coefficient), a third rater was added. Interrater reliability (Pearson product-moment correlation coefficient) ranged from .68 to .90, with a mean reliability of .86 (Jones et al., 1988).

The observer Q-sort of each treatment session was correlated with the psychodynamic and cognitive-behavioral prototypes. The correlations with the Q-prototypes then were transformed into z-scores using the Fisher r to z transformation. The z-scores represent the degree to which an hour of psychotherapy is correlated with the Q-prototypes. The z-scores were then correlated with outcome in the archived treatment samples to determine whether those aspects of the therapy process which in theory should promote patient change are in fact responsible for predicting positive outcome. Partial correlations of the z-scores and the outcome measures were calculated in order to control for pre-treatment scores.

RESULTS

Figure 1 depicts the mean correlations of the observer Q-sorts and the Q-prototypes in the three archived treatment samples. The correlations were transformed from Pearson correlation coefficients into z-scores using the Fisher r to z transformation before averaging. The mean correlations provide an index of how closely the treatments adhered to the process prescribed by the experts in the psychodynamic and cognitive-behavioral prototypes.

In the first psychodynamic treatment sample, there was a near-significant difference between the correlations of the observer Q-sorts with the psychodynamic prototype and the cognitive-behavioral prototype, $t(30) = -2.04$, $p = .051$. While both correlations were quite strong, the correlation between the observer Q-sorts and the psychodynamic prototype (M z-score = .49, SD = .15) was higher than the correlation between the observer Q-sorts and the cognitive-behavioral prototype (M z-score = .41, SD = .14). In the sample of psychodynamic treatments for PTSD, there was no significant difference between the correlations of the observer Q-sorts with the psychodynamic prototype (M z-score = .29, SD = .21) and the cognitive-behavioral prototype (M z-score = .27 SD = .18), $t(38) = -0.63$ NS. In the cognitive-behavioral treatment sample, there was a significant difference between the correlations of the observer Q-sorts with the two prototypes $t(32) = 24.65$, $p < .001$. There was a high correlation between the observer Q-sorts and the cognitive-behavioral prototype (M z-score = .73, SD = .21) and a negative correlation between the observer Q-sorts and the psychodynamic prototype (M z-score = -.09, SD = .13). It is important to note that this negative correlation indicates that, on average, the treatment sessions in the cognitive-behavioral sample did not conform to the psychodynamic prototype. However some elements of a psychodynamic process still may have been present in these sessions.
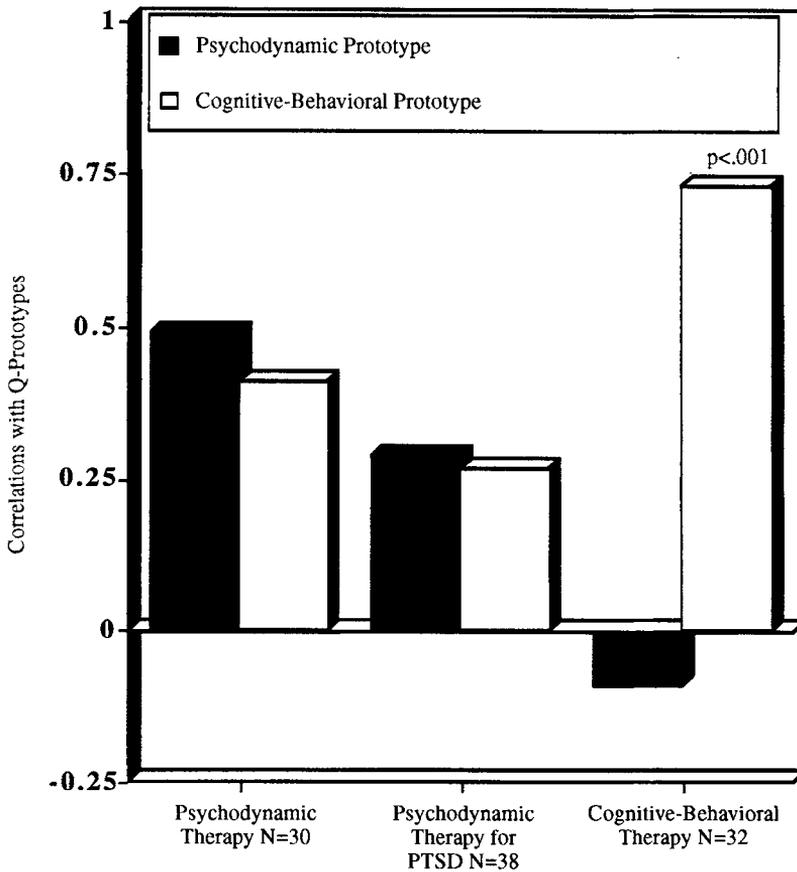
FIGURE 1. Mean correlations of observer Q-sorts and Q-prototypes in psychodynamic and cognitive-behavioral treatment samples. Correlations were transformed from Pearson correlation coefficients into z-scores using the Fisher r to z transformation before averaging.

Table 3 displays the partial correlation coefficients in the three treatment samples of the Q-prototypes and the outcome measures, controlling for pretreatment scores. Positive correlations reflect a favorable association with outcome. In the psychodynamic treatment sample, the psychodynamic prototype was significantly associated with positive outcome on three of the six outcome measures with a trend in the positive direction on an additional measure. The cognitive-behavioral prototype was significantly associated with positive outcome on only one outcome measure and showed little or no association with the other five measures. In the psychodynamic treatment for PTSD sample, the two prototypes showed little or no association with positive outcome on any of the outcome measures. In other words, none of the prototypes were capable of identifying the active ingredients in the process of a sample of generally successful psychodynamic treatments for PTSD. In the cognitive-behavioral treatment sample, the psychodynamic prototype was significantly associated with positive outcome on four of the six outcome measures with a trend in the positive direction on an additional measure. The cognitive-

TABLE 3. Q-Prototypes Correlated with Outcome in Psychodynamic and Cognitive-Behavioral Treatment Samples

	Q-prototypes	
Outcome measures (rater)	Psychodynamic prototype	Cognitive-behavioral prototype
Psychodynamic treatment sample		
Target Complaint Scale (patient) .	.44*	.01
Target Complaint Scale (therapist)	.37*	.05
Target Complaint Scale (evaluator)	.19	−.05
BPRS (therapist)	.36†	.51*
BPRS (evaluator)	.41*	.02
SCL-90-R	.19	.10
Psychodynamic treatment for PTSD sample		
BPRS (therapist)	−.15	−.16
BPRS (evaluator)	.11	.08
SCL-90-R	−.12	.14
Cognitive-behavioral treatment sample		
BDI	.41*	.13
ATQ feelings	.45**	.39*
ATQ beliefs	.45**	.23
HRSD-17	.34*	.17
MMPI-D	.30†	.17
RDS	.23	.13

Note. A positive correlation reflects a favorable association with outcome. All Pearson correlations are partial correlations controlling for patient pretreatment scores.
Target Complaint Scale is the main problem identified by the patient rated according to how bothersome it is. Endpoints are 0 (not present) and 12 (extremely severe). BPRS = Brief Psychiatric Rating Scale; SCL-90-R = Symptom Distress Checklist—Revised; BDI = Beck Depression Inventory; ATQ = Automatic Thoughts Questionnaire; HRSD-17 = 17-item Hamilton Rating Scale for Depression; MMPI-D = Minnesota Multiphasic Personality Inventory Depression scale; RDS = Raskin Depression Scale.
†$p < .10$.   *$p < .05$.   **$p < .01$.

behavioral prototype was significantly associated with positive outcome on only one outcome measure.

DISCUSSION

The prototypes created in this study by panels of experts represent an ideal treatment process from two distinct theoretical perspectives. A remarkable finding was that observer Q-sorts were positively correlated with the cognitive-behavioral prototype in both psychodynamic treatments samples. The psychodynamic therapists applied a notable amount of cognitive-behavioral strategies in addition to psychodynamic strategies in the first psychodynamic sample and almost as much in the way of cognitive-behavioral strategies as they did psychodynamic strategies in the sample of psychodynamic treatments for PTSD. In contrast, in the archived cognitive-behavioral treatment sample, there was a high positive correlation of observer Q-sorts with the cognitive-behavioral prototype, but a negative correlation with the

psychodynamic prototype. The cognitive-behavioral therapists applied a good deal in the way of cognitive-behavioral techniques, but did not foster a psychodynamic process. The cognitive-behavioral treatments appeared to follow the cognitive-behavioral model closely. The psychodynamic treatments that were studied clearly included a more diverse set of interventions. Cognitive-behavioral techniques were, in a sense, a sub-sample of the techniques used by the psychodynamic therapists. It seems a psychodynamic stance may be more compatible with working with ideas and beliefs than a cognitive-behavioral stance is with working with, for example, the therapy relationship.

This study also addressed the question of whether the prototypes of ideal therapy process are associated with positive outcome. Perhaps the most intriguing finding was a replication of results in earlier research using the PQS in the same datasets (Jones & Pulos, 1993). In both studies, psychodynamic technique, differently defined, was consistently significantly associated with positive outcome in the cognitive-behavioral treatment sample. In the first study, psychodynamic technique was defined by a process factor consisting of only 10 Q-items which were generated by a factor analysis of observer Q-ratings of sessions ("R-factor analysis"). This process factor was simply labeled "psychodynamic technique" by the investigators because it appeared to describe techniques conceptually associated with psychodynamic psychotherapy. In the present study, psychodynamic technique was defined by a prototype constructed from expert therapist's ratings ("Q-factor analysis") across the full array of 100 Q-items. The expert therapists' formulations of an ideal psychodynamic process were again positively correlated with outcome, providing independent verification that psychodynamic strategies were correlated with positive outcome in these cognitive-behavioral treatments.

The cognitive-behavioral prototype was only associated with positive outcome on one of the six outcome measures available in both the first psychodynamic treatment sample and the cognitive-behavioral treatment sample that we studied. The psychodynamic prototype was consistently significantly associated with positive outcome in the first psychodynamic treatment sample. In the second sample of psychodynamic treatments (for PTSD), none of the prototypes was associated with positive outcome. Since we know that subjects in this study did benefit significantly from the therapy, the prototypes failed to identify the active ingredients in the therapy process. This suggests that modified prototypes with greater specificity may be needed for variations of therapy technique used to treat specific patient populations or types of clinical problems such as PTSD. Jones et al. (1988) found that the successful treatments with the more disturbed patients in this sample were best described as anxiety suppressive or supportive rather than expressive psychotherapy. The therapists modified general psychodynamic techniques to be less neutral and more reassuring and structuring, in response to the subjects' traumatic experiences. This explains why the correlations with the psychodynamic prototype were lower in this sample than in the other psychodynamic treatment sample we studied. A prototype of supportive psychodynamic therapy for PTSD might have better accounted for positive patient change.

A question arose as to what, clinically speaking, might constitute a cognitive-behavioral intervention in a psychodynamic treatment and vice versa. A qualitative analysis of transcripts was used to answer this question. A transcript from the psychodynamic treatment sample that had a high correlation with the cognitive-behavioral prototype was identified. This hour was typical of the psychodynamic treatments in that it also correlated highly with the psychodynamic prototype. In

this session, the patient said that she wished her mother would leave her alone. The therapist suggested that the patient might have some stronger thoughts about her mother than that. The patient then admitted that sometimes she wished that her mother would die, and that she felt extremely guilty about this wish. The therapist interpreted that the patient had a belief that at some level she was responsible for her mother's well-being and that if she did something that her mother disapproved of, she would injure her. The therapist was interpreting warded-off wishes, but the discussion also clearly centered on cognitive themes, i.e., the patient's belief that she is omnipotently responsible for her mother. Conversely, review of transcripts from the cognitive-behavioral sample that had a high correlation with the psychodynamic prototype provided examples of psychodynamic strategies used in cognitive-behavioral therapy. An example of psychodynamic treatment strategy in the cognitive-behavioral treatments involved the discussion of the therapy relationship in a way that approaches a transference interpretation. In one such session, the therapist points out to the patient that she is being too hard on herself at school by not asking for help from professors. The therapist then links this to the patient's belief that she should be able to deal with her problems by herself rather than with the help of therapy. In a session toward the end of another treatment, the patient talks of her ambivalence about becoming invested in relationships because they always end. The therapist links this fear to termination and the patient's fear of becoming too dependent on therapy, an intervention focused on the therapy relationship that experts associated with psychodynamic therapy. These examples demonstrate that, although the psychodynamic prototype was negatively correlated with the observer Q-sorts of the cognitive-behavioral treatment sample as a whole, some elements of a psychodynamic process were present in the cognitive-behavioral therapies.

The intriguing result that a psychodynamic process predicts positive outcome in cognitive-behavioral therapy was true despite our finding that psychodynamic strategies were not very prevalent in these cognitive-behavioral therapies, indicated by the negative correlation with the psychodynamic prototype. Research by other investigators using this same sample of cognitive-behavioral treatments has shown that the specific cognitive-behavioral technique of focusing on the impact of distorted cognitions was negatively correlated with outcome (Castonguay, Goldfried, Wiser, Raue, & Hayes, 1996). Descriptive analyses indicated that the therapists tried to correct problems in the therapeutic alliance by increasing their adherence to the cognitive-behavioral techniques prescribed by the manual. This increased adherence, however, further strained the alliance. The authors suggest that the therapists failed to use the cognitive model in a flexible way and that the incorporation of some interpersonal techniques may have helped to repair the alliance strain. Our data confirm this hypothesis. The correlations with the Q-prototypes indicate that on average the therapists were rigidly applying cognitive-behavioral interventions and not psychodynamic interventions. When the therapists did use psychodynamic interventions in the sessions (such as in the descriptions of sessions provided above), it was these interventions that were correlated with positive outcome. These findings demonstrate the importance of studying the therapy process in addition to outcome. What is presumed to be a cognitive-behavioral treatment may actually contain significant psychodynamic ingredients or vice versa, and these interventions may be among the active ingredients in the therapy process. This may help to explain why different forms of treatment have achieved such strikingly similar results in traditional outcome studies.

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Zusammenfassung

Die Untersuchung beschreibt eine innovative Methode zur Identifikation wirksamer Zutaten des psychotherapeutischen Prozesses. Eine Reihe von Experten entwickelten Prototypen für psychodynamische und kognitiv-behaviorale Therapien unter Verwendung eine Psychotherapieprozess -Q-sort. Die Prototypen wurden verwendet, um zu prüfen, inwieweit Behandlungen aus drei archivierten Stichproben mit selbigen übereinstimmten. Das Ausmass, in dem die Behandlungen den Prototypen entsprachen, wurde quantitativ erfasst und mit dem Behandlungsergebnis korreliert. Der psychodynamische Prototyp, der von den Experten entwickelt wurde, korrelierte konsistent und signifikant mit einem positiven Ergebnis sowohl psychodynamischer als auch kognitiv-behavioraler Therapien. Der kognitiv-behaviorale Prototyp dagegen korrelierte nicht konsistent signifikant mit einem positiven Ergebnis beider Therapieformen.

Résumé

Cette étude présente une méthodologie innovatrice pour identifier les ingrédients actifs du processus psychothérapeutique. Sur la base du Psychotherapy Process Q-set, des comités d'experts ont développé des prototypes de thérapies psychodynamiques et cognitivo-comportementales. Les prototypes ont servi à l'évaluation du degré de congruence entre 3 échantillons de traitements archivés et les prototypes. Le degré d'adhérence des traitements aux prototypes a été mesuré quantitativement et corrélé avec les résultats des traitements. Le prototype psychodynamique établi par les experts s'est avéré corrélé de manière significative avec une issue positive dans les deux types de traitement, aussi bien psycho-dynamique que cognitivo-comportemental, le prototype cognitivo-comportemental dans aucun des deux types de thérapie.

Resumen

Este estudio presenta una metodología para identificar los ingredientes activos en el proceso psicoter-apéutico. Diversos paneles de expertos desarrollaron prototipos de terapia psicodinámica y cognitivo-comportamental usando el Proceso Q-set de psicoterapia. Los prototipos evaluaron el grado en que los tratamientos se adecuaban a los prototipos en 3 muestras de tratamientos que se hallaban archivados. Se midió cuantitativamente el grado en que los tratamientos adherían a los prototipos y se correlacionó esta medida con el resultado. Se observó que el prototipo psicodinámico construido por expertos se correlacionaba en forma consistentemente significativa con el resultado positivo tanto enla terapia psicodinámica como en la cognitivo-comportamental. En cambio, el prototipo cognitivo-comportamental no se correlacionó en forma consistentemente significativa con el resultado positivo en ninguno de los dos tipos de terapia.