Clinical Psychology and Psychotherapy
Clin. Psychol. Psychother. **17**, 25–32 (2010)
Published online 13 November 2009 in Wiley InterScience (www.interscience.wiley.com). **DOI**: 10.1002/cpp.656

Do we Know When our Clients Get Worse? An Investigation of Therapists' Ability to Detect Negative Client Change

Derek Hatfield,[1]* Lynn McCullough,[1] Shelby H. B. Frantz[1] and Kenin Krieger[2]
[1] *Department of Psychology, Indiana University of Pennsylvania*
[2] *Hamilton Center Inc.*

Routine clinical judgment is often relied upon to detect client deterioration. How reliable are therapists' judgments of deterioration? Two related studies were conducted to investigate therapist detection of client deterioration and therapist treatment decisions in situations of deterioration. The first study examined therapists' ability to detect client deterioration through the review of therapy progress notes. Therapist treatment decisions in cases of client deterioration were also explored. Therapists had considerable difficulty recognizing client deterioration, challenging the assumption that routine clinical judgment is sufficient when attempting to detect client deterioration. A second study was a survey of therapists asking how they detect client deterioration and what treatment decisions they make in response. Symptom worsening was the most commonly stated cue of deterioration. Copyright © 2009 John Wiley & Sons, Ltd.

Key Practitioner Message:
- Clinicians may have a difficult time detecting when their client's symptoms are worsening.
- Outcome assessment strategies do exist to help clinicians detect client deterioration.

Keywords: Client Deterioration, Outcome Assessment, Clinical Judgment and Decision Making

INTRODUCTION

Unfortunately, some clients' condition deteriorates after beginning psychotherapy. Deterioration rates are estimated to be between 5–10% (Lambert & Ogles, 2004; Mohr, 1995) and research directly investigating client worsening is sorely needed. Therapists' ability to make appropriate treatment decisions in response to client deterioration is naturally dependent on therapists' ability to recognize client worsening when it occurs. Hence, the detection of client deterioration is a clinically important issue worth careful investigation (Lambert, 2007). When therapists are questioned about their ability to detect client deterioration, a common answer (often given definitively) is, 'I know when my clients are worse'. The question remains, however, if this is a valid assertion. Just how well do therapists notice client deterioration in routine clinical practice?

Some research suggests that therapists might struggle with this task more than many assume. Hannan et al. (2005) found that therapists almost wholly failed to predict client deterioration and

*Correspondence to: Derek R. Hatfield, 218 Uhler Hall, Indiana University of Pennsylvania, Indiana, PA15701, USA.
E-mail: hatfield@iup.edu

frequently did not detect client deterioration when it was occurring. Michael Lambert's feedback studies at the Brigham Young University student counselling centre (Lambert, 2007) have demonstrated that using a feedback system alerting therapists when a client's symptom severity has significantly worsened compared to the start of therapy can lead to improved client outcome for those clients who are not progressing in therapy as might be expected. Others have also created and studied feedback systems alerting therapists to clients with a high risk for treatment failure (Barkham et al., 2001; Kordy, Hannöver, & Richard, 2001; Lueger et al., 2001).

Why does a simple alert to therapists indicating client deterioration lead to improved clinical outcomes for clients, especially if therapists are already able to detect the deterioration using their normal clinical judgment? One possible explanation is that therapists are often not detecting their clients' deterioration when it is occurring (Hatfield & Ogles, 2006). Again, if therapists are unable to detect client deterioration, they will not have reason to make appropriate treatment decisions in response to the deterioration. Another related and important question concerns what those treatment decisions are. What do therapists do when they notice that their clients have worsened?

It can be difficult to directly study therapists' judgments and treatment decisions without influencing the therapy process in some manner. One method of assessing therapists' judgment of client change (using only their clinical judgment) is to retrospectively investigate therapist statements regarding client progress. This can be accomplished by reviewing the therapy progress note written soon after the session by the therapist. Progress notes offer a unique opportunity to 'look in the window' of a therapy session. Obviously, progress notes do not provide information concerning everything discussed in a therapy session, but in absence of videotaped sessions, they are a snapshot of what occurred in the session and usually contain the therapist's impressions concerning the progress of the client.

Good clinical practice would suggest that information concerning client deterioration be included in the progress note, though there is no guarantee that this occurred in every case. In this study, the results are based upon the assumption that therapists were generally abiding by this standard. As will be seen in the results, even if there were occasional situations in which the therapist noticed client deterioration but failed to document such in the progress note, a few exceptions to this assumption will not drastically alter the conclusions.

Study 1 was designed to investigate the question of therapists' awareness of client deterioration. Standardized outcome measure scores were used to identify sessions in which clients presented with significantly worsened symptoms compared with the start of therapy. The therapy progress notes of those sessions were then reviewed to determine if the therapist noticed symptom worsening (through normal clinical judgment and skills, and without the aid of systematic feedback). Progress notes were also reviewed to determine what treatment decisions the therapist made during sessions when the client presented with worse symptoms.

As the results of Study 1 show, therapists often failed to detect client deterioration. Consideration was then given to the difficulty of the therapeutic task. For example, is it reasonable to ask therapists to recognize a change in the client's symptom severity in the fifth session compared with the same client's symptom severity of the first session (as many systematic feedback programmes do)? A follow-up investigation to Study 1 was conducted and represents an attempt at the same analysis—this time, however, for situations that therapists could most easily and readily detect client deterioration.

Both Study 1 and the follow-up investigation examined the actual judgments and decisions made by therapists in situations of client deterioration. This is not necessarily the same as what therapists *state* they would do in this circumstance (Hatfield & Ogles, 2006). Future research will need to investigate if therapists actually engage in the therapeutic strategies they espouse. Since these issues are interrelated, Study 2 was included as a preliminary step towards such research. Study 2 was a national survey of therapists conducted to simply assess what therapists say concerning how they become aware of client deterioration and what treatment decisions they would make if this were to occur. Although the therapist survey represents a different set of therapists than those in the first study, results are included here because the important issues of both studies are interrelated and can guide future research.

STUDY 1

Methods

Agency and Participants

This study was conducted at a large Midwestern university counselling centre. The centre employs

DOI: 10.1002/cpp

13–14 full-time therapists and several part-time therapists. Of the progress notes reviewed, approximately 45% were clients with Ph.D. level therapists, 25% were seen by Masters level therapists and another 30% by therapists completing their pre-doctoral internship. The therapists in this study had varied theoretical orientations and years of experience. The clients were both undergraduate and graduate students of the university and had diverse presenting problems. Two-thirds of the clients were female and one-third male. In collecting the data for this post-therapy study, all client identifying information was completely separated from the analysis of the results.

Clients were given the Outcome Questionnaire-45 (OQ-45) prior to each therapy session. The OQ-45 is a valid and reliable measure of global symptom severity (Lambert et al., 2004) and happens to be the same measure utilized in the Lambert feedback studies at Brigham Young University previously mentioned (Lambert, 2007). Clients were given the OQ-45 before each session of therapy by an agency receptionist and the client completed it prior to the therapy session. Therapists were responsible for scoring and entering the data, which often occurred following the conclusion of the session. Unlike the Lambert feedback studies, no systematic feedback of client symptom severity was provided at this particular agency. OQ-45 scores were often listed in the client chart. Additionally, the data was electronically stored in an agency database for internal quality assurance purposes.

Selection Criteria

Over 7000 clients came to the agency during a 5-year period. Only 4253 clients had two OQ-45 scores, representing the total number of clients that would have been considered in a system providing feedback on client progress. Several selection criteria were used to determine which client charts were reviewed. The first OQ-45 score in the database had to be the client's intake session. Importantly, the session in which client deterioration was indicated (as demonstrated by change in OQ-45 scores) needed to be with the same therapist as the intake session. The session of noted deterioration also needed to occur within the first 10 therapy sessions to be included in this study. Reliable change on the OQ-45 is 14 points (Lambert et al., 1996) with a clinical cutoff score of 64 (a score of 63 or lower represents normal functioning). Only cases in which the client's intake score was in the clinical range and a later score was worse by 14 or more points were considered.

Using the agency database, it was determined that of the original 4253 cases, 386 cases (9%) had an intake score in the clinical range and also had a later session score worse by 14 points or more. Due to the large number of cases and limited time, 214 were randomly selected for review. Each of these client charts were then obtained for closer examination. Almost two-thirds of these failed to meet the selection criteria. In most cases, the reason that inclusion criteria were not met was because the intake therapist was different than the therapist for the session that the deterioration was marked (this agency utilizes an emergency walk-in policy, which often accounted for the different therapist). The final number of progress notes for this analysis was 70.

Procedure

Progress notes were carefully examined for the session in which the client's OQ-45 score was at least 14 points worse than the intake. The progress notes were reviewed by the primary investigator to determine if therapists indicated any degree of client change. If the note contained any statement that the therapist observed client deterioration or that the client had verbally reported being worse, both were included in the 'Deterioration' category. Notes were similarly reviewed to determine if therapists indicated that the client had improved or if they specifically noted that there was no change in the client. If no indication of client progress was contained in the progress note, it was included in the 'No Mention' category.

For the progress notes that indicated that the client had deteriorated, they were reviewed again for information related to the therapist's treatment decisions or actions. Various types or categories of treatment decisions and treatment behaviours were derived from several sources, including the clinical support tools utilized in the Lambert feedback studies (Lambert, 2007), findings from the Hatfield and Ogles (2006) study, and normal clinical practice.

Results

Of the charts reviewed, 70 met the selection criteria and were reviewed to determine if the therapist indicated client deterioration, no change, or improvement. Results of this analysis are included in Table 1. 'OQ Score' indicates the number of times that the OQ-45 score was included in the progress note. If a progress note contained no indication of the other categories, then it was placed in the 'No Mention' category.

DOI: 10.1002/cpp

Table 2 includes the frequency of each treatment decision for the 21 progress notes that indicated client deterioration, including notes containing an OQ-45 score (suggesting the therapist might have known of the deterioration). 'Session Content Only' is the category for notes containing no information regarding the therapist's treatment decisions, only the content of the session (i.e., 'we discussed her recent relationship . . .'). Some therapists indicated more than one treatment decision and all were included in the results.

Follow-Up Investigation

The follow-up investigation to Study 1 represents an effort to review clinical situations that might be the most likely for therapists to detect client deterioration. Noticing a deterioration in client symptoms in a fifth therapy session compared with the intake session can be a difficult task. It is probable that therapists would be better able to detect client deterioration when it occurred in consecutive sessions. To identify the most obvious cases of deterioration, the agency database was searched to identify consecutive sessions in which the client's OQ-45 scores worsened by at least 30 scale points (significant change on the OQ-45 is 14). A change of 30 or more represents a large change in symptom severity.

The same database used in Study 1 was utilized again for the follow-up investigation. All demographic variables are similar between the two studies. Of the 4253 cases with at least two data points, there were 187 incidents of OQ-45 scores worsening by at least 30 points. This means that 4.4% of all clients at this agency with at least two sessions experienced this degree of symptom deterioration between consecutive sessions. Of the 187 identified cases, 106 were randomly selected for more careful review. Forty-one of these cases met the selection criteria (same as Study 1) and the progress notes for the sessions of deterioration were then reviewed. The progress notes were analysed with the same methodology as Study 1, considering both the assessment of client change and therapist's treatment decisions. Results are contained in Tables 1 and 2, respectively. As in Study 1, some therapists indicated more than one treatment decision and all were included in the results.

Table 1. Detection of client deterioration

	Study 1		Study 2	
	# of Cases	% of 70	# of Cases	% of 41
Deterioration	15	21.4	13	31.7
No change	6	8.6	2	4.9
Improved	2	2.9	0	0.0
OQ score	6	8.6	5	12.2
No mention	41	58.6	25	61.0

OQ = Outcome Questionnaire.

STUDY 2

The second study consisted of a national survey sent to practicing clinicians and was an attempt to better understand what clinicians *say* they would do when they detect client deterioration. Hopefully, the results of Study 2 provide useful information that can guide future research.

Table 2. Therapist treatment decisions

	Study 1		Study 2	
	# of Cases	% of 21	# of Cases	% of 41
Change treatment implementation	4	19.0	6	14.6
Continue treatment-as-usual	5	23.8	2	4.9
Discuss therapeutic alliance	0	0.0	1	2.4
Explore deterioration	1	4.8	1	2.4
Change treatment goals	0	0.0	1	2.4
Medication referral	5	23.8	8	19.5
Discuss motivation to change	0	0.0	0	0.0
Discuss social support	2	9.5	3	7.3
Peer consultation	1	4.8	0	0.0
Reevaluate diagnosis	0	0.0	0	0.0
Discuss possible termination	0	0.0	0	0.0
Peer med consultation	1	4.8	0	0.0
Transfer therapists	0	0.0	0	0.0
Session content only	7	33.3	22	53.7

DOI: 10.1002/cpp

Methods

Participants

A random sample of psychologists who are members of American Psychological Association (APA) and currently practicing therapy were surveyed. Those included in the sample had to be licensed practitioners in the USA and must have paid the special assessment fee—a mandatory fee for all those who desire to practice therapy. A total of 300 addresses were ordered from the APA.

For the sample of usable data, a majority of the sample (80.6%) indicated that a Ph.D. was their highest degree obtained, 16.7% held a Psy.D. and 2.8% an Ed.D. Practitioners reported conducting therapy for an average of 20.9 hours per week (SD = 9.1) and the average number of years since first licensure for the entire sample was 20.0 (SD = 8.8). Most therapists (83.3%) indicated that they work in a private practice. As for theoretical orientation, 23.5% of therapists identified themselves as conducting Cognitive Behavioral Therapy, 35.3% as Psychodynamic/Psychoanalytic, and 41.1% as Eclectic.

Procedure

Having obtained the addresses from the APA, the surveys were mailed to participants. Of 300 surveys mailed, 40 (13.3%) surveys were returned. Four of the surveys were returned without participant response, leading to 36 surveys containing usable information.

The survey consisted of two open-ended questions: 'How do you know when one of your clients has deteriorated (become worse) after treatment has started?' and 'What do you usually do when you notice that a client has gotten worse?' Responses were coded by the primary investigator and are contained in Tables 3 and 4. Therapists were able to write as much as they desired and many gave multiple responses.

Results

Therapist responses to the question regarding how they know when their clients are deteriorating are contained in Table 3. Indications of client deterioration fell into three conceptual categories: Symptom

Table 3. Assessing client deterioration—therapist responses

Response	# of times mentioned	% of 36	Response	# of times mentioned	% of 36
Symptom					
Clinician	13	36.1	Therapist inquiry	4	11.1
Client report	17	47.2	Alliance worsens	1	2.8
General	14	38.9	Treatment goal failure	3	8.3
Rating scale	4	11.1	Appointments missed	7	19.4
Other person report	7	19.4	Decreased motivation to change	1	2.8
Social functioning	3	8.3	Contacting therapist	2	5.6
Job/school functioning	3	8.3	Suicidality increase	4	11.1
Diagnostic changes	1	2.8			

Table 4. Treatment decisions in cases of deterioration—therapist responses

Response	# of times mentioned	% of 36	Response	# of times mentioned	% of 36
Discuss deterioration	11	30.6	Modify treatment	10	27.8
Events	8	22.2	Level of care	9	25.0
Med referral	20	55.6	Add treatment modality	7	19.4
Session increases	12	33.3	Peer consultation	10	27.8
Involve significant others	4	11.1	Refer to another clinician	7	19.4
Specific interventions	7	19.4	Motivation assessment	3	8.3
Social support	4	11.1	Process treatment	7	19.4
Gather information	12	33.3			

DOI: 10.1002/cpp

Worsening, Change in Functioning, and Therapy Indications. 'Symptom Worsening' were further subdivided into Clinician Observation, Client Report, Rating Scales, and Symptoms—General (source of information was not provided). The category of 'Change in Functioning' specifically included Social, Job/School, Decreased Motivation to Change, Increase in Suicidality, and Other Person Report subcategories. 'Therapy Indications' was comprised of Therapist Inquiry, Worsening of Alliance, Treatment Goal Failure, Diagnostic Changes, Missed Appointments and Client Contacting the Therapist.

Responses to what therapists state they do when they notice client deterioration are contained in Table 4. Clinician responses to the question of what they do when they notice client deterioration can be conceptualized into three treatment decision categories: In-Therapy Action, Outside-Therapy Action and Interpersonal. In-Therapy Action seemed the most popular type of treatment decision, with nine specific responses given: 'Discuss the Deterioration', 'Focus on Precipitating Events', 'Increase Frequency of Sessions', 'Gather Information', 'Specific Interventions' (i.e., supportive therapy, CBT, utilizing coping strategies, etc.), 'Modify Treatment' (non-specific), 'Add Treatment Modality' (i.e., group therapy, couples therapy as an adjuct, etc.), 'Assess Motivation to Change' and 'Process the Treatment Itself'. The Outside-Therapy Action category consisted of 'Medication Referral', 'Level of Care' (i.e., inpatient, day treatment, etc.), 'Peer Consultation' and 'Refer to Another Clinician'. The Interpersonal category was comprised of decisions to 'Involve Significant Others' and improve 'Social Support'.

DISCUSSION

In Study 1, it was possible to take 'a quick peak' inside the window of therapy to look at therapists' judgment of client deterioration and subsequent treatment decisions. If a feedback system similar to the one utilized by Lambert (2007) had been in place, each of the sessions considered would have generated an alert to the therapist that the client had worsened. Using their clinical judgment, only 21% of the therapists indicated in their progress notes that the client had deteriorated compared to the start of therapy. Perhaps some might argue that it is not necessary or important for therapists to be aware of situations when their client's symptoms have worsened. The results of the Lambert feedback studies, however, strongly suggest that therapists' awareness of client deterioration can lead to significant improvement in clients' clinical outcomes (Lambert, 2007).

Should therapists be expected to notice symptom deterioration in a later session (e.g., fifth) compared to the first session, which might have occurred one to 2 months earlier? In addition to the intervening sessions with that specific client, full-time therapists often have heavy caseloads and scores of sessions have likely occurred between the first and fifth sessions for a particular client. There conceivably is a tremendous amount of information that can create interference in the therapist's judgment of client change, hindering an accurate assessment of negative client change. Perhaps it is a nearly impossible task for therapists to judge client symptom change from the first session to the fifth session (or even later). The results of this study strengthen the argument that this clinical task is very difficult and highlights the assistance that a feedback system can provide. Several studies have demonstrated the benefit that such measures can add to routine clinical judgment (Garb, 2007).

The difficulty is not limited, however, to the amount of time or information between the first session and later sessions. The results of the follow-up investigation demonstrated that in situations of very significant symptom deterioration occurring in consecutive sessions (and therefore, potentially the easiest situation for therapists to detect deterioration), therapists did not indicate client worsening in their notes close to 70% of the time. It appears that often, therapists simply have difficulty noticing client deterioration.

Hannan et al. (2005) found that therapists largely failed to predict client deterioration and struggled to correctly identify client deterioration when it was occurring. In their study, clinicians were asked questions after the therapy session and relied upon the end-of-session ratings to make their conclusions. Study 1 and the follow-up investigation utilized a different methodology than the Hannan et al. (2005) study, though obtained similar results. This replication through divergent methods suggests that a problem likely does exist with regards to therapists' ability to detect client deterioration when it is occurring. Even if therapists choose to not utilize a formal system of obtaining feedback on client deterioration, the results of these studies suggest that therapists can be more aware of the possibility of client deterioration (and therefore potential treatment failure). In any event, due diligence to the routine clinical assessment of client

DOI: 10.1002/cpp

symptom severity during each therapy session might lead to better therapeutic outcomes.

The finding that therapists struggled to notice significant client symptom worsening in consecutive sessions is particularly interesting given the results of the survey mailed to therapists. In response to an open-ended question asking them how they know that clients have worsened since the start of therapy, 32 of 36 (88.9%) respondents indicated that in some form, a worsening of symptoms was a factor in this judgment. Shulte (1997) makes a persuasive argument for the use of symptom severity change as an important measure of therapy progress. Symptom worsening was the most common answer on this therapist survey. If therapists use symptom worsening as a key indicator of client deterioration, the results of Study 1 (and particularly the follow-up investigation) suggest that many therapists might have considerable trouble noticing these critical cues of client deterioration and potential treatment failure. Future research can more directly investigate the extent to which therapists are failing to detect symptom worsening in clinical practice. The results of this study serve as a wake-up call that this type of empirical inquiry is needed and clinically important.

In Study 1 and the follow-up investigation, with such low numbers of therapists indicating that they noticed deterioration, it is hard to draw firm conclusions regarding the treatment decisions made by the therapists. Of note is how infrequently statements occurred in the progress notes suggesting changes in the therapy or even collaborative discussion of possible changes (including problems with the therapeutic alliance). It should be remembered that in these situations, the therapist had indicated in the progress note that he/she was aware that the client had worsened. Also surprisingly infrequent were noted direct discussions with the client about the deterioration.

An important theoretical and clinical consideration is what a therapist *should* do when a client deteriorates, though that topic is beyond the scope of this paper. What can be addressed, however, is what therapists *say* they would do when faced with a client who had worsened since the start of therapy. Responses were numerous and varied with regards to the therapist survey question asking therapists this very question. It is noted that a little over half of the therapists who responded to the survey indicated that they would make a referral for possible psychopharmacological treatment if their client was worsening. Other popular treatment decisions were increasing the frequency of therapy sessions, gathering more information for the assessment of client change, discussing the deterioration with the client, seeking peer consultation for the case and modifying the treatment approach in some way.

Also of interest is the apparent discrepancy between what therapists responding to the survey stated they would do and what the therapists in Study 1 reported doing in their therapy sessions. It remains a possibility that therapists do not always practice what they espouse with regards to treatment decisions in cases of client deterioration. Future research can clarify this issue and determine what exactly therapists actually do when faced with deteriorating clients. The results of this therapist survey can provide a framework for future investigation of actual therapist treatment decisions.

Two limitations in these studies need to be addressed. As mentioned earlier, therapy progress notes are not a perfect source of information. The possibility exists that therapists did notice client deterioration, but failed to write such in the progress note. Good clinical practice would suggest that such information be included in a progress note, though there is no guarantee that this occurred in every situation. In this study, the results are based upon the assumption that therapists were generally abiding by this standard. To the extent that this was not the case, the results need to be interpreted with caution, perhaps serving importantly as a catalyst for future research on this important topic. In particular, more direct investigations of clinical judgment of client change that do not rely on progress notes would be beneficial. An additional limitation was the poor response rate to the therapist survey. It remains a possibility that the results might be in some way biased. Perhaps only therapists who have an interest in or have thought extensively about client deterioration responded to the survey, however, no known bias exists in the responses.

The ultimate purpose of psychotherapy research is the understanding and improvement of clinical services provided to the clients seeking professional help. A portion of these clients deteriorate following the start of therapy, and it appears that alerting therapists to the fact that symptoms have worsened can lead to improved clinical outcomes. Research is gradually challenging the assumption that therapists can always detect client deterioration through the use of routine clinical judgment. It is hoped that future research will more directly investigate this issue, as well as therapists' actual

DOI: 10.1002/cpp

treatment decisions in situations of client deterioration. It is also hoped that therapists will be open to the idea that additional information concerning client progress will enhance their clinical judgment, particularly concerning potential client deterioration.

REFERENCES

Barkham, M., Margison, F., Leach, C., Lucock, M., Mellor-Clark, J., Evans, C., et al. (2001). Service profiling and outcomes benchmarking using the CORE-OM: Toward practice based evidence in the psychological therapies. *Journal of Consulting and Clinical Psychology, 69*(2), 184–196.

Garb, H.N. (2007). Computer-administered interview and rating scales. *Psychological Assessment, 19*(1), 4–13.

Hannan, C., Lambert, M., Harmon, C., Nielson, S., Smart, D., Shimokawa, K., et al. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology, 61*(2), 155–163.

Hatfield, D.R., & Ogles, B. M. (2006). The influence of outcome measures in assessing client change and treatment decisions. *Journal of Clinical Psychology, 62*(3), 325–337.

Kordy, H., Hannöver, W., & Richard, M. (2001). Computer assisted feedback-driven quality management for psychotherapy: The Struttgart–Heidelberg Model. *Journal of Consulting and Clinical Psychology, 69*(2), 173–183.

Lambert, M.J. (2007). Presidential address: What we have learned from a decade of research aimed at improving psychotherapy outcome in routine care. *Psychotherapy Research, 17*(1), 1–14.

Lambert, M.J., Burlingame, G.M., Umphress, V.J., Hansen, N.B., Vermeersch, D., Clouse, G., et al. (1996). The reliability and validity of the Outcome Questionnaire. *Clinical Psychology and Psychotherapy, 3*, 106–116.

Lambert, M.J., Morton, J.J., Hatfield, D., Harmon, C., Hamilton, S., Reid, R.C., et al. (2004). *Administration and scoring manual for the Outcome Questionnaire—45.* Salt Lake City, UT: OQ Measures.

Lambert, M.J., & Ogles, B.M. (2004). The efficacy and effectiveness of psychotherapy. In Lambert, M.J. (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change* (5th ed., pp. 139–193). New York: Wiley.

Lueger, R.J., Howard, K.I., Martinovich, Z., Lutz, W., Anderson, E.E., & Grissom, G. (2001). Assessing treatment progress of individual patients using expected treatment response models. *Journal of Consulting and Clinical Psychology, 69*(2), 150–158.

Mohr, D.C. (1995). Negative outcome in psychotherapy: A critical review. *Clinical Psychology: Science & Practice, 2*(1), 1–27.

Shulte, D. (1997). Dimensions of outcome measurement. In H.H. Strupp, L.M. Horowitz, & M.J. Lambert (Eds), *Measuring patient changes in mood, anxiety, and personality disorders: Toward a core battery* (pp. 57–80). Washington, DC: American Psychological Association Press.

DOI: 10.1002/cpp