Although these approaches to monitoring are more recent than efficacy and effectiveness research, the client-focused research approach typified by monitoring has great potential to bridge the gap between science and practice. Science, by its nature, is concerned with generalizable results, whereas clinical practice is concerned with the instance. By increasing the relevance of data collection to the individual client, monitoring strategies will allow clinical psychologists to collect client-relevant data that can be integrated with data available from treatment-relevant efficacy and effectiveness research. Furthermore, monitoring permits a science-informed practitioner to test and evaluate hypotheses about each client. How to monitor client progress is the topic of the next chapter.

Chapter

4

Monitoring client progress

Clinical psychologists are referred clients who are in distress; the problems have profound impacts on their lives and the psychologist's intention is that, after some intervention, the client will leave treatment no longer distressed and with their problems resolved. One way to guide the selection of treatments to achieve this desired outcome is by using evidence-based practice. In so doing, it is possible to make inferences about the progress of the average client. Evidence-based practice draws upon efficacy studies that contrast active treatments with appropriate comparisons under controlled conditions and permit an estimate of the effect size of treatment to be made. Effectiveness studies can then examine the degree to which the effect sizes observed under controlled conditions are reproduced in clinical settings. The reduced control over the types of clients, the extent of comorbidity, and the training of therapists can all affect the extent to which effect sizes observed in efficacy studies may fail to generalize. Lambert (2013) has documented that the effect sizes tend to be smaller in clinical practice than in efficacy studies, but nonetheless, as a scientist-practitioner, it is possible to know that a given evidence-based treatment will have a particular effect size and to infer that the average client treated will experience a similar benefit. The present chapter, while not arguing against the application of evidence-based treatments, will present the case that the blind application of evidence-based treatments is not optimal clinical practice.

Monitoring and feedback is a specific therapeutic intervention

Evidence-based practice is not incompatible with practice-based evidence (Castonguay, Barkham, Lutz, & McAleavey, 2013). In evidence-based practice, we use interventions and practices that have a reliable and valid foundation in empirical findings. However, practice-based evidence allows clinicians to monitor client progress during treatment and adapt therapy accordingly. Therapists adapt treatment but they do so by allowing the clinical judgements to be guided by evidence and to be responsive to the data collected. Before describing how this can be done, let us review the evidence showing that clinical outcomes are improved by using practice-based evidence.

The pioneering research in patient monitoring and feedback was conducted by Mike Lambert and colleagues. They have published many randomized controlled trials evaluating the effectiveness of providing individualized feedback to clinicians (Harmon, Hawkins, Lambert, Slade, & Whipple, 2005; Hawkins, Lambert, Vermeersch, Slade, & Tuttle, 2004; Lambert et al., 2001; Lambert et al., 2002; Whipple et al., 2003). Conducted in routine clinical settings, each of the studies was assigned to 'treatment as usual' or to a condition in which therapists were given feedback about the progress of each client during treatment. Broadly speaking, the

client data collected each session provided the therapists with feedback that could be distilled into information as to whether the client was progressing as expected (i.e., was 'on track') or was not progressing as expected (i.e., was 'not on track'). Therapists were not given any additional treatments, but were free to use their clinical experience to adapt the treatments in light of the feedback. The clear result was that when patients drifted off track, providing therapists with that information led to improvements in patient outcomes (Shimokawa, Lambert, & Smart, 2010). Specifically, the effect size was moderate (even though this was over and above the benefits of treatment) and the deterioration rate was halved.

Expressing this differently: an efficacy study provides information that the average client will improve by a particular amount. However, some people will improve more than the mean and others will improve less than the average. Just using evidence-based practice does not provide information about what to do with clients who improve less than the average. Practice-based evidence, on the other hand, complements evidence-based practice and uses data collected during therapy to allow clinicians to target those who are falling behind and then potentially avert negative outcomes. Not surprisingly, the outcomes for patients who are 'on track' are less affected by feedback. Presumably, when a clinical psychologist uses an evidence-based treatment and learns that the client is responding as expected, the therapy will not require a modification to standard practice.

Lambert's group uses the 45-item Outcomes Questionnaire (Lambert, Gregersen, & Burlingame, 2004) to measure outcomes and to provide feedback to therapists. They have amassed an impressive evidence base for their outcomes monitoring system (www.oqmeasures.com). However, other researchers have replicated the same beneficial effects using different assessment measures (e.g., Lutz, Martinovich, Howard, & Leon, 2002; Miller, Duncan, & Hubble, 2005a; Miller, Duncan, Sorrell, & Brown, 2005b) with different age groups and diagnoses (Kelley & Bickman, 2009; Kelley, Bickman, & Norwood, 2010), and across different treatment settings (Byrne, Hooke, Newnham, & Page, 2012; Newnham, Hooke, & Page, 2010b). Innovative research from Wolfgang Lutz's clinical research group has carefully studied the behaviours of clinicians and one important finding has relevance for clinical psychology trainees (Castonguay et al., 2013). They compared experienced psychologists with trainees, and found that when trainees encountered a client who was not proceeding as expected, they were more likely to seek supervision. Thus, it is clear that the provision of feedback is a specific treatment intervention that has beneficial effects on clients who are not progressing well and as such, science-informed practice should include such a system. For clinical psychology trainees, the system provides a complement to training. It does this by signalling when extra supervision could be needed and thus, timely and focused help can be sought. While there are many commercially available patient monitoring systems, the remainder of the chapter will outline the key principles of a system by describing a freely available version and then cover some reasons why feedback and monitoring might be beneficial. Trainees can then experiment with a system and use it to seek targeted help from supervisors.

A monitoring and feedback system

Think of a monitoring system like a thermometer. In physical medicine, a thermometer provides a quick measure of temperature and allows staff to compare the reading against an expected distribution with a threshold distinguishing normal from abnormal levels. An elevated temperature does not tell the doctor or nurse what is wrong, but signals that something is not right. Further investigations then guide clinical decisions about how to modify treatment.

Extending this logic to mental health, it means that we need a quick, repeatable measure of mental health and a way to identify when scores are 'normal' and 'abnormal'.

There are a number of instruments that can serve as 'mental health thermometers'. The 45-item Outcome Questionnaire (OQ-45; Lambert & Finch, 1999; Lambert et al., 2004) has been the most widely used instrument and it has been shown to be acceptable in both outpatient and some inpatient settings. Sophisticated software is available to provide clinicians with a comprehensive suite of tools to monitor outcomes and to provide feedback to clients. Added benefits are that comparable instruments have been developed for use among children and adolescents (Cannon, Warren, Nelson, & Burlingame, 2010; McClendon et al., 2011; Nelson, Warren, Gleave, & Burlingame, 2013) and the scale has been translated into many languages with the beneficial outcomes being replicated in countries other than the US (e.g., de Jong et al., 2008; de Jong, van Sluis, Nugter, Heiser, & Spinhoven, 2012; Wennberg, Philips, & de Jong, 2010). The Outcome Rating Scale (ORS; Miller et al., 2005b) is a popular measure in counselling psychology, since the system provides indications about the quality of the therapeutic relationship as well as distress. Another instrument, developed by Bickman and colleagues (Bickman, Kelley, Breda, de Andrade, & Riemer, 2011) permits assessments of youths' symptoms and functioning. Its strength is that it draws on a theoretical foundation about feedback developed within industrial and organizational psychology (Sapyta, Riemer, & Bickman, 2005) and its use has also been shown in a randomized controlled trial to improve outcomes (Bickman et al., 2011). Within the United Kingdom, the Clinical Outcomes in Routine Evaluation 10-item scale (CORE; Barkham et al., 2013; Barkham et al., 2010b; Connell et al., 2007) has proved to be popular and its strength is that it is accompanied by a whole suite of associated indices (www.coreims.co.uk/). Yet all of these different outcome monitoring systems share a common methodology in which an instrument is used to provide the practice-based evidence upon which clinical decisions are made.

By way of illustration we will describe an outcome monitoring system that we have developed. Since the instruments and the tools are in the public domain it means that you can use them in your clinical training. To capture both mental health as well as psychological distress, we have developed two companion measures. The first instrument we use is the World Health Organization's Well-Being Index (WHO-5; Bech, Gudex, & Johansen, 1996). The WHO-5 has good internal consistency in medical settings ($\alpha = 0.91$; Löwe et al., 2004) and psychiatric samples ($\alpha = 0.89$; Newnham, Hooke, & Page, 2010a). The instrument consists of five items rated on a six-point Likert-type scale measuring frequency from 'All of the time' (scores as 0) to 'At no time' (scored as 5). Participants endorse the appropriate option for the previous 24 hours (adaptation by Newnham et al., 2010a) with high scores indicating increased well-being. The items ask patients the amount of the time that they have felt (i) cheerful and in good spirits, (ii) calm and relaxed, (iii) active and vigorous, (iv) woke up feeling fresh and rested, and (v) that their daily life has been filled with things that interest them. Similar to other research groups, we demonstrated in a controlled trial that providing feedback about progress to staff and patients reduced depressive symptoms in patients at risk of poor outcomes post-treatment (Newnham et al., 2010b). A companion symptom measure assessing psychological distress is the 5-item Daily Index (DI-5; Dyer, Hooke, & Page, 2014). Items assess a variety of symptom domains, including thoughts about suicide. It has strong reliability ($\alpha = 0.88$) and has good sensitivity to treatment change. It also shows good validity, with strong correlations with other longer symptom measures, and in a recent controlled trial it was apparent that combining symptom and well-being feedback leads to even greater benefits for 'not on track' patients.

	A	B	C	D	E	F	G	H
2	DI-5 Item	Pre	Post		1	2	3	4
3	I have felt anxious	2	1		2	1	1	1
4	I have felt depressed	5	4		5	5	4	4
5	I have felt worthless	4	2		4	3	3	2
6	I have thoughts about killing myself	2	0		2	1	1	0
7	I have felt that I am not coping	4	3		4	4	4	3
8	Total:	17	10		17	14	13	10
9								
10	Improved Boundary:	13.46						
11	Deteriorated Boundary:	20.54						
12	Nonclinical Border:	6.17						
13	Reliable Change Index:	Achieved!						
14	Values taken from Manuscript : (Dyer, K., Hooke, G.R., & Page, A. C. (2013) Daily Monitoring of Mental Health Outcomes: Development and Psychometrics of							
15	Reliability of Measure:	0.89						
16	Standard Deviation (nonclinical):	3.85						
17	Standard Deviation (clinical):	5.41						
18	Mean (nonclinical):	4.47						
19	Mean (clinical):	8.56						
25	Healthy Range	Healthy Range	6.17	6.17				
26	Improving	Improving	7.29	7.29				
27	Potential for Change	Potential for Cha	7.08	7.08				
28	Deteriorating	Deteriorating	4.46	4.46				

INPUT / Therapist Graph / Therapist Graph (B&W)

Figure 4.1 Screenshot of input for symptom monitoring using the Daily Index-5 (Dyer et al., 2014).

The DI-5 (Dyer et al., 2014) asks patients to rate five items on a 6-point Likert-type scale (0 = At no time; 1 = Some of the time; 2 = less than half of the time; 3 = more than half of the time; 4 = most of the time; 5 = all of the time). The items are 'Over the last day I have' (i) felt anxious, (ii) felt depressed, (iii) felt worthless, (iv) thought about killing myself, (v) felt that I am not coping. Each scale is scored by summing items to create a score that ranges from 0 to 25. Scores on the DI-5 and WHO-5 scales will be negatively correlated because high scores on the DI-5 represent elevated symptoms whereas higher scores on the WHO-5 reflect greater well-being. Calculation can be performed by hand, but spreadsheets were developed by Kale Dyer and are available for the DI-5 (www.researchgate.net/publication/258246782_Development_and_psychometrics_of_the_five_item_daily_index_in_a_psychiatric_sample_-_calculator?3ev=prf_pub) and the WHO-5 (www.researchgate.net/publication/259192434_WHO_5_Monitoring_Spreadsheet_for_scoring_and_interpretation?ev=prf_pub) that not only add up the relevant scores, but assist with interpretation.

The two spreadsheets are similar so we will illustrate only the DI-5. The three tabs at the foot of the page (see Figure 4.1) are labelled (i) INPUT, (ii) Therapist Graph, and (iii) Therapist Graph (B&W). The Input screen is shown for a patient who has attended four sessions. The clinical psychologist has entered data into columns E–H and the program has provided totals. The first data set is identified as the pre-treatment session (Column B) and the last and most recent data set as the post-treatment (Column C). Were data from another session
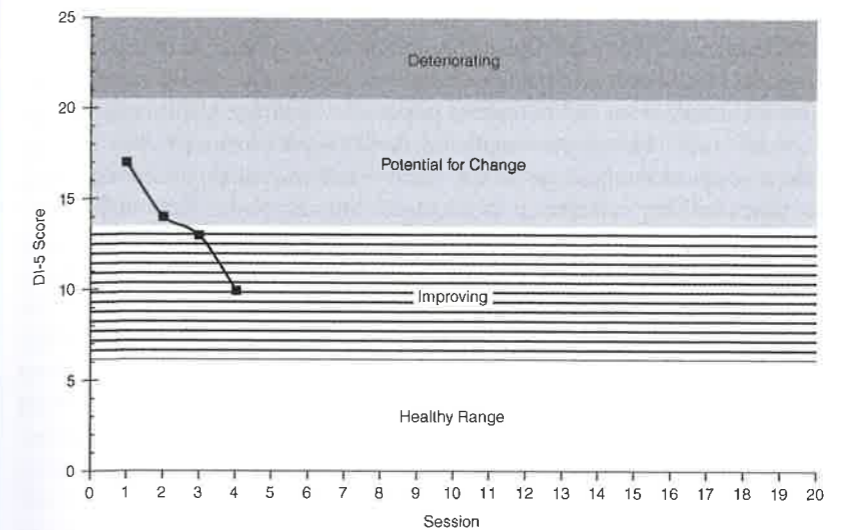
Figure 4.2 Screenshot of output for symptom monitoring using the Daily Index-5 (Dyer et al., 2014).

to be added, this would now be identified as the post-treatment. The information below the table relates to the calculation of clinical significance. Before discussing this, the Therapist Graphs on the two tabs will be reviewed.

The Therapist Graphs have identical content, but one is coloured. They plot the client's scores in a graphical manner so that progress can be evaluated. The x-axis is the number of sessions and the y-axis is the extent of psychological distress (or well-being) rated 0–25. The lines depicting the client's data are overlaid on a series of horizontal bands. In the colour version of the graph, the top red band (labelled 'deteriorating') reflects that relative to the pre-treatment score, the client has significantly worsened. The green band (titled 'improving') indicates significant improvement and the blue band (titled 'healthy range') shows that the client has improved significantly and the post-treatment score is now in the healthy range. The amber ('potential for change') band is anchored to the client's pre-treatment score and movement within this area is not yet statistically significant. Therefore, the client depicted in Figure 4.2 has psychological distress that improved non-significantly between the first and second sessions, but the change by session three was significantly different to the pre-treatment score. The client is thus now in the 'improving' range, but has not yet exhibited a reduction in psychological distress that is in the healthy range.

Clinical significance

It is important to understand the logic that underpins the categorization because the principles are those that tend to be used by the majority of outcome monitoring systems. 'Clinical significance' has been developed because statistical significance alone does not reflect the 'meaningfulness' of clinical change (Ogles, Lunnen, & Bonesteel, 2001). Even with large effect sizes, it is impossible to conclude that any participant is asymptomatic. To redress this deficiency, 'clinical significance' was developed (Jacobson & Truax, 1991). While there are a variety of calculation methods (Ronk, Hooke, & Page, 2012) and approaches available (Lambert, Hansen, & Bauer, 2008), the most common illustrative approach is the Jacobson

and Truax method. It comprises two components, the first of which is the Reliable Change Index (RCI). The RCI expresses the pre- to post- difference in standardized units and identifies if pre-post change is reliable (i.e., exceeds measurement error). The second component assumes client scores are drawn from an 'unhealthy' population and non-client scores from a 'healthy' one. A cut-off is established to estimate if a client's score moves into the healthy range. Consequently, a client with a post-treatment score that is not reliably different from their pre-treatment score will be classified as 'unchanged'. Someone who has reliably improved, but failed to move into the healthy range is 'improved' whereas someone who has reliably improved and moved into the health range is 'recovered'. Finally, clients who exhibit a reliable change in the opposite direction will be classified as 'deteriorated'.

The Jacobson and Truax (Jacobson, Follette, & Revenstorf, 1984; Jacobson & Truax, 1991) method identifies a cut-off between 'functional' and 'dysfunctional' populations. There are three ways to identify a cut-off, but the optimal method is possible when both normative and clinical data are available. The resulting cut-off (i.e., criterion C) is calculated using the formula below:

$$C = \frac{S_{pop}M_{pre} - S_{pre}M_{pop}}{S_{pop} + S_{pre}}$$

where S_{pop} and S_{pre} are standard deviations of functional and dysfunctional (pre-treatment) groups respectively, and M_{pop} and M_{pre} are the means of functional and dysfunctional (pre-treatment) groups respectively. For the DI-5, the result of applying these calculations (to obtain the value of 6.17) can be seen in the Input worksheet (Figure 4.1) in the row called 'non-clinical border' and the values entered into the equation are listed in the rows above.

The second step calculates the Reliable Change Index (RCI). This expresses each individual's pre- to post-treatment change score in standard error units of measurement and signals that a reliable change has occurred when this value exceeds an increase or decrease of 1.96. The formula used is:

$$RCI = \frac{X_{post} - X_{pre}}{\sqrt{2(S_{pre}\sqrt{1 - R_{xx}})^2}}$$

where X_{post} and X_{pre} are the individual's raw scores post- and pre-treatment respectively and r_{xx} is the reliability of the measure (e.g., test–retest reliability, Cronbach's alpha). Thus, the equation expresses the difference between pre- and post- values as a standard score, and asks the question 'is the difference larger than that to obtain a probability value less than 0.05?' Since change can be both positive and negative, there are two values. One is the 'deteriorated boundary' (i.e., 20.54) and the other is the 'improved boundary' (i.e., 13.46) which are the pre-treatment score plus or minus the RCI. The categorization of 'Achieved' in Figure 4.1 is included because the change for this particular individual from the first to fourth sessions has exceeded the value necessary for reliable change.

By combining the cut-off with the RCI it is possible to create the four categories depicted in the spreadsheet. While the calculations are relatively straightforward, the spreadsheet performs the operations for you. However, understanding the logic is necessary for the informed use of the categories. The interested reader may also consider the literature about clinical significance because there are other calculation methods and approaches (Ronk et al., 2012).

The clinical psychologist can then use a monitoring tool such as the DI-5 and WHO-5 to provide feedback to clients about their progress. Since we know that the average client will respond favourably to an evidence-based treatment, the expectation would be that a client who is responding appropriately to the treatment will move from the pre-treatment levels into the 'improving' or even the healthy range. Furthermore, Howard and colleagues demonstrated that the typical trajectory of improvement follows a negatively accelerating curve. That is, the reduction in symptoms (or growth in well-being) is maximal in the first few sessions of therapy with the improvement gradually plateauing, until the amount of improvement after each subsequent session is marginal. Importantly, the degree of change in the first few sessions is predictive of later improvement. Clients who make rapid gains early in therapy go on to have the best outcomes, whereas clients who make rapid early losses will tend to have the worst outcomes (Lambert, Harmon, Slade, Whipple, & Hawkins, 2005). This information is clinically useful because the clinical psychologist does not have to wait until post-treatment to know which clients are going to fare badly. In fact, the amount of progress (or lack thereof) by three sessions into therapy is sufficient to predict end-state. The implication is that monitoring the progress allows the clinical psychologist to use this practice-based evidence to guide and inform clinical decisions about treatment progress.

If a client is not progressing as expected, the clinical psychologist can review possible obstacles. It may be that the treatment is not being appropriately applied or that elements have been omitted. It is possible that the problem has not been appropriately conceptualized. Alternatively, it may be that client is not ready for change, social support may be inadequate, the therapeutic alliance has not been established or it may have been ruptured, or life stresses or comorbid conditions may be impeding progress. The clinician can evaluate these options using relevant psychometric assessments and then implement treatment options that are appropriate (Harmon, Hawkins, Lambert, Slade, & Whipple, 2005; Lambert, Harmon, Slade, Whipple, & Hawkins, 2005). There is growing evidence that when such clinical support tools are used in the context of an outcome monitoring system, the benefits to clients are even greater still (Shimokawa et al., 2010).

The reasons why feedback works

Before leaving the discussion of outcomes monitoring it is worth considering explanations of why the provision of feedback would be beneficial. After all, don't therapists already ask clients how they are progressing? Don't clinical psychologists already know when a client is not on track and use their clinical judgement accordingly?

Clearly we must answer in the affirmative to these questions and this probably explains why the majority of clients do not deteriorate and that even without a formal monitoring system, therapists are able to turn around the negative progress of many clients who get worse during treatment (Lambert, 2010, 2013). However, the observation remains that when monitoring systems are implemented and the results fed back to therapists, the client outcomes improve. Why is this?

One part of the answer is that statistical predictions of outcome tend to be more accurate than clinical judgements (Grove, Zald, Lebow, Snitz, & Nelson, 2000). Specifically, when clinical and statistical methods for prediction of treatment failure were contrasted, clinicians tended to vastly underestimate the probability that a treatment failure would occur (Hannan et al., 2005). The authors found that even though clinicians could identify which patients were worse off during a particular session, they did not use that information to modify their

treatment. If a feedback system is in operation, it is much harder to maintain an overly positive (potentially self-serving) cognitive bias in the face of data that the client's actual treatment progress is not proceeding according to plan and it is harder to ignore the objective evidence of potential treatment failure (Newnham & Page, 2010). Furthermore, not all patients follow the same trajectory through treatment (Nordberg, Castonguay, Fisher, Boswell, & Kraus, 2014) and algorithms can be used to identify which group a client is a member of and this in turn can guide treatment (Lutz, Stulz, & Kock, 2009). The identification of a particular client's therapeutic trajectory is hard for a clinician to identify, but computers can do this more easily and this information can feed into the clinician's decision-making process.

Another part of the answer may also be that client recollections of progress may not always be accurate. Page and Hooke (2009) found that increasing the amount of psychological therapy was associated with increased gains in self-reported pre- to post- treatment outcomes. However, when patients reflected on their treatment gains, those who had received more therapy and improved to a greater degree recalled less improvement and were less satisfied with treatment. Thus, retrospective self-report is not completely valid. Therefore, by collecting data in real time and presenting it in an objective manner to therapists clinical decisions can be made on a more rational basis (Schulte & Eifert, 2002).

How to give feedback to clients

Given that client recollections are not perfect, that clinicians tend to underestimate negative outcomes, and that even when clinicians are aware of evidence of poor progress they do not always use the information to modify practice it is not surprising that supplementing clinical judgement with practice-based evidence can improve outcomes. Having described the empirical justification for progress monitoring and illustrated a method for doing so, the remaining issue is the process of providing feedback to clients. In our experience there are a few concerns that clinicians first need to address.

The first issue is a concern clinicians have about the possible risks of sharing the progress graph and its meaning with a client. One worry is that it may be demoralizing to clients to see a lack of progress. In this context it is important to remember that the graphs are a depiction of information that the client has provided. Therefore, it is typically more newsworthy for the clinician than for the client. Concerns about a lack of progress will already have been in the client's mind. The graph allows the topic to be put on the clinician's agenda. It is in the open and available for discussion. The depiction legitimizes both progress and lack of progress as a topic for collaborative consideration. The conversation can be guided by the data and therapist and client can consider the best way to progress. However, do not be surprised to find the graphs challenge your perception of progress more than they challenge your client's view.

A second issue relates to the value of the self-report. It is possible that the self-report fails to capture the nuances of the client's problems. We do not see this as a fatal flaw, but it is a reason for the clinical psychologist to interpret the meaning of the score. This interpretation will be guided by an understanding of both the construct validity of the scales and the meaning of the clinical significance categories. The two scales are a 'thermometer' and just as a doctor will take a patient's temperature but will also use a plethora of other tests, the clinical psychologist should be no different. Each test is interpreted with a view to its strengths and weaknesses.

A third concern raised by clinical psychology trainees is the view that formal feedback is not needed, because routine clinical practice already involves therapists asking clients about
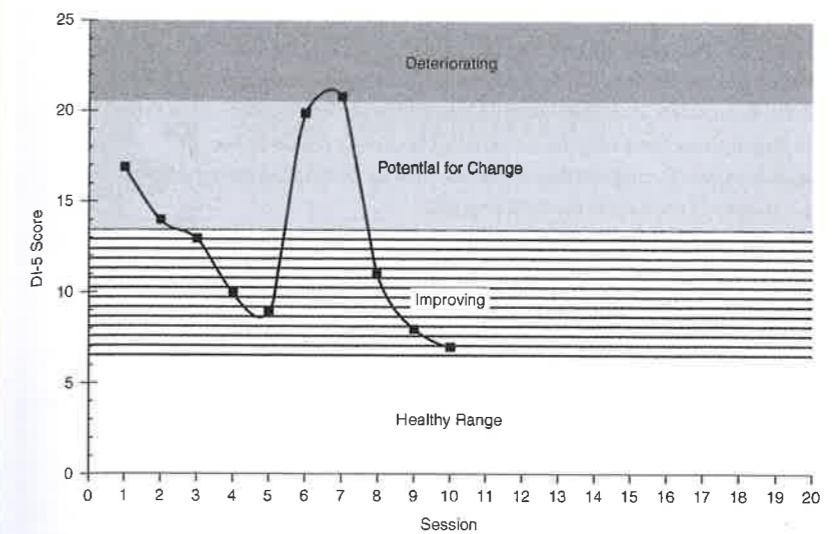
Figure 4.3 A graph depicting a client's progress with a lapse around sessions 6 and 7.

their progress. In response to this concern, it is useful to remember that the controlled trials involved 'treatment as usual' conditions. The therapists who used feedback had better outcomes than therapists who did not. One important methodological detail of the studies (see Shimokawa et al., 2010) is that it was often the *therapists* who were randomly assigned to conditions. That is, one therapist had feedback graphs on one client, but not on another. Hence, the benefits were not attributable to the normal behaviours of particular therapists, but an effect of giving a therapist access to the graphs and the opportunity to discuss them with a client which led to improvements with that person but not the next client (for whom the graph might not be available). The exact mechanisms underpinning the benefits will need to be revealed by future research, but for the time being it is sufficient to know that progress monitoring and feedback is beneficial.

With these concerns addressed, the clinical psychologist who collects data on session-to-session progress will be in a position to start to provide feedback once three sessions of data are collected. Take for example the data from a client with agoraphobia that is depicted in Figure 4.3. The client had been on antidepressant medications before coming to see the psychologist and there had been no changes in medication. The psychologist had begun a programme of cognitive behaviour therapy. The session with the client might have an interaction such as follows:

THERAPIST: Thank you for completing the questionnaires so reliably. Since the last time we reviewed the graph at the fifth session you can see that the amount of psychological distress that you reported increased. I wonder if you could tell me what you think might have been going on then?

CLIENT: I think that was when I had to start confronting the situations that I was afraid of. I found it all too much and I was about to give up.

T: But you didn't give up and what happened then?

C: My distress has come right down.

T: That's right. It has come back into the improving range which is great to see and the distress has continued to decline. To what extent does this match with your experience?

C: When things were deteriorating I was a mess and that fits, but I don't feel close to the healthy range. There are still so many normal things that I cannot do.

T: You have a sense that the questions that make up the scale aren't fully capturing the agoraphobia?

C: I guess so. They ask me about recent anxiety and stuff, but my anxiety really depends on what I've got to do. How depressed I'm feeling also seems to depend on whether I have panic attacks or not.

T: That's an interesting observation. Throughout this whole time your medication has been stable, yet your mood has been going up and down in response to events in your life.

C: I feel the medication takes the edge off my depression.

T: So, if the medication is stable and taking the edge off some of the feelings, what might explain the fluctuations?

C: When things go badly, then I get depressed.

T: When things go badly, what does it mean to you?

C: Isn't that obvious? When I get a panic, then I feel like I'm never going to get over this anxiety.

T: Can I check I've understood what happens. When you have a panic, you think, 'Oh no, I'll never recover' and then you start to feel more depressed.

C: That's right.

In the preceding interaction you can see that the clinical psychologist was able to use the graph to elicit thoughts from the client that could be used if the therapist was going to engage in cognitive restructuring. The therapist was also able to challenge the view that the medication was responsible for all mood improvements, with a view to ultimately helping the client to perceive their role as an active manager of their own mood, rather than as a passive responder. The client seemed comfortable both with an idiographic interpretation, comparing their own scores with earlier data points, and also with normative comparisons when the bands were used to interpret. One outstanding issue the clinical psychologist would need to return to was the point that the scale did not capture the agoraphobia. The clinician would need to address this point by noting that the scale is a 'mental health thermometer' and is not intended to measure all symptoms, but to capture psychological distress. Maybe it would be time to suggest some more pertinent assessments that focus on panic and agoraphobia and the scores on these instruments could be compared with the pre-treatment levels.

In summary, the monitoring of progress through treatment is possible with the repeated administration of appropriate scales. Using this practice-based evidence it is possible to identify potential treatment failures and to more accurately target treatment and reduce deterioration.

Linking assessment to treatment: case formulation

5

Case formulation is a

hypothesis about the causes, precipitants, and maintaining influences of a person's psychological, interpersonal, and behavioral problems. A case formulation helps organize information about a person, particularly when that information contains contradictions or inconsistencies in behavior, emotion, and thought content. Ideally, it contains structures that permit the therapist to understand these contradictions and to categorize important classes of information with a sufficiently encompassing view of the patient. A case formulation also serves as a blueprint guiding treatment and as a marker for change. It should also help the therapist experience greater empathy for the patient and anticipate possible ruptures in the therapy alliance. (Eells, 2007a, p. 4)

The above quote by Eells highlights that a case formulation links the client and his or her problems with the treatment. It captures both the strengths and the weaknesses of the client, thereby placing the problem and the potential resolution in the context of the whole person. To use a metaphor, if the treatment is the locomotive and the client's problems are the carriages, then the case formulation is the coupling that holds the two together. Without the coupling, a treatment might chug along nicely but it will fail to bring about any movement in the problems. In addition, case formulation enhances the therapeutic relationship by fostering a deeper understanding of and responsiveness to the client.

Clients present to a professional psychologist with a large quantity of information. There is information specific to the presenting problem, but there is also historical, familial, demographic, cultural, medical, educational, and social information. Some of this ancillary information will have direct bearing on the presenting problem, some will provide a background and context to the problem, and other information will be largely irrelevant to the problem. In addition to this descriptive information, psychologists will aim to identify the personal meaning of the information. They will try to understand the client's experience of events and the way that they interpret them. The psychologist's task is to distil the relevant information quickly and efficiently into a treatment plan. It is the case formulation that provides the link. As shown in Figure 5.1, information about a client passes through the 'lens' of the theoretical and empirical literature and is channelled into a case formulation. The case formulation provides the coupling between diagnostic and assessment information and clinical decisions about treatment planning. Case formulation itself can be broken down into the eight steps illustrated in the callout box in the figure and described later in this chapter. As indicated by the two-way arrows, case formulation is not a one-off event. The process of assessment, formulation, and treatment planning continues to cycle throughout therapy as a client's progress is measured and monitored.

While there are a variety of psychotherapy case formulations, they typically share much common ground (see Eells, 1997b, 2007b). We will begin with a behavioural functional