What Is the Case Formulation Approach to Cognitive-Behavior Therapy?

The case formulation approach to cognitive-behavior therapy is a framework for providing cognitive-behavior therapy (CBT) that flexibly meets the unique needs of the patient at hand, guides the therapist’s decision making, and is evidence based. Case formulation-driven CBT is not a new therapy. It is a method for applying empirically supported CBTs and theories in routine clinical practice. The elements of the case formulation approach to CBT are depicted in Figure 1.1. The therapist begins by collecting assessment data to obtain a diagnosis and develop an individualized formulation of

![Diagram of case formulation approach to CBT]

**FIGURE 1.1.** The case formulation approach to CBT. Copyright 2008 by the San Francisco Bay Area Center for Cognitive Therapy. Reprinted by permission in Jacqueline B. Persons (2008). Permission to photocopy this figure is granted to purchasers of this book for personal use only (see copyright page for details).
the case. The therapist uses the formulation to aid the work of developing a treatment plan and obtaining the patient’s consent to it. As treatment proceeds, the therapist uses the formulation to guide decision making and works with the patient to collect data to monitor the progress of therapy and make adjustments as needed. All this happens in the context of a collaborative therapeutic relationship.

**WHY IS A CASE FORMULATION APPROACH TO CBT NEEDED?**

The development of empirically supported treatments (ESTs) for psychiatric disorders and psychological problems is an important positive development in our field and a boon to psychotherapists who strive to provide evidence-based treatment. Nevertheless, the EST protocols do not provide guidance to the evidence-based clinician in many challenging situations. These situations include: the patient who has multiple disorders and problems, the patient who has multiple providers, a need for the therapist to make decisions that are not referenced in the EST protocols, the patient who has disorders and problems for which no ESTs are available, the patient who does not adhere to the EST protocol, the patient who cannot establish the collaborative therapeutic relationship that is needed to implement the EST protocol, the patient who fails to respond to the EST protocol, or the ever-burgeoning number of ESTs the therapist is called upon to master.

I elaborate on each of these challenging situations briefly in the next section. Then I describe the case formulation approach to CBT and show how it addresses those situations. I conclude the chapter with a review of the intellectual foundations and empirical underpinnings of a case formulation approach to CBT. The remainder of the book describes in detail how to use the case formulation approach to provide CBT to the heterogeneous group of adult patients typically seen in outpatient practice. These patients generally present with chief complaints of anxiety and/or depression and all the problems that go with them.

**Multiple Disorders and Problems**

ESTs typically target single disorders, but patients typically have multiple disorders and problems. To treat these patients, the therapist must answer several questions, including the following: Which disorders and problems are interfering most with the patient’s quality of life? Is it best to treat the multiple disorders and problems in sequence or simultaneously? If I use a sequential strategy, which problem ought I to target first? Might treating some problems lead to improvements or setbacks in other problems? The ESTs themselves do not (nor can they) answer these questions.

Another challenge posed by the multiple-problem patient is that sometimes the patient’s various problems all seem to be caused by many of the same psychological mechanisms, as in the case of the depressed socially phobic grocery store checker whose depression and social anxiety can both be conceptualized as driven by schemas of himself as inadequate and defective and of others as critical and rejecting. An EST approach to treating this person seems to suggest that the therapist carry out two EST protocols in sequence—one for depression, one for social phobia. But this strategy feels cumbersome and inefficient, particularly when the two protocols are both
founded on the same cognitive-behavior model and rely on many of the same interventions.

**Multiple Providers**

EST protocols describe a single psychosocial therapy. They do not provide any guidance to help the therapist with the common situation in which a patient is simultaneously receiving treatment from other clinicians. Examples include the woman seeking treatment for panic disorder who is already receiving benzodiazepine therapy from her primary care physician and the young man with obsessive–compulsive disorder who also consults a spiritual advisor (Bell, 2007). These adjunctive treatments may undermine—or facilitate—the treatment the cognitive-behavior therapist is providing.

**Situations Not Referenced in the EST Protocols**

Clinicians make large and small decisions dozens of times each day that are not referenced in the EST protocols. For example, is Susan’s wish to reduce her academic course load this term an example of avoidance behavior or healthy limit setting? An EST protocol cannot answer questions at this level of detail. The EST protocol is based on a nomothetic (general) formulation that describes classes of target behaviors (e.g., in the case of Beck’s cognitive therapy for depression, distorted cognitions and maladaptive behaviors) but does not identify which specific cognitions and behaviors are problematic for a particular patient. Without a systematic way to determine whether a particular behavior is adaptive or maladaptive, the therapist may shoot from the hip or be guided by convenience when making these decisions. The available evidence indicates that psychotherapists are not very skilled at decision making (Garb, 1998; Wilson, 1996a).

**No EST Is Available**

People often seek treatment for problems for which no EST is available, such as a somatization disorder, Asperger syndrome, a dissociative disorder, or distress about a husband’s affair. And sometimes people have a disorder for which an EST is available but treating that disorder is not their goal. A common example is the depressed socially phobic man who wants to begin dating and marry. Although the man’s DSM disorders interfere with his ability to date and marry, he does not wish to treat the DSM disorders to remission (as the ESTs assume).

**Nonadherence**

Nonadherence, including treatment refusal, homework noncompliance, and premature termination, are common. This is not surprising. Many cognitive-behavior therapies, such as exposure treatments for anxiety disorders, impose a substantial workload on patients and require them to tolerate significant distress. The effective cognitive-behavior therapist needs strategies to promote adherence with taxing and distressing interventions. Although a creative therapist can often generate good ideas for promoting adherence (Kendall, Chu, Gifford, Hayes, & Nauta, 1998), the EST protocol itself does not usually provide any explicit assistance.
Difficult Establishing a Collaborative Therapeutic Relationship

The EST protocols require patient and therapist to work closely and collaboratively on demanding and sensitive tasks. Many patients have presenting problems that interfere with their ability to establish the collaborative therapeutic relationship that is needed to carry out the interventions described in the ESTs. Tension, disagreement, failure to collaborate, and ruptures in the therapeutic relationship can interfere with the smooth progress of treatment. The EST protocols themselves are not able to provide the therapist with much guidance in this situation.

Treatment Failure

Many patients do not respond to the ESTs. For example, 40 to 50% of patients who receive CBT for depression in the randomized controlled trials fail to make a full recovery by the end of treatment (Westen & Morrison, 2001). The only guidance the ESTs provide in this situation is the suggestion to attempt another EST. However, they do not offer any guidance about which EST is most likely to be helpful.

A related difficulty is that the EST protocol does not help the therapist effectively manage early failure. The therapist following an EST protocol who carries out the protocol as written will, in the case of Beck’s cognitive therapy for depression, for example, complete a full trial of 18 to 20 sessions before declaring the treatment to be a success or failure. This strategy is inconsistent with data from Ilardi and Craighead (1994) indicating that after as few as four to six sessions it is possible to make a good prediction about the patient’s ultimate treatment outcome.

Multiple ESTs

A final challenge is the proliferation of ESTs. Of course, the availability of a large number of ESTs is good news. In fact, our field needs even more effective therapies. At the same time, the ever-increasing number of ESTs poses a very real burden to the evidence-based psychotherapist. The EST protocols are often large tomes. As clinicians struggle to find time to read these tomes, it is frustrating to discover that many of them overlap considerably. Cognitive-behavior conceptualizations and ESTs for many disorders and problems are based on the same models and describe many of the same interventions (Chorpita, 2006; Zayfert & Becker, 2007).

Therapists who succeed in learning multiple protocols are faced with making decisions about which treatment is most likely to be helpful to the patient who is in the therapist’s office at that moment. But the ESTs themselves do not provide any answers to that question.

The case formulation approach to CBT provides a framework to guide clinicians’ handling of these challenges as they strive to use ESTs. In the next section I offer an overview of the case formulation approach to CBT and show how it addresses these issues.

ELEMENTS OF THE CASE FORMULATION APPROACH TO CBT

Assessment to Obtain a Diagnosis and Initial Case Formulation

The therapist begins by collecting assessment data in order to obtain a diagnosis and an initial case formulation that are used to guide treatment planning and clinical decision
making (see Figure 1.1). The therapist collects data from multiple sources, including the clinical interview, self-report scales, self-monitoring data provided by the patient, structured diagnostic interviews, and reports from the patient’s family members and other treatment providers.

Diagnosis is important for several reasons, including that the EST and other scientific literatures are tied to diagnosis, and diagnosis can aid in formulation, treatment planning, and intervention decision making.

But diagnosis is not enough to guide treatment; a case formulation is needed. A case formulation is a hypothesis about the psychological mechanisms and other factors that are causing and maintaining all of a particular patient’s disorders and problems.

**Elements of a Case Formulation**

A complete case formulation ties all of the following parts together into a logically coherent whole:

1. It describes all of the patient’s symptoms, disorders, and problems.
2. It proposes hypotheses about the mechanisms causing the disorders and problems.
3. It proposes the recent precipitants of the current disorders and problems, and
4. The origins of the mechanisms.

So, for example, a case formulation for Jon, a patient with depression, based on Beck’s theory, reads as follows. The elements of the formulation are identified with CAPITAL LETTERS.

In childhood and adolescence, Jon was brutally teased and humiliated by his father (ORIGINS). As a result, Jon learned the schemas “I’m inadequate, a loser,” and “Others are critical, attacking, and unsupportive of me” (MECHANISMS). These schemas were activated recently by a poor performance evaluation at work (PRECIPITANT). As a result, Jon began having many automatic thoughts (MECHANISMS), including, “I can’t handle this job,” and experienced anxiety and depression (SYMPTOMS, PROBLEMS), with which he coped by avoiding (MECHANISM) important work projects and withdrawing from collegial interactions with both peers and superiors (PROBLEMS). The avoidance caused Jon to miss some deadlines (PROBLEM), which resulted in criticism from his colleagues and boss (PROBLEM) and led to increased sadness, feelings of worthlessness, self-criticism and self-blame, low energy, and loss of interest in others (SYMPTOMS, PROBLEMS). Jon’s low energy and hopelessness (PROBLEM) caused him to stop his regular program of exercise, which exacerbated his prediabetic medical condition (PROBLEM).

As this example illustrates, a good cognitive-behavior formulation is internally coherent. Its elements cohere to tell a compelling story that pulls together many aspects of the patient’s history and functioning (Persons, 1989). The formulation of Jon’s case ties together all of his problems, including his depression, alcohol use, and medical condition. A case formulation helps the therapist understand how apparently diverse problems are related and develop an efficient treatment plan to address them.
A simple example is the case of Jane, who sought help for what she described as “compulsive shopping.” A comprehensive assessment revealed that she also had panic and some agoraphobic symptoms. Careful monitoring of all these symptoms revealed that Jane’s urges to shop were triggered by anxiety and panic symptoms that, in turn, were triggered by catastrophic cognitions about unpleasant somatic sensations. Shopping was negatively reinforced by its anxiolytic effects. Based on this formulation, Jane’s therapist developed a plan that treated all of Jane’s problems simultaneously by teaching Jane to monitor her somatic experiences, catastrophic cognitions, and urges to shop, and to use strategies other than shopping (e.g., cognitive restructuring, present-moment mindfulness) to manage uncomfortable somatic sensations and the anxiety they provoked.

The Process of Developing an Initial Case Formulation

Early in treatment the therapist develops an initial working case formulation that guides initial treatment planning, gives the patient enough information to provide informed consent to treatment, and helps the patient engage in treatment. However, a complete and fully elaborated case formulation typically is available only after treatment has begun and further information is collected, including information from progress monitoring, described later. In fact, the formulation is a hypothesis and is subject to constant testing and revision as information gathering and treatment go forward.

The task of case formulation begins with developing a comprehensive list of all of the patient’s problems. The therapist assesses all domains of the patient’s life, including housing, finances, and other arenas, in order to develop a Problem List. The formulation accounts for all of the patient’s problems, disorders, and symptoms and offers hypotheses about how they are related and what mechanisms are causing and maintaining them.

Developing a Mechanism Hypothesis

The heart of the formulation is the mechanism hypothesis. To develop a mechanism hypothesis, the therapist begins with a nomothetic theory and individualizes it to account for the case at hand. A nomothetic formulation is a general one. An example of a nomothetic formulation is Beck’s cognitive theory that depressive symptoms result when schemas are activated by life events to produce dysfunctional automatic thoughts, maladaptive behaviors, and problematic emotions. The therapist’s task is to translate a nomothetic formulation to an idiographic one. An idiographic formulation describes the particular symptoms, the schemas, and the automatic thoughts, maladaptive behaviors, and emotions experienced by a particular individual.

To develop an idiographic mechanism hypothesis for any particular patient, the therapist can use one of two strategies. The first is to identify a nomothetic formulation that underpins an EST (e.g., behavioral activation for depression) and then individualize and extrapolate that formulation to account for all of the problems of the particular patient who is in the therapist’s office at that moment.

The second strategy is to base the formulation on a more general evidence-based psychological theory (e.g., operant conditioning theory) and then individualize and extrapolate that formulation to account for the details of the case at hand. To aid in this
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process, Chapters 2, 3, and 4 describe the basic principles and clinical implications of the main cognitive, learning, and emotion theories that underpin large numbers of ESTs.

Learning these theories helps the therapist address the problem of the proliferation of protocols. Most ESTs are based on these theories. Instead of learning the details of each and every EST, the clinician learns one or two of the ESTs that target problems and disorders he or she commonly treats, and relies heavily on the basic principles that underpin those and many other ESTs to guide formulation, treatment planning, and clinical decision making.

Levels of Formulation

Formulations are developed at three levels: case, disorder or problem, and symptom. The three levels are nested. A case consists of one or more disorders/problems, and a disorder consists of symptoms. Thus, a case-level formulation generally consists of an extrapolation or extension of one or more disorder- and symptom-level formulations.

Formulations at the various levels guide different aspects of treatment. The case-level formulation guides the process of treatment planning, especially the process of setting goals and making decisions about which problems to tackle first. It also frequently guides agenda setting in the therapy session.

Most intervention happens at the level of the symptom and is guided by a symptom-level formulation. However, the interventions used to treat a symptom do not just depend on the symptom-level formulation. The symptom of rumination illustrates how the disorder-level formulation guides the formulation for a symptom. Behavioral activation (Martell, Addis, & Jacobson, 2001) identifies the symptom of rumination as avoidance behavior and uses interventions to promote behavioral approach and reengagement with one’s environment. In contrast, Beck’s cognitive model views ruminations as consisting of distorted thoughts and intervenes to help patients change the content of their thoughts.

Treatment Planning

The function of the formulation is to guide effective treatment (S. C. Hayes, Nelson, & Jarrett, 1987). A key way the formulation guides treatment is by identifying the targets of treatment, which are generally the mechanisms that the formulation proposes are causing the symptoms. In the case of a formulation like the one above for Jon, which is based on Beck’s cognitive theory, the treatment targets are the schemas, automatic thoughts, and maladaptive behaviors that the cognitive model views as mechanisms causing and maintaining patients’ symptoms. In contrast, a formulation based on Lewinsohn’s behavioral theory (Lewinsohn, Hoberman, & Hautzinger, 1985) identifies deficits in social skills and a dearth of pleasant activities as treatment targets.

Treatment Planning When Multiple Providers Are Needed

Treatment planning in the case formulation approach to CBT happens at the level of the case. That is, it considers all of the therapies the patient is receiving, not just the one that the cognitive-behavior therapist is providing. A case formulation approach to CBT also focuses the therapist’s attention on mechanism, not just the procedures of the
interventions. For example, in the case of Mary, the patient with panic symptoms who was receiving both exposure therapy and a benzodiazepine, a case formulation-driven approach helped the therapist realize that the cognitive-behavior and benzodiazepine components of Mary’s treatment conflicted with one another. The CBT was designed to help Mary expose herself to and learn to tolerate her anxiety symptoms to learn they were not dangerous, whereas the benzodiazepine treated the anxiety symptoms by abolishing them. In this particular case, the problem was easily solved. When Mary’s cognitive-behavior therapist explained the conflict between the two therapies, Mary proposed that after she learned some anxiety management strategies she would ask her primary care physician to begin tapering the benzodiazepine.

**Preventing Nonadherence**

The use of an idiographic formulation to guide treatment helps the therapist prevent nonadherence by selecting a conceptualization and treatment plan that best fits the case at hand. For example, the case of a patient with depression can be conceptualized using any of several evidence-based nomothetic formulations, including Beck’s cognitive model (A. T. Beck, Rush, Shaw, & Emery, 1979), Lewinsohn’s behavioral model (Lewinsohn & Gotlib, 1995), behavioral activation (Martell et al., 2001), problem-solving therapy (Nezu & Perri, 1989), or Cognitive Behavioral Analysis System of Psychotherapy (CBASP; McCullough, 2000). The therapist can carry out an idiographic assessment of the case at hand and select the model that best fits the case (Haynes, Kaholokula, & Nelson, 1999) or is most acceptable to the patient.

This approach to treatment can prevent and reduce nonadherence because the therapist works to adapt to the patient rather than the other way around. For example, Jackie reported that she had successfully overcome a previous depressive episode by increasing her exercise and social contacts. Thus, she wanted to use that strategy again. Her strategy seemed to be based on a conceptualization of her depression that was similar to Lewinsohn’s (1974) view of depression as due to a loss of positive reinforcers. Because the interventions Jackie described had helped her in the past and were consistent with an EST-based formulation and intervention plan, I was happy to support them. I worked with Jackie on using exercise and activity scheduling to overcome her current depressive episode rather than requiring her to learn a new set of cognitive or problem-solving skills (Rude, 1986).

This approach to treatment is reminiscent of Acocella’s (2003) description of the approach of George Balanchine, the choreographer of the New York City Ballet. He was convinced that you could not really change a dancer. All you could do was develop what she already had. In choreographing a ballet, he would often say to the people he had assembled, “Well, what can you do?” Then, if he liked what they showed him, he would work it up, and put it in, and let the dancers complete it . . . . When the cast of a ballet changed, he often changed the choreography to fit the new performers. As a result, many of his ballets exist in a number of versions. (p. 53)

Thus, the therapist can select different formulations for different patients, depending on which appears most acceptable or helpful to the patient who is in his or her office at that time. In fact, the therapist can use different formulations at different moments in
time for a single patient. For example, if a patient who generally benefits from behavioral activation to treat depressive symptoms balks at it one day, I might shift to Socratic dialogue to identify and address distorted cognitions instead. The rationale for this strategy is that the behavioral activation and cognitive models, although different, do not conflict with one another. In fact, both might be valid, even for a single patient!

The strategy of using multiple conceptualizations simultaneously is risky. It is especially risky when models conflict because then the interventions driven by the different formulations may work at cross-purposes. However, this risk is small, because most CBT models do not conflict. Another risk is that the therapist’s use of multiple formulations can contribute to fuzzy thinking or no thinking, just a random going back and forth from one intervention to another without any rationale. So this strategy must be used with care. In fact, whether the benefits of this strategy outweigh the risks is a fascinating empirical question. Nevertheless, it allows the therapist a high degree of flexibility that can help him or her flexibly respond to the patient to keep him or her engaged in treatment.

_Treatment Planning When No EST Is Available_

When patients seek treatment for problems and disorders for which no EST is available, evidence-based practitioners face a dilemma. Ought they refuse to provide treatment? This option is not very appealing. The case formulation approach to CBT offers several alternatives.

One is to adopt the strategy used by Opdyke and Rothbaum (1998). They used the empirically supported formulations and interventions for one impulse control disorder (trichotillomania) as templates to develop formulations and interventions for other impulse control disorders (e.g., kleptomania and pyromania) for which no empirically supported formulations and therapies are available. This strategy is particularly useful when patients do not meet full criteria for a DSM disorder for which an EST is available or when the patient has the disorder but has goals other than to treat the disorder. These patients can be offered a treatment based on the EST even though the patient does not meet full criteria for the disorder targeted by the EST.

Another strategy is to develop an idiographic formulation based on one of the basic theories that underpin many of the ESTs, such as Beck’s cognitive theory, theories of respondent and operant conditioning, and Lang’s (1979) bioinformational theory of emotional processing (described in Chapters 2, 3, and 4) and use the formulation to develop a treatment plan. This strategy is a transdiagnostic one (Harvey, Watkins, Mansell, & Shafran, 2004). That is, it is not tied to diagnosis. It allows the clinician to draw on basic science to guide conceptualization and treatment.

Thus, a case formulation-driven mode of treatment allows the therapist to offer treatment to patients who have disorders or problems that are not targeted by an EST. Of course, because the therapist treating these patients is not using an EST, the therapist must obtain the patient’s informed consent before embarking on what is essentially an experimental treatment.

_Obtaining Informed Consent for Treatment_

The initial case formulation, diagnosis, and treatment plan are developed in the context of a collaborative relationship with the patient and are shared with the patient.
Ideally this happens gradually as a process of mutual discovery. But before beginning treatment, the therapist reviews the key information in a formal process to obtain the patient’s informed consent to proceed with the proposed treatment.

The case formulation aids in the process of obtaining informed consent because most patients are not willing to go forward in treatment unless they have confidence that the therapist truly understands their difficulties and will provide treatment that addresses them—that is, that patient and therapist have a shared formulation about the nature and causes of the patient’s problems and what is needed to treat them effectively. The formal process of obtaining the patient’s informed consent before going forward also helps prevent nonadherence by getting the patient’s agreement to the goals and interventions of treatment before beginning it.

All of the elements of therapy described so far (initial assessment, diagnosis, case formulation, treatment planning, and informed consent for treatment) make up the pre-treatment phase of the therapy. This phase of therapy lasts one to two or four sessions. The activities of the pretreatment phase are described in detail in Chapters 5, 6, and 7. If these elements are successfully accomplished and patient and therapist can agree on a treatment plan, treatment begins.

**Treatment**

Treatment is guided by the formulation (or more accurately, by multiple formulations, because, as already described, the therapist develops formulations at multiple levels). In Chapters 10 and 12, I discuss how the therapist uses the various levels of formulation to guide decision making and intervention. I do not say much in this book about the details of the interventions themselves for two reasons: First, those details are provided in many other places and I assume the reader is familiar with them. Second, in my experience, carrying out the intervention is the easy part of clinical work. The hard parts are collecting and sorting through all of the information that comes the clinician’s way in order to determine when to intervene and what treatment target to address at that moment, and therefore I focus my attention on those decision-making tasks.

**Using the Formulation to Guide Idiographic Decision Making**

The case-level, disorder-level, and symptom-level formulations guide the therapist’s decision making in situations that are too unique to be addressed by the EST protocols. The case formulation translates the nomothetic (general) protocol into an idiographic (individualized) one for the case at hand. The idiographic formulations guide the clinician’s decision making, for example, in the case of Susan, mentioned above, who wanted to reduce her course load for the upcoming semester. The therapist needed to work with Susan to determine whether her wish to reduce her course load was adaptive coping or maladaptive avoidance.

Susan’s therapist had earlier worked with Susan to develop the formulation that she held the self-schema that she was weak, fragile, and helpless. This formulation suggested that Susan’s wish to reduce her course load was a maladaptive one driven by that schema. However, rather than simply assuming that this was true, the therapist worked with Susan to test it. They carried out a Thought Record in which Susan examined the automatic thoughts that arose when she reviewed her course plan (which was
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a very typical one, not unduly heavy or light) for the semester. Consistent with the formu-
lation hypothesis, Susan’s automatic thoughts included “I won’t be able to complete
the work” and “I’ll fall apart and get depressed again and my life will be ruined.” Susan
and her therapist identified these thoughts and were able to agree that these predictions,
although they felt emotionally compelling to Susan, were not consistent with how well
she was functioning.

Another student, Erik, also felt anxious about his course load. His anxiety occurred
in the context of returning to school after a long illness and was driven by thoughts like
“If I make any accommodation at all to my illness, my life will be ruined,” a line of think-
ing that stemmed from a self-schema of “I am ruined, defective, and doomed because
of my illness.” In Erik’s case, the formulation suggested that reducing his course load
might allow him to test his belief that if he accommodates to his illness his life will be
ruined.

In both Susan’s and Erik’s cases, the idiographic case formulation gave the therapist
an initial hypothesis about what line of intervention to take to help the student evaluate
his or her course load. And in both cases, the therapist worked collaboratively with the
patient to flesh out and test the formulation hypothesis. Next, patient and therapist will
collect data to monitor the patient’s adherence to the interventions flowing out of the
formulation and their helpfulness.

The case formulation also provides a guide to clinical decision making in situations
involving scheduling and business aspects of therapy that are typically not addressed
in the ESTs. Leonora called and left a phone message saying that she was facing a major
deadline at work and wanted to cancel the session we had scheduled for the next week
and reschedule her session to meet with me after the deadline passed. What answer do I
give? I consulted my formulation of her case. Leonora suffered from worry and she and
I had recently developed the conceptualization that her worry behavior (especially the
worry thought “I made a mistake; I shouldn’t have married my husband”) functioned
to promote her avoidance of acknowledging and taking action to solve her marital prob-
lem. Based on this conceptualization, I hypothesized that Leonora’s request to postpone
the therapy session might be an instance of one of the treatment targets (avoidance
behavior) described in her case formulation. I called Leonora and explained, referring
to our previous collaborative conceptualization, why I recommended that she keep her
appointment. She accepted my rationale and we met and had a productive session that
helped her move forward to take some action to solve her marital problem.

Using the Formulation to Handle Nonadherence

The individualized case formulation helps the therapist understand and manage non-
adherence behavior effectively. For example, my formulation of my patient Chie’s case
proposed that one of her major strategies for coping with stressful situations was to
“shut down and give up.” In fact, often she simply went to bed. If Chie was scheduled

My formulation of her case helped me by reminding me that Chie’s “shut down
and give up” mode was a key problem behavior that was common to all of her symp-
toms and problems. Therefore it was completely expectable and in fact good news that

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it appeared in therapy, where I could get a detailed assessment of it and intervene with it directly. That is, the formulation helped me increase my empathy and reduce my frustration when Chie’s problem behavior appeared in therapy. The formulation also helped me prioritize and target this behavior for intervention when it occurred and reminded me that interventions that addressed this behavior could not only increase Chie’s compliance in therapy but help her solve many other problems.

**Monitoring and Hypothesis Testing**

As treatment proceeds, the patient and therapist collect data to test the formulation and monitor the process and outcome of therapy. Chapter 9 describes this part of therapy in detail. Data collection allows patient and therapist to answer questions like the following:

- Is the patient accepting and adhering to the interventions the therapist provides?
- Are the mechanisms changing as expected?
- Do the mechanisms (e.g., cognitive distortions) and symptoms (e.g., hopelessness) covary as expected?
- Are the symptoms remitting?
- Are problems in the therapeutic relationship interfering?

If process (mechanism change, the therapeutic alliance, or adherence) and/or outcome are poor, the therapist works with the patient to collect more assessment data to get more information about what is interfering with progress and to evaluate whether a different formulation might lead to a different intervention plan that produces better results. Thus, therapy is an idiographic hypothesis-testing process, where the treatment of each case is like an experiment, where the formulation is the hypothesis and the therapist can carry out assessments or even experiments to directly test the formulation (e.g., see Iwata, Duncan, Zarcone, Lerman, & Shore, 1994, and Turkat & Maisto, 1985). More commonly, the therapist tests the formulation indirectly by monitoring the degree to which the treatment plan based on the formulation leads to the expected changes in processes and outcomes.

Progress monitoring strengthens the patient-therapist alliance by building an ongoing evidence-based process of work that patient and therapist share. It also helps the therapist address nonadherence and failure. These topics are addressed in detail in Chapter 11. The case formulation approach to CBT calls for the therapist to monitor adherence carefully at every step in order to identify and address early signs of nonadherence before they worsen and destroy the therapy altogether.

The case formulation approach to treatment helps address treatment failure in several ways. First, progress monitoring identifies failure early so the therapist can begin problem solving promptly.

Second, the model provides the therapist with a systematic decision-making strategy to manage treatment failure. When treatment fails or appears likely to fail, the therapist using a case formulation-driven approach works collaboratively with the patient on the problem. One piece of the work is to gather more assessment data to consider whether a different formulation of the case might lead to a different treatment plan that might be more effective. Thus, for example, if monitoring shows that a patient with
depression is not responding to therapy driven by a cognitive formulation and in fact
that cognitive restructuring interventions appear to promote suppression (Beevers,
Wenzlaff, Hayes, & Scott, 1999), the therapist can shift to a formulation and interven-
tions based on mindfulness-based cognitive therapy (Segal, Williams, & Teasdale, 2002)
or behavioral activation.

The Therapeutic Relationship

The therapeutic relationship supports all of the other parts of the therapy. That fact is
reflected in its depiction in Figure 1.1 as a background shading that encompasses all of
the other stages of case formulation-driven CBT.

The therapeutic relationship is essential to the process at every stage. In fact, the
therapist begins working to develop the relationship with the initial telephone call from
the potential patient. Throughout pretreatment and treatment, the therapist works to
build a trusting, collaborative therapeutic relationship. He or she works to strengthen
the patient’s motivation for change and willingness to carry out the proposed therapy
by working collaboratively with the patient to develop a shared formulation, set treat-
ment goals that are emotionally meaningful to the patient, and clearly tie the interven-
tions to the patient’s goals.

The case formulation approach to CBT relies on a dual view of the relationship
that is described in detail in Chapter 8. One part of the relationship is the necessary-
but-not-sufficient (NBNS) view. In this view, the trusting collaborative relationship is
the foundation upon which the technical interventions of CBT rest. The other view of
the relationship is as an assessment and intervention tool itself, as illustrated in the case
of Chie, above. In that example, Chie’s behavior with me, her therapist, exemplified
behavior she also exhibited with others in her life. I was able to use that fact to guide my
conceptualization of her case and to intervene to address the problems in our relation-
ship and other aspects of her life.

The case of Adrienne offers another example of how the therapist uses the rela-
tionship in case formulation-driven CBT. Adrienne called for help coping with a stress-
ful meeting she was scheduled to lead. When I was unable to return her call before
the meeting, she flew into a rage and attacked me for being not supportive when she
needed it. My formulation of her case helped me by guiding me to think about her
problematic behavior as an example of the behavior for which Adrienne sought treat-
ment. That meant that I could use the case formulation to understand her behavior and
guide intervention to address it. In Adrienne’s case, assessment revealed that her anger
resulted from her feeling abandoned and tricked by me. We had a good discussion in
which we were able to agree that her feelings of rage toward me and the belief that I was
trick her were caused by and consistent with how her abusive parents had treated
her but were not valid in her relationship with me. This discussion resolved the problem
in our relationship and gave Adrienne some useful tools to address other situations in
which she felt enraged and tricked by others.

The case formulation approach to CBT also helps the therapist establish a good
relationship at the beginning of therapy by adapting the formulation and treatment plan
to the needs and mode of working of the patient, as was described in the discussion of
adherence above, and by constantly monitoring the quality of the relationship so that
glitches and ruptures can be identified and addressed early.
The case formulation approach to CBT also helps the therapist anticipate potential problems in the alliance. For example, when the case formulation proposes that the patient tends to view authority figures as attacking and critical, the therapist can expect that the patient might feel attacked and criticized in therapy and can use that expectation to try to head off relationship problems before they develop.

To summarize, the case formulation approach to CBT is a framework for using the ESTs in clinical practice that helps the therapist address many issues and difficulties that are not addressed by the EST protocols themselves. One way case formulation-driven CBT does this is by focusing on the whole patient and all the therapies the patient is receiving, not just on a single disorder or treatment protocol.

The case formulation approach to CBT also addresses flexibly difficulties the clinician encounters because it is a principle-driven approach to treatment rather than a protocol-driven approach. One way to capture this notion is via the analogy of a trip. The protocol-driven approach and formulation-driven approaches to treatment are analogous to two approaches to determining the route on a road trip—say, a trip from San Francisco to New York. The protocol-driven approach is analogous to following a list of directions that specifies, in order, what turns to make to get from San Francisco to New York. The formulation-driven approach is analogous to using a map. If, on the way to New York, you encounter a roadblock, a list of instructions gives no guidance on what to do next. In contrast, a map allows you to find an alternate route. Case formulation-driven CBT is like a map. Patient and therapist select the destination, choose a route, monitor progress at every step of the way, and make adjustments as needed to overcome the obstacles and roadblocks that inevitably arise along the way.

INTELLECTUAL FOUNDATIONS OF CASE FORMULATION-DRIVEN CBT

The case formulation approach to CBT has multiple origins within and outside of CBT. Within CBT, case formulation-driven CBT borrows heavily from functional analysis (Haynes & O’Brien, 2000; Turkat & Maisto, 1985) and paradigmatic behavior therapy (Eifert, Evans, & McKendrick, 1990). Probably the main difference between the functional analysts and the model I present here is that the functional analysts focus exclusively on case conceptualizations that are based on operant conditioning, whereas case formulation-driven CBT also permits case conceptualizations based on Beck’s and other cognitive theories (described in Chapter 2) and on emotion theories (described in Chapter 4).

The material presented here relies on work by other cognitive-behavior therapists who have written about case formulation, including J. S. Beck (1995); Freeman (1992); Koerner & Linehan (1997); Nezu, Nezu, and Lombardo (2004); Padesky (1996); Turkat (1985); Hersen (1981); and Tarrier (2006). The approach to treatment described here also rests heavily on the long-standing tradition in behavior therapy—indeed, in psychology—of the value of observing the single organism (Kazdin, 1982; Morgan & Morgan, 2001).

The EST movement underpins case formulation-driven CBT as described in this book (Kendall & Chambless, 1998). Other underpinnings include the field of program evaluation (cf. Bloom, Fischer, & Orme, 1995); recent writings about outcome evaluation
in clinical practice (Woody, Detweiler-Bedell, Teachman, & O’Hearn, 2003); the scientist-practitioner tradition in clinical psychology (Barlow, Hayes, & Nelson, 1984; Peterson, 1991; Stricker & Trierweiler, 1995), medicine (Sackett, Richardson, Rosenberg, & Haynes, 1997), and social work (Gibbs & Gambrill, 1999); and even the scientific method itself (Cone, 2001).

The case formulation approach to CBT also draws on earlier discussions of the need for modularized (Wilson, 2000) and principle-driven protocols (Castonguay & Beutler, 2006; G. M. Rosen & Davison, 2003) and protocols in which interventions are guided by idiographic assessment (Persons, 1991). Evidence-based protocols of this sort that are already available include multisystemic therapy (MST; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998), dialectical behavior therapy (DBT; Linehan, 1993a), acceptance and commitment therapy (ACT; S. C. Hayes, Strosahl, & Wilson, 1999), the modular therapy for depressed adolescents developed by Curry and Reinecke (2003), Blanchard’s (Greene & Blanchard, 1994) cognitive-behavior protocol for treating irritable bowel syndrome, and Chorpita’s (2006) protocol for treating childhood anxiety disorders. Others that are currently being developed include protocols for treating substance abuse (McCrady & Epstein, 2003), depression in adolescents (Albano, 2003), and eating disorders (Fairburn, Cooper, & Shafran, 2003).

EMPIRICAL SUPPORT FOR CASE FORMULATION-DRIVEN CBT

Has the case formulation approach to CBT been shown in controlled studies to be effective? In one sense, this is not a sensible question, because the method described here is not a new treatment. It is simply a systematic method for adapting empirically supported treatments to meet the needs of the case at hand (Sackett et al., 1997). From this idiographic vantage point, the method itself provides a way to answer the effectiveness question because it calls for the therapist and patient to collect data to evaluate the effectiveness of the therapy for each case.

However, the question of whether CBT guided by a case formulation has been shown to be effective can also be posed from a more general, nomothetic point of view. The evidence on this question is sparse. A handful of randomized trials comparing outcomes of case formulation-driven and standardized CBT shows that formulation-driven treatment produces outcomes that are not different from and sometimes a bit better than standardized treatment (Jacobson et al., 1989; Schneider & Byrne, 1987; Schulte, Kunzel, Pepping, & Schulte-Bahrenberg, 1992).

Although the Schulte et al. (1992) study is frequently described as showing that patients who received individualized treatment had worse outcomes than those who received standardized treatment, a careful review of the findings suggests that the study fails to show a difference between individualized and standardized treatment. Schulte et al. (1992) randomly assigned 120 persons with phobia to standardized exposure treatment, individualized treatment, or yoked control treatment (patients in the yoked control group received an individualized treatment that had been developed for a patient in the individualized treatment condition). Although a multivariate analysis of variance (MANOVA) showed that the three treatment conditions differed significantly at the $p < .05$ level for three of nine outcome measures at posttreatment, these results faded over time (appearing on only two measures at 6-month follow-up, and on none at 2-year
follow-up). Furthermore, no statistical tests were conducted to directly compare the
patients in the standardized condition with those in each of the other conditions.

Three uncontrolled trials that I and my colleagues conducted of the methods
described in this book have shown that treatment of patients with depression (Persons,
Bostrom, & Bertagnolli, 1999; Persons, Burns, & Perloff, 1988) and both depression and
anxiety (Persons, Roberts, Zalecki, & Brechwald, 2006) guided by a cognitive-behavioral
case formulation and weekly progress monitoring has outcomes similar to outcomes of
patients receiving cognitive-behavior therapy or cognitive-behavior therapy plus phar-
macotherapy in the randomized controlled trials. An uncontrolled trial showed that
patients with bulimia nervosa who received individualized treatment guided by a func-
tional analysis had better outcomes than patients who received standardized treatment
on some measures (abstinence from bulimic episodes, eating concerns, and body shape
dissatisfaction) but not others (self-esteem, perceived social support from friends, and
depression) (Ghaderi, 2006).

Another relevant literature is the literature on the treatment utility of idiographic
assessment, as the main role of the idiographic case formulation is to aid in the treat-
ment process. Nelson-Gray (2003) and Haynes, Leisen, and Blaine (1997) reported that
functional analysis (one of the methods of case formulation described in of this book;
see Chapter 3) had good treatment utility in the treatment of individuals with severe
behavioral problems, such as self-injurious behavior. The treatment utility of functional
analysis and other idiographic assessment methods for the types of outpatient cases
described in this book has unfortunately rarely been studied.

The case formulation approach to treatment requires frequent monitoring of the
process and outcome of the therapy. Surprisingly, the effects of monitoring on outcome
have rarely been studied. One exception is the work of Michael Lambert and his col-
leagues, who have conducted several studies showing that patients treated by ther-
pists who received feedback through monitoring data had better outcomes than patients
treated by therapists who did not receive feedback. In particular, patients who had poor
outcomes early in treatment improved after the therapist was alerted to the patient’s
poor progress (Lambert, Hansen, & Finch, 2001; Lambert, Harmon, Slade, Whipple, &
Hawkins, 2005; Whipple et al., 2003).

The studies reviewed here converge to provide support for the assertion that reli-
ance on a cognitive-behavioral case formulation can contribute to treatment outcome.
However, few studies have examined this question directly. For that reason, it is proba-
bly fair to say that the strongest empirical support for the treatment utility of a cognitive-
behavioral case formulation currently comes from the method’s reliance on evidence-
based nomothetic formulations as templates for the idiographic formulation and from
the idiographic data that the therapist collects to monitor each patient’s progress.

* * *

This chapter describes the essential elements of the case formulation approach to
CBT, which are presented in Figure 1.1. Central to case formulation-driven CBT is a
solid understanding of the theories of cognition, learning, and emotion that underpin
the currently available empirically supported cognitive-behavioral protocols. These
theories are described in the next three chapters, beginning with cognitive theories and
therapies.