Current Clinical Psychiatry
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Timothy J. Petersen
Susan E. Sprich
Sabine Wilhelm *Editors*

The Massachusetts General Hospital Handbook of Cognitive Behavioral Therapy

Humana Press

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Foreword

While, at first thought, we conceptualize our therapeutic efforts as working with the patient/client to change thought, emotion, and behavior, in truth what we must do is to change, literally, rewire, the brain, to accomplish these goals. What is remarkable about our field is that we now know that we can and do accomplish this with the therapeutic tools that have been developed, and that through learning and experience, effective treatment literally rewires the brain and rebalances circuits that are responsible for how we think, feel, and behave. It is incumbent on all behavioral health caregivers to learn these skills, to acquire these tools, in order to be credentialed professionals privileged to care for and to provide effective treatments for fellow humans who suffer.

This volume that my remarkable colleagues have produced is unique in that it brings together foremost clinical and research experts who all have active clinical research programs based in an academic medical center, a place that is often the court of last resort for the most challenging and complicated cases. They have offered an accessible text, both in terms of its readability and in the clarity of clinical guidance. Case examples are used in each chapter to illustrate how the described techniques can be applied to actual patients.

The format of this volume is also unique in the CBT book world as the content spans basic skills/applications and more specialized applications and topics. Our department has endeavored to make these expertises available to all who seek to develop or enhance their clinical skills, and some readers may wish to in addition pursue our online CBT portfolio of courses for which this handbook will become the main "reading and resource" going forward. Our ultimate mission is to create a community of learners who continue to develop evidence-based practice skills and look to MGH as their education "provider." We will always be grateful for your feedback and suggestions as we pursue our mutual goal of reducing human suffering and impairment.

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Introduction

1

Timothy J. Petersen, Susan E. Sprich, and Sabine Wilhelm

Psychotherapy has rich and complicated historical roots, and has evolved considerably into what we today consider generally accepted, modern forms of treatment. One of the earliest forms of psychotherapy, developed over 2,000 years ago, was based on the principles of Buddhism and posited that mental suffering was caused by ignorance stemming from a craving for attachment. If an individual followed the "Noble Eightfold Path to Enlightenment," this craving would be eased (The Four Noble Truths and Noble Eightfold Path, [1]). Other notable, early forms of psychotherapy, spanning antiquity through the early nineteenth century, include Hippocrates' focus on bringing the "four humors" into balance (Hippocrates, ca. 460 BC–ca. 370 BC [2]), emphasis on balancing the forces of Yin and Yang [3], various forms of hypnotherapy [4, 5], and exorcism [6]. More formalized models of "talk therapy" were not developed until the late nineteenth century, when Freud and subsequent followers began their transformative clinical work.

The beginning of the twentieth century marked a period of rapid growth and refinement of psychotherapy, with notable developments taking place in Europe and the USA. From 1900 through the end of World War II, key developments included publication of Freud's seminal work *Interpretation of Dreams* [7], establishment of the American Psychological Association, opening of the first mental health clinic at the University of Pennsylvania, Adler and Jung's departure from strict Freudian views and the resulting formation of the Individual and Analytical schools of thought [8, 9], Horney's establishment of Neo-Freudianism [10], and publication of Carl Roger's seminal work *Counseling and Psychotherapy* [11].

Significant branching of theories and forms of psychotherapy occurred during the mid-twentieth century. In addition to publication of the first Diagnostic and Statistical Manual of Mental Disorders (DSM; [12]), this period marked the appearance of what is known as the "first wave" of evidence-based psychotherapies. As a group, these therapies were in part a rejection of the perceived shortcomings of psychoanalytic theory and techniques (e.g., overemphasis

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on childhood experiences as the primary cause of psychopathology, lack of standardization of techniques, absence of validated outcome measures). Among the most important of these new therapies was behavioral therapy developed and codified by such pioneers as Wolpe and Skinner. Behavior therapy represented a significant paradigm shift in that observable events (behaviors) were the primary unit of interest and proved to be modifiable based on reinforcement strategies and contingencies [13, 14]. Along with this core component of the "first wave," another notable progress was taking place in the development of different schools of psychotherapy including Perls' creation of Gestalt Therapy, development of Maslow's Humanistic Psychology, and the spawning of psychodynamic therapies and their briefer versions [15–17]. The "second wave" of psychotherapies, occurring in the late 1960s and 1970s, centered on a focus on cognitions as the primary drivers of affect and behavior. Rather than simply respondents to behavioral contingencies, human beings were viewed as engaging in active cognitive processing that had a significant impact on day-to-day experience. This "second wave" was accompanied, in parallel, by the development of both social psychology and computer programming. Within social psychology, an emphasis on researching how people interact with each other led to the creation of attribution theory, which posits that individuals actively determine causes of others' behavior through reflective thought. Within the world of computer science, programming language and the concept of a "central processor of information" served as an accurate and useful model for understanding human thinking. Social psychologists additionally contributed to the empirical development of CBT with the advent of information processing theory. Information processing theory represented a critical paradigm shift in which humans were seen not as simply responding to external stimuli, but as active cognitive processors of information presented to them from their external world [18]. This theory helped establish thought processes or cognitions as legitimate targets for scientific research and therapeutic interventions. Initially this new line of thinking was met with criticism from those solidly in the behaviorism camp as external, observable behaviors were seen by these scientists as primary in understanding the human experience.

Albert Ellis and Aaron Beck are considered to be the leaders of this second wave of psychotherapy development. Ellis created rational emotive therapy (RET; [19]). The fundamental tenet of RET is that unhealthy, self-defeating thoughts and beliefs create distress and individuals can be taught to identify and modify them. Ellis firmly believed that this treatment approach resulted in effective promotion of emotional well-being. The Albert Ellis Institute, still in existence, has successfully spearheaded positive RET outcome studies [20] and has provided training and certification to thousands of psychologists. Beck, in what was arguably one of the most significant developments in the growth of psychotherapy during this time period, created the cognitive therapy (CT) model, with a specific focus on how thoughts play a pivotal role in the development and maintenance of depression. His 1979 book, *Cognitive Therapy of Depression*, influenced the field in a profound manner and served as the basis for cognitive behavioral therapy (CBT) models created to treat a broad range of mental health disorders [21]. The Beck Institute in Pennsylvania continues to provide training for clinicians worldwide.

Subsequent to Beck's original 1979 publication, developers of CBT treatment protocols have generously incorporated behavioral strategies into the overall treatment package [22, 23]. Thus, the term CBT, as compared with CT, is a more accurate reflection of what actually takes place during treatment—in that more behavioral strategies are now incorporated, as compared to the original CT envisioned by Beck. The relative contribution of cognitive and behavioral strategies to observed efficacy of CBT has been examined in a formal manner [23]. While some research suggests behavioral strategies to be the more "active" ingredient, in that they alone may produce the same positive outcomes when compared with the entire CBT treatment package, other research does not confirm this finding [24, 25]. At this point, the most common clinical strategy is to evaluate each patient's individual

symptom presentation and select cognitive and/or behavioral techniques and strategies most likely to be effective and acceptable to the patient. Ultimately, the inclusion of both cognitive and behavioral techniques and strategies in the CBT treatment package helped serve the purpose of clinically bridging the cognitive and behaviorist camps. It is this combination of approaches that allows for CBT to be flexibly and effectively applied across a range of psychiatric conditions. From our perspective, CBT is most accurately defined as a specific clinical approach and set of techniques, based on empirically derived behavioral and cognitive theories, which have a strong evidence base of support for the treatment of a wide range of mental health conditions.

In the past few decades, there has been an increasing focus on treatments that incorporate concepts such as mindfulness into CBT. For example, dialectical behavior therapy (DBT) was developed by Marsha Linehan [26, 27]. DBT was originally developed to treat borderline personality disorder, but has been used with various disorders (e.g., treatment-resistant depression, [28], and binge eating disorder, [29]). Along somewhat similar lines, acceptance and commitment therapy (ACT) was developed by Steven Hayes and colleagues. ACT has acceptance as a major focus of treatment and also incorporates mindfulness and values work [30]. Some authors contend that these treatments are fundamentally related to CBT and should not be classified separately (e.g., [31]). On the other hand, Hayes and others have referred to these new treatments as the "third wave" of cognitive and behavioral therapies, implying that they are fundamentally different than older CBT treatments (e.g., [32]).

The MGH Handbook of CBT provide in-depth coverage of CBT, arguably the most widely disseminated evidence-based psychotherapy utilized today. As you will see, CBT has been adapted for use across an impressively broad range of clinical indications and modified for use across varying stages of illness. Empirical evidence confirms that CBT is more effective than no treatment conditions, and in some instances CBT demonstrates equivalent or greater efficacy when compared with psychotropic treatments [33, 34].

Our overall mission was to create a handbook grounded in state-of-the-art, empirically based clinical research. This volume take the reader through a sequence that includes the basic principles of CBT, common applications (e.g., depression, obsessive compulsive disorder [OCD]), and, finally, highly specialized applications (e.g., use of CBT in medically ill populations, body dysmorphic disorder [BDD]). Our contributors are foremost experts in their respective specialties, and all have ongoing, active clinical research programs. Case vignettes are incorporated into each chapter to bring clinical techniques and strategies "to life." We are confident that you will find the contents of this volume highly accessible and useful in your clinical practice. For those readers who have not received formal training in CBT, we hope that this handbook spurs your interest to engage in additional, specialized training. This will maximize the confidence you bring to your work and help ensure that the treatment being provided is of the highest possible quality. For those readers who have been formally trained in CBT, the information contained in this handbook will undoubtedly enrich your practice of CBT, and hopefully serve as an impetus to engage in more specialized CBT training. Thank you for your interest in the MGH Handbook of CBT. We wish you great success in your clinical work!

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Basic Principles and Practice of Cognitive Behavioral Therapy

2

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2.1 Structure of Treatment

As discussed in the previous chapter, cognitive behavioral therapy (CBT) is designed to build a set of skills that increase awareness of thoughts and behaviors and help patients understand how thoughts and behaviors influence emotions. CBT uses a collaborative process in which the therapist and patient work together to problem-solve how to challenge dysfunctional thoughts and behaviors underlying the presenting problem. This is quite different from other types of talk therapy. In CBT, the therapist teaches the appropriate skills to address the clinical problem and then the patient works to apply these skills more generally outside of session.

CBT is structured and time-limited with treatment typically consisting of 8–25 sessions, based on clinical presentation and symptom severity. Sessions typically range from 45 to 60 minutes in length, are generally scheduled every week, and are often tapered (i.e., once every other week, once a month) toward the end of treatment. Although CBT is a structured treatment, the content of each session is certainly not the same, and varies based on diagnosis and case conceptualization. In general, the treatment progresses through the following stages: (1) thorough assessment of symptoms, (2) case conceptualization/formulation, (3) psychoeducation, (4) identification of specific measurable goals, (5) practice and implementation of cognitive and behavioral treatment strategies, and (6) relapse prevention/booster sessions. Each of these stages of treatment will be discussed in further detail in this chapter.

2.2 Early Sessions: Orientation to CBT

At the first session, the therapist should orient the patient to CBT by welcoming him/her and explaining the concept and characteristics of

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CBT. In general, patients feel more comfortable when they know what to expect from therapy and many patients will. Orientation to CBT also involves a discussion of the focused and time-limited nature of the therapy, as well as the rationale (including empirical support) for selecting CBT to treat the patient's presenting problem. It is often helpful to use metaphors or examples that the patient can relate to when starting a new treatment. An example is:

"*CBT is probably quite different than other types of therapy you may have previously tried*; *it is much like taking a class which focuses on how to better cope with your problems. The emphasis is on learning and practicing new skills outside of session*."

At the first session, the therapist should discuss the nature of confidential treatment and any ethical/legal considerations. Also, the therapist can discuss that one of roles of the therapist is to keep sessions on track; so he/she may, at times, need to shift the focus of conversation. Getting the patient's agreement early on will help him/her feel more comfortable if the therapist needs to redirect or interrupt later in the assessment and/or therapy.

After orienting the patient to CBT the therapist should briefly summarize goals for the current session and for the treatment overall. For example, the therapist could say:

"*Today we will talk about the problems you are currently experiencing. Over the course of the treatment, you will learn new ways to respond to the thoughts that are bothering you, along with behavioral skills to help manage your symptoms. This is a collaborative process, so we will work together to set an agenda for each session, and decide on the therapy homework you will be assigned to do between sessions. The homework will allow you to practice new skills outside of the therapy session and to fully maximize the treatment. Over the course of the treatment, I will teach you the skills you need to have so that at the end of treatment, you can become your own therapist.*"

2.3 Early Sessions: Assessment

An initial assessment and diagnostic evaluation is essential for effective treatment planning in CBT. Clinical diagnoses play the primary role in determining how CBT should be adapted for each particular patient. The following information should be gathered and thoroughly assessed:

- Information regarding current triggers, thoughts, and behaviors associated with problem symptoms. Inquiring about specific examples can be helpful in prompting the patient to provide more detailed information about his/her experiences.
- For example, the therapist could ask, "Can you tell me about the last time you experienced those symptoms? What occurred right before these symptoms came on? Where were you? What were you thinking/doing at the time?"
- For patients who engage in avoidance behaviors or other maladaptive behaviors, the therapist should assess the motivation that underlies these behaviors.
- The therapist could say, "What do you think will happen if you do not avoid this situation? What is the worst that you think could happen?"
- Circumstances that may have been related to the onset of the problem/disorder, such as preceding events or stressors (e.g., final exams, medical illnesses, work difficulties).
- A history of the problem/disorder. The therapist could inquire, "How long have you been experiencing these symptoms? When did they first start? How long do the symptoms last? How frequently? Have the symptoms changed over time (e.g., content of thoughts, types of behaviors, intensity of symptoms)?"
- The patient's explanation for the cause of the problem/disorder and the patient's perception of the problem.
- Questions that the therapist could ask include, "What do you think may have caused these problems to start? Was there anything that you believe may have made the problems worse?"
- As many psychological disorders have familial components, it is important to document

the family history of the disorder and other psychiatric problems. The therapist could ask, "Has anyone else in your family experienced psychological difficulties? Do you know if anyone has had the same types of difficulties that you are experiencing now?" As the presence of comorbid conditions can change the treatment trajectory and may even potentially interfere with treatment, co-occurring psychological disorders should be thoroughly assessed and accounted for prior to the start of treatment (e.g., with a structured diagnostic interview).

- Traumatic experiences, if any, should be identified; however, the therapist should keep in mind that many patients may be reluctant or unwilling to share this information during the initial evaluation period due to the sensitive nature of the experiences.
- Substance use (including tobacco use, alcohol use, caffeine consumption and prescription medication use above and beyond the prescribed dose) may contribute substantially to decreased psychological health. If endorsed, the therapist should document duration and frequency of use, amount used in a single sitting, and level of impairment caused by substance use.
- Psychosocial and functional impairment related to the problem/disorder in work, school, family, and social domains should be assessed. Level of impairment will serve as a marker for progression through treatment (i.e., Is the patient getting better/worse?); therefore, it is important to document specific ways in which the symptoms may cause the patient impairment in these various domains.
- The therapist can ask, "How do your symptoms get in the way of your life? Do they keep you from doing things you want to do? What about your relationships with family and friends?"
- Sleep disturbances can cause or exacerbate existing symptoms. The therapist should assess sleep hygiene and any sleep problems, including difficulty waking up, falling asleep, and waking frequently during the night.
- Assessment of current lifestyle (e.g., daily routines, physical activity family and social life, and employment) will provide information regarding level of impairment, and elucidate whether a patient's lifestyle may be a problematic factor during treatment, or a strength that can be utilized to maximize progress.
- Type, duration, dosage, and effects of current and past medications. Medications, particularly concurrent psychiatric medications, can have a significant impact on the patient's symptoms.
- Assessment of previous psychological treatment and effects allows therapists to get a sense of how the patient may perceive the present therapy and help guide how to tailor the current treatment toward the needs of the patient.
- Questions that the therapist can ask include, "What types of things did you find helpful in your previous therapy?" "What types of things did you feel were not helpful?" "Why did you terminate treatment with your last therapist?"
- Coping strategies that are developed to manage symptoms can differ widely amongst patients, with some adopting healthier strategies (e.g., taking a bath, working out) and others relying on coping behaviors that may exacerbate symptoms (e.g., using substances, avoiding aversive situations).
- The therapist should ask, "What types of things do you do to manage your symptoms when they become overwhelming?" "How do you usually respond when you start to feel that way?"

2.3.1 Symptom Measures

Therapists often find it helpful to use clinician-rated assessments to make informed ratings of symptom-related impairment and distress in comparison to cases they have previously seen. In conjunction with clinician-rated measures, patient self-report measures are frequently administered and can be completed quickly and independently. Additionally, psychiatric patients may sometimes feel more comfortable completing measures independently rather than in response to a clinician's questions. Self-report

measures may help guard against under- or over-reporting of symptoms. Used alongside clinician-rated measures, self-report forms may provide additional information to clarify the clinical picture.

Some commonly used measures include:

- Beck Depression Inventory (BDI-II; [1]) is a 21-item self-report measure that assesses cognitive, behavioral, and somatic symptoms associated with depression. The measure provides a composite score that can be utilized to track the severity of depressive symptoms over time.
- Quick Inventory of Depressive Symptomatology (QIDS; [2]) is a 16-item clinician administered or self-report (QIDS-SR) measure that assesses depression severity using *DSM* criteria for depression.
- Beck Anxiety Inventory (BAI; [3]) is a 21-item self-report questionnaire that measures the presence of clinical anxiety symptoms. Similar to the BDI-II, the BAI has a composite score that can be used in clinical practice to track the progression of anxiety symptoms.
- Post-Traumatic Stress Disorder (PTSD) Symptom Scale-Self Report (PSS-SR; [4]) assesses the presence of a traumatic event and measures the severity of the PTSD symptoms that an individual may experience due to the endorsed trauma.
- Yale-Brown Obsessive–Compulsive Scale (Y-BOCS; [5]) is a semi-structured, clinician-administered interview that assesses the presence of various obsessions and compulsions, as well as the severity of obsessive–compulsive symptoms. A 10-item composite score is provided. The Y-BOCS has been empirically validated and is demonstrated to be sensitive to treatment effects, making the Y-BOCS suitable for clinical practice.
- Schwartz Outcome Scale (SOS-10; [6]) is a brief self-report questionnaire that measures psychological well-being.
- Range of Impaired Functioning Tool (LIFE-RIFT; [7]) is a brief, clinician-administered, semi-structured interview that assesses level of functional impairment due to psychopathology in four domains: work, interpersonal relations, recreation, and global satisfaction.
- MOS 36-Item Short-Form Health Survey (SF-36; [8]) is a measure of quality of life associated with physical health. The following eight domains are assessed: overall health, physical functioning, and limitations due to physical health, emotional well-being associated with physical health, social activity, bodily pain, work, and energy. Each domain provides a score that ranges from 0 to 100 with 0 representing the worst and 100 representing the best quality of life.

2.4 Early Sessions: Case Conceptualization

Case conceptualization is a framework that is used to understand the patient and his/her current symptoms as well as to inform treatment and intervention techniques. It is a set of hypotheses about what variables serve as causes, triggers or maintaining factors for a patient's presenting problems. This description of symptoms provides a means of organizing and understanding how to target interventions to alleviate the problem symptoms. Case conceptualization also serves as a basis to assess patient change/progress. Case conceptualization begins during the first session and is flexibly modified as treatment progresses and more information is gathered. Treatment plans and goals based on the case conceptualization are routinely revisited and changed based on new information and changes in clinical presentation.

The model of cognitive behavioral case conceptualization presented here has multiple origins including the functional analysis literature [9]. Case conceptualization in CBT is based on a constantly evolving formulation of the patient and his/her symptoms. The therapist frequently uses an Antecedents, Behaviors, Consequences (ABC) Model as a formalized model for conducting a functional assessment and examining behaviors in a larger context. This model rests on the assumption that behaviors are largely determined by antecedents (i.e., events that precede) and consequences (i.e., events that follow).

2.4.1 Antecedents

Antecedents, or events that occur before a behavior, can be an affect/emotion, thought, behavior, physical sensation or situation. For example, a patient seeking treatment for a drug abuse problem may identify the desire for relief from uncomfortable physical sensations (withdrawal symptoms) as an antecedent for drug use. To help the patient identify antecedents, the therapist and patient can work to identify conditions that affect the patient's behavior. Questions that the therapist might ask to help identify possible antecedents include:

"*What were you feeling before that happened*?"
"*What physical symptoms did you notice in your body right before you did that*?"
"*What do you usually do when in this situation*?"
"*What thoughts might go through your head before this happens*?"
"*In what situation does this often happen*?"

2.4.2 Behaviors

A behavior in the ABC model is an action the patient engages in. The behavior, in this model, can be something the patient does, feels, or thinks immediately following the antecedent. The behavior becomes problematic as it serves to maintain the ABC model. Some questions that may be helpful in identifying the behavior component of the ABC model are:

"*What did you do in response to that sensation*?"
"*What was the first thought you had when you felt that way*?"
"*Did you do anything to avoid that emotion*?"

2.4.3 Consequences

The consequences can be positive or negative and either increase or decrease the likelihood of something happening again. For example, positive consequences increase the chances that a behavior will be repeated in the future through the experiences of something positive occurring (e.g., receiving praise) or the removal of something aversive (e.g., not having to do chores). Consequences can be of an affective, cognitive, behavioral, somatic or situational nature. Questions the therapist could ask to help identify possible consequences include:

"*What were you feeling after that happened*?"
"*What physical symptoms did you notice in your body right after you did that*?"
"*How do you usually react after you are in this situation*?"
"*How does your family react to your behavior*?"
"*What thoughts might go through your head after this happens*?"

It is important to examine both short- and long-term consequences. Short-term consequences tend to be behavioral reinforcers, while long-term consequences tend to be negative outcomes. In the case of social anxiety, the short-term consequence of avoiding a work situation that provokes anxiety, such as public speaking, is escape from a negative mood/anxiety; the long-term consequence may be trouble at work, job loss, family problems or financial stress. As a therapist, gaining understanding of the positive and negative consequences of a behavior is important in determining how to design the intervention. For example, in the case above, an intervention targeting the anxiety would decrease the need for avoidance of work situations. Here are some examples of questions that may be used to elucidate short-term consequences:

"*Do you receive attention for this behavior in some way*?"
"*What good/bad things happen as a result of this behavior*?"
"*Does this behavior help you avoid something you don't want to do*?"
"*Does this behavior make you feel good/high in any way*?"

2.4.4 Treatment Plan

It is helpful to keep the treatment plan as simple as possible with reasonable and objective behavioral goals. The treatment plan should be a

"living" document that can be changed based on new data or disconfirmed hypotheses. The therapist might describe the treatment plan to the patient in the following manner:

"*Thus far, we have identified some thoughts and behaviors that are likely contributing to your current difficulties. In particular, your views of yourself and your future are quite negative, and you have started to avoid many work and social situations. At this point it would be helpful to further explore your thoughts and see if we can find a more balanced view of your current difficulties. I would also like to talk with you more about re-engaging in work and social activities in a graduated, structured fashion. What are your thoughts about these goals for therapy*?"

2.5 Early Sessions: Psychoeducation

Psychoeducation is information that the therapist provides to the patient about their presenting problem, the possible causes of the condition, possible maintaining factors and how the CBT treatment for that condition works. It is an important component of CBT and may be associated with symptom reduction on its own [10]. Psychoeducation is often helpful for family and friends of the patient as well. Family involvement in the treatment can serve to enlarge the treatment "team" and family members can help in facilitating the completion of CBT homework assignments.

Psychoeducation can also take the form of assigned readings about a specific problem/disorder. This is also often referred to as bibliotherapy, and is a useful tool for CBT because it allows the patient to read about his/her disorder or CBT between sessions. Bibliotherapy emphasizes the self-management focus of CBT and can accelerate therapeutic progress and maintenance of changes. Reading materials can range from assigning patients to read information on websites, book chapters, or sections of patient manuals.

2.6 Early Sessions: Setting Goals

Setting goals in CBT is a collaborative process in which the therapist and patient identify specific therapeutic outcomes for treatment. The therapist works with the patient to set goals that are observable, measurable and achievable and relate to cognitive or behavioral changes relevant to the patient's presenting problem. Patients often initially describe goals that do not meet many of these criteria (e.g., "I would like to be happy") and the therapist should work with the patient to re-word or specify the goals (e.g., "Improve my mood by increasing amount of time that I exercise each week"). To increase the patient's chance of success, the therapist should try to gauge how reasonable the goals are. For example setting a goal of exercising 60 minutes every day for someone who has not exercised in months would be very difficult. Start with a more achievable goal, such as exercising for 20 minutes twice over the next week, or taking daily 10 minute walks. Also, if the patient is successful he/she will be more likely to remain actively engaged in treatment and continue to work toward his/her goals. Using a graded approach to treatment goals (breaking large goals into smaller pieces that can be worked toward each week) also helps to make goals feel more manageable.

Goals are tied to specific skills that will be addressed later in treatment. When setting goals, the therapist should also try to guide the patient toward goals that involve changing the patient's thoughts and behaviors, rather than changing the thoughts and behaviors of others around them. Treatment goals allow for increased continuity of sessions, help to focus the treatment, and enable the patient and therapist to assess the progress of therapy and identify change objectively. The therapist can think about asking the patient the following questions when guiding the treatment goal setting:

"*How would I be able to tell that your mood/anxiety/etc. was improving*?"

"*What would you be doing differently if you weren't experiencing this symptom right now*?"

"*Is there anything you've stopped doing because of your symptoms that you would like to start doing again*?"
"*How would you like things to be different at the end of this treatment*?"
Examples of goals:
"*I will learn new ways of responding to my negative thoughts*."
"*I want to be able to comfortably ride the subway every day*."
"*I would like to be able to concentrate better while I am at work*."
"*I want to be able to manage stressful situations more effectively*."

2.7 All Sessions: Cognitive and Behavioral Strategies

CBT therapists use data that they gather from each patient to conceptualize the presenting problem and tailor the treatment to the individual patient. Specific cognitive and behavioral strategies will be discussed in other chapters of this book; however, some examples include: cognitive restructuring, exposure, behavioral activation, relaxation techniques, and mindfulness exercises.

2.8 Late Sessions: Relapse Prevention/Booster Sessions

Toward the end of treatment, as the patient is improving and using the tools he/she has learned in CBT, therapy sessions may be spaced out to once every 2 weeks and then once every 3–4 weeks. This allows for the patient to have more time to practice his/her homework between sessions and to take more control of the therapy (as he/she is becoming his/her own therapist). During the weeks when the patient is not meeting with the therapist, it is often helpful for the therapist to assign the patient to schedule a "self-session." The self-session should involve the patient taking time to schedule his/her own agenda, review homework and skills, and set new goals for homework.

Even after treatment ends, it may be helpful to offer patients the opportunity to schedule "booster sessions." Booster sessions help to prevent relapse through early identification of problems and skill use to get the patient back on track if he/she starts to notice his/her symptoms increasing again. Additionally, research supports the use of booster sessions and suggests that CBT interventions with booster sessions are more effective and the effect is more sustainable than CBT interventions without booster sessions [11].

2.9 Structure of Sessions

Individual CBT sessions have a general structure, which clinicians follow, much in the same way as CBT as a treatment has a general structure [12]. During each weekly session, the following is covered: (1) symptom check-in/brief update, (2) bridge from previous session, (3) agenda setting, (4) homework review, (5) cognitive and behavioral strategies from agenda, (6) setting new homework, and (7) summary and feedback [12]. The content of each of these items changes from week to week, based on the patient's clinical presentation and the stage of treatment (e.g., later in treatment less time is spent on introducing new concepts and more time is spent on review and consolidation of concepts). Adhering to this session structure allows CBT to be understandable and time-efficient for both the therapist and patient.

2.9.1 Mood Check/Brief Update

A brief check in at the beginning of the session on the patient's mood and/or physical functioning allows the therapist to gauge how the patient is progressing from week to week. The therapist should ask the patient to provide his/her explanations for any mood improvements or declines that occur. It is important to try to keep this portion of the session brief and structured so that the majority of the session does not become dominated by the events of the previous week rather than teaching new skills.

2.9.2 Bridge from Previous Session

Providing a bridge from the previous session allows the therapist to check in on what the patient understood from the last session and reinforce that all material covered is important to the patient's clinical improvement. Clinicians can also utilize this time to note how previous skills could have been implemented in specific situations the patient may have brought up during his/her update about the prior week. Suggested questions to ask to bridge information from the previous session include:

"*Compared to last week, how is your mood, is it better or worse*?"

"*Did you experience any changes in your physical health over the last week*?"

"*Did you have any thoughts over the last week about what we discussed last session*?"

"*Was there anything we discussed last week that you had questions or concerns about*?"

"*What were the main points that we talked about last week*?"

"*In that situation, which of your skills could you have used to respond differently*?"

2.9.3 Set Agenda

Setting the session's agenda is a collaborative process through which the therapist and patient decide how session time will be used and in what order agenda items will be discussed. Both the patient and therapist can contribute items to be included in the agenda. In the early stages of treatment, the therapist often sets the majority of the agenda items, and toward the end of treatment there is a shift toward the patient setting more of the agenda. A suggested way that the therapist could begin this dialog is:

"*I'd like to begin today's session by setting the agenda—or decide what we are going to work on today. This is how we will start each session so that we can be sure to have enough time to cover the most important items. I have some items I'd like to suggest that we add to the agenda and I will ask you if you have any items to add as well. Does this sound okay to you*?"

By collaboratively setting the agenda, the needs of both the therapist and the patient are met. Agenda items should be in the service of treatment goals. After listing and prioritizing items for the agenda, the therapist can assign a time limit to each issue if needed (e.g., in a situation where later items on the agenda are frequently not being addressed because too much time gets spent on the earlier items). By setting a time limit for each item, chances are increased that all items can be covered in the session. Some example questions that the therapist can ask the patient while creating the session agenda include:

"*What treatment goals would you like to work on today*?"

"*What problems would you like to discuss/prioritize in this session*?"

"*What is causing you the most difficulty right now*?"

"*What do you think we should focus on in the session today*?"

"*What would you like to put on today's agenda*?"

2.9.4 Homework Review

Homework review should take place during every session. The review serves two main purposes: (1) it reinforces the importance of practicing the skills learned in session outside of the therapy appointment and (2) it allows the therapist to assess skill acquisition and retention from the previous session. In general, patients who complete homework between sessions show significantly greater symptom improvements than those who do not [13]. If it becomes clear during the homework review that elements of the cognitive behavioral techniques learned in the previous session were misunderstood or forgotten, it is then a good idea to use additional session time to review the skill. If a patient does not complete his/her homework, it should be directly addressed in the session. Setting up and encouraging a "win-win" scenario can be a helpful approach to homework compliance. For example, using metaphors such as likening therapy to "taking a class" or "learning a musical instrument" are often helpful. The more time spent out of session

practicing the skills, the "better grade you'll get" or "more quickly you'll be able to play." Additionally, barriers to homework compliance (e.g., difficulty organizing time, external stressors, and avoidance) should be frequently monitored and addressed quickly. Some helpful questions to ask during homework review are:

"*What did you attempt/complete for homework since the last session*?"

"*How did the assignment go*?"

"*What did you learn from doing this homework assignment*?"

"*How many times and for how long did you practice your homework*?"

"*What do you think got in the way of completing your homework assignments this week*?"

2.9.5 Cognitive and Behavioral Strategies/Work on Agenda

The therapist should discuss each agenda item, starting with the most important (as decided by the patient and therapist previously). During the early treatment sessions, this portion of the session is often more didactic in nature with the therapist doing the majority of the talking. If time runs short, the therapist can discuss with the patient that items that were not addressed this week will be put on the agenda for the following week. It is the therapist's responsibility to keep the treatment discussion on track and focused; the therapist should guide the patient back to the problem being discussed when he/she drifts to other topics. If the patient persists on a tangent or topic not on the agenda, it can be helpful to ask the patient if he/she would like to add this topic to the agenda for the following week. In some cases it may be necessary to educate/review with the patient the nature of CBT and what kinds of issues are relevant for the agenda and how to spend session time optimally.

2.9.6 Setting New Homework

As previously mentioned, homework is an important part of CBT and contributes to positive treatment outcomes [13]. CBT therapists typically meet with individual patients once per week for 45–60 minutes, which amounts to less than 1 % of a patient's waking hours in a week. In order to influence the remaining 99 % of the patient's time and to practice what is learned in session, homework becomes an integral part of the therapy. Homework is assigned at every session and involves practice of the cognitive and behavioral strategies used in the treatment session that week. At the beginning of treatment, it is often helpful to start with educational reading. Self-monitoring homework, such as completing logs to document mood, anxiety or activity levels is also very useful as it can be used to guide the case conceptualization and treatment approach.

Much like the treatment sessions, homework often requires patients to experience some discomfort or anxiety, such as in exposure homework assignments. Additional assignments might include cognitive restructuring. These assignments aid patient skill acquisition, treatment compliance, and symptom reduction by integrating treatment concepts into the patient's daily life. Homework is important for between-session work and making progress toward patient goals.

2.9.7 Summary and Feedback

Summarizing the main points of the session and eliciting feedback from the patient at the end of the session contributes to the collaborative nature of CBT. At the end of the session, the therapist should summarize the main points of the session. As treatment progresses he/she patients to complete the session summaries themselves (further emphasizing the role of the patient in eventually becoming his/her/his own therapist). Encouraging the patient to provide feedback strengthens the therapeutic relationship and reminds the patient of the active role he/she/he plays in the treatment itself. This can also be a time for the therapist to provide feedback about progress he/she noticed and encourage and motivate patients to continue working toward their goals. Suggested questions

to ask patients during the summary/feedback portion of the session include:

"*What were your impressions of today's session*?"

"*Did we neglect to discuss anything that you think is important*?"

"*Was there anything about today's session that you did not understand*?"

"*Was there anything that we discussed today that bothered you*?"

2.10 Summary

CBT is a goal-oriented and time-limited therapy that encourages patients to change their thinking as well as their behavior. To achieve the goals of therapy, a thorough evaluation is necessary at the start of treatment to identify both problem areas and aspects of the patient's life that might be contributing to or exacerbating the symptoms. While patients are taught specific skill sets to manage their symptoms, the treatment is flexible in nature where goals of therapy may change with ongoing assessment and certain skills may be emphasized depending on the needs of the patient. The process is always collaborative, with the therapist working with the patient to agree on treatment goals and therapy homework assignments. As the skills learned in CBT are meant to be utilized regularly, homework assignments are an integral part of the therapeutic process and allow patients to practice CBT skills in their everyday lives. Although the therapy is time-limited, booster sessions are recommended after the end of treatment to help patients maintain their gains by giving them a means to review the CBT skills with their therapist.

Additional Resources

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Cognitive Techniques

3

Lauren B. Fisher and Susan E. Sprich

3.1 Cognitive Techniques

Over the past 50 years, a multitude of researchers and clinicians have contributed to the evolution of cognitive behavior therapy from its original form created by Aaron T. Beck at the University of Pennsylvania [1] to a variety of adaptations. Cognitive behavior therapy (CBT) has become the most widely utilized and researched approach of all psychotherapeutic methods [2]. The general efficacy of CBT has been demonstrated for a wide range of psychological conditions in a variety of patient populations [3], delivered in different formats (i.e., individual, group, family, couples, etc.). Specifically, years of research have demonstrated the efficacy of CBT in the treatment of depression [4], suicide [5, 6], generalized anxiety disorder [7], posttraumatic stress disorder [8], schizophrenia [9], personality disorders [10], and substance abuse [11], among other disorders and psychological issues.

The intersection of CBT and mindfulness practice (i.e., as with mindfulness-based cognitive therapy, dialectical behavior therapy) illustrates one of the many ways in which the field of clinical psychology has integrated distinct cognitive approaches in an effort to develop more effective psychological interventions. In the following chapter, we explain the core techniques inherent in Beck's CBT. Further, we outline basic principles and applications of mindfulness practice, including ways in which mindfulness practice complements standard approaches to CBT. Case examples are used to illustrate each of the principles outlined throughout the chapter and tips for basic troubleshooting are briefly explored.

3.1.1 The Cognitive Model

Individuals who are not experienced consumers of CBT often believe that emotions are triggered directly by situations. Unfortunately, direct attempts at changing one's emotions are typically quite difficult and can lead to further emotional and behavioral difficulties. The cognitive model challenges the common assumption that situations trigger emotions by suggesting that the

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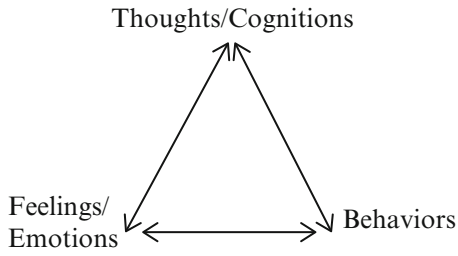

Fig. 3.1 Basic representation of the cognitive model using a *triangle* and *bidirectional arrows* to illustrate the nature in which thoughts, feelings, and behaviors can each influence each other

thoughts an individual has about a particular situation give rise to an emotion. Thus, a variety of cognitive interventions are aimed at changing the individual's way of thinking and belief system in order to produce lasting emotional and behavioral changes. It is critical that the therapist has a solid understanding of the cognitive model prior to initiating CBT with a patient. Further, it is important that the patient develops a basic understanding of the general tenets of the cognitive model prior to the utilization of cognitive techniques in session.

The core of the cognitive model is the understanding that one's thoughts influence one's emotions and behaviors [12]. In order to illustrate the basic concepts of the cognitive model and lay the groundwork for CBT, we find it useful to utilize a diagram and incorporate examples from the patient's own life. One basic representation of the cognitive model utilizes a triangle and bidirectional arrows to illustrate the nature in which thoughts, feelings, and behaviors can individually influence each other (see Fig. 3.1). The current chapter focuses on strategies for identifying and changing maladaptive thoughts rather than on strategies for directly modifying behaviors.

A key component of the cognitive model emphasizes that an individual's perception or interpretation of an event (i.e., thoughts) is of critical importance, rather than the actual event itself. Consider the example of an individual getting into a minor car accident in which no one was hurt, but that caused a small dent in the person's car. One possible interpretation that the individual might have of this event could be:

"*This is a horrible way to start my day. It is all going downhill from here. Why does this kind of thing always happen to me*?"

Another possible interpretation of the same event may be:

"*I'm so thankful everyone was safe and the car is only in need of minor repair. I will just be a bit late to work. This whole scenario could have been much worse. Accidents happen*."

In the first scenario, the individual is likely to report negative feelings (i.e., depressed) and approach the rest of the day with a pessimistic attitude, perhaps looking for further evidence that bad things always happen to him or her. In the second scenario, the individual is likely to report feeling somewhat neutral and maybe even relieved that more severe negative consequences did not occur. Visual representation of this process can also be explained using Albert Ellis' [13] ABC model (see Fig. 3.2).

It is critical that patients understand the concepts outlined in Figs. 3.1 and 3.2 before learning any techniques focused on change. It is often useful for patients to visualize the models, both generically, and by using personal examples. Therapists can use white boards and handouts to actively engage patients.

The cognitive model explains that three different levels of cognitive dysfunction occur within the context of psychological disturbance: automatic thoughts, intermediate beliefs, and core beliefs [12]. *Automatic thoughts* occur on the surface. They are often quick, evaluative thoughts that occur without much consideration. For example, "*I'm ugly,*" "*They think I am crazy,*" *or* "*I won't get the promotion*." Individuals are often unaware of these thoughts as they occur; however, these are the thoughts that tend to have the most bearing on sudden shifts in mood. Although automatic, these types of thoughts do not just appear out of nowhere. They are often shaped by more enduring core beliefs that guide an individual's way of thinking. *Core beliefs* are our most fundamental ways of thinking about ourselves, others, and the world [14]. Core

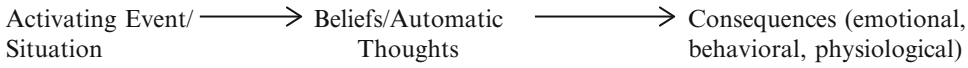

Fig. 3.2 Albert Ellis' [13] ABC model

beliefs are often shaped over time, beginning in childhood, as a result of our experiences in the world and the ways in which we interpret them. Core beliefs are often global, rigid, and overgeneralized [12]. Although often hidden far below the surface, core beliefs are regarded as absolute truths which guide the conditional rules and assumptions (i.e., intermediate beliefs) by which we lead our lives. Core beliefs about the self are often related to issues of helplessness (i.e., "*I am useless on my own*"), unlovability (i.e., "*I am unlovable*"), and worthlessness (i.e., "*I am a failure*") [15]. *Intermediate beliefs* differ from the other layers of cognition in that they are attitudes or rules that one follows across situations. Common maladaptive assumptions are related to acceptance (i.e., "*I am nothing unless I am loved*"), competence (i.e., "*I am what I achieve*"), and control (i.e., "*I must do this on my own*") [12].

Initial work with a patient is often focused on identifying and challenging automatic, maladaptive thoughts. As therapy progresses, deeper therapeutic work targets the modification of core beliefs and leads to more meaningful and lasting emotional and behavioral changes. However, the task of discerning a patient's core and intermediate beliefs is not always straightforward. Developing a clear cognitive conceptualization of an individual client is one that evolves over the course of psychotherapy and often includes the testing of a variety of hypotheses [16].

3.1.2 Identifying Automatic Thoughts

Everybody has automatic thoughts. However, automatic thoughts and images often occur without much awareness. As humans, we are generally more in tune with shifts in emotion than the automatic thoughts that drive them. Automatic thoughts are of particular importance for patients struggling with psychiatric illness given our understanding of psychopathology according to the cognitive behavioral model. Beck [15] has long asserted that individuals suffering from psychopathology experience biased information processing which distorts their interpretation of experiences, thus leading to thoughts that are inaccurate or unhelpful in some way.

There are various strategies for helping patients begin to identify their automatic thoughts and to increase their awareness of thoughts and emotions. Opportunities frequently occur in session when the therapist observes a shift in affect and is able to ask the patient in the moment, "*What is going through your head*?" Therapists can also conduct role plays in session to create opportunities to observe affect shifts that may not otherwise occur naturally. Patients then have the opportunity to provide the "hot" thoughts and/or images that triggered the emotional response [12]. More frequently, however, these interactions do not occur in session, and patients are faced with the task of identifying such moments on their own outside of therapy sessions. When used appropriately, the thought record can be one of the therapist's most effective tools to gather data about thoughts that patients are having between sessions.

There are a number of different types of thought records that may be used. In some cases, generic thought records are sufficient. Other times, therapists may want to consider tailoring thought records to an individual patient to target the patient's presenting problem or learning style. Some patients prefer a paper and pencil form, and other patients prefer to use more advanced technology, such as mobile phone applications or websites that provide structure for gathering the relevant data. Therapists can begin by providing patients with their own version of a thought record and instruct the patient to complete the thought record when he or she experiences some form of distress. To increase the likelihood that