Evaluating In-Session Therapist and Client Behaviors From a Contextual Behavioral Science Perspective

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The aim of this chapter is to show how the principles of contextual behavioral science (CBS; Hayes, Barnes-Holmes, & Wilson, 2012) can be applied in understanding how interchanges between therapists and their clients eventuate in behavioral change both inside and outside of the clinical setting. Within this larger endeavor, three main areas will be covered: (a) the targets of assessment in therapy, (b) the strategies to measure psychological problems in session, (c) and the strategies to measure changes in client and therapist in-session behaviors.

**Targets of In-Session Assessment**

 **What is a Psychological Problem From a CBS Perspective?**

Contextual approaches to psychotherapy frame behavioral problems in ways that often challenge more traditional views on psychopathology. Instead of looking at psychological suffering through categories of disorders as in the medical model (e.g., American Psychiatric Association, 2013; World Health Organization, 1992), therapists from a CBS perspective consider what people do, how it affects their well-being, and what contextual features contribute to the initiation and maintenance of these behaviors (Hayes, Villatte, Levin, & Hildebrandt, 2011). Categories can also be used in such an approach, but they are entirely defined by the context, and thus no fixed topographical description of psychological problems is possible within this framework.

 A concrete example will illustrate this approach. Consider a person who checks the news on his smartphone more than 100 times per hour. Most people would probably consider this behavior excessive, but out of context, it is actually impossible to tell if it is. This person might be a journalist in the midst of a major event, and checking the news so frequently might be a part of doing his job. On the other hand, this person might be checking the news to alleviate the fear that a war has been declared against his country, while nothing in the current international context indicates that this is likely to happen at the moment. The same behavior in two different contexts leads to a very different analysis of the psychological health and functioning of the person displaying it.

Taking the context into account is not foreign to categorical medical classifications, but CBS therapists go beyond the mere recognition that the meaning of a behavior varies across contexts. They seek to identify how the context *influences* the production of a behavior. The observation of the occurrence of a behavior is thus not as important as the functional relationship it shares with contextual variables. In our example above, what is important from a CBS perspective is that checking the news allows for a consequence to occur. In the first case, the journalist is better informed and can write an article that includes as much currently available information as possible. In the second case, the person feels briefly less anxious as soon as he learns that no war has been declared yet. The consequences occurring as a result of checking the news can be seen as changes in the context, which increase the likelihood that checking the news will occur again. In other words, the context influences (and not only predicts) the occurrence of this behavior.

From a CBS perspective, three main categories of psychological problems can occur, all defined by a different relationship between a behavior and its context. Avoidance and escape correspond to behaviors people do to discount or remove aversive events. When doing so doesn’t work, or actually increases contact with the aversive event and impairs overall well-being, avoidance and escape is problematic. Examples of ineffective or costly avoidance and escape are numerous in psychological suffering. A person might temporarily reduce anxiety triggered by obsessive thoughts through engaging in compulsive behaviors (as in the football player example), avoid going out to discount fear of public places, or drink alcohol to be less bothered by traumatic memories. In each case, the behavior likely impairs quality of life.

Approach corresponds to behaviors people do to contact desirable events. When doing so doesn’t work or impairs overall well-being, then approach is also problematic. Examples of problematic approach behavior are also frequent in psychopathology. People might use a drug because it triggers satisfying feelings and sensations, start fights to get more attention from their partner, or lie about themselves to be appreciated by others. If these behaviors are not effective at contacting the expected outcomes, or lead to greater suffering in the long run, they might become targets of change in psychotherapeutic work. Often, approach and avoidance overlap or are two sides of the same coin. For example, using drugs might be done both for escaping painful emotions and for contacting pleasant sensations. Procrastination also often involves both the avoidance of anxiety triggered by doing a task and approach toward competing sources of satisfaction.

The last main category of behavior problems is defined by a lack of actions contributing to well-being. Although behavior deficits can result from problematic approach and avoidance (the person doesn’t do what would be effective because she is doing what is not effective instead), they can also be caused by a lack of contact with satisfying qualities of the given behavior. For example, people may have lost interest in their job and as a result they stop going to work, then stop going out and seeing friends, and finally don’t even get out of bed anymore.

In these three functional categories of psychological problems, contextual variables influence the occurrence of the behavior and determine whether it might be a relevant target of clinical intervention. Given the contextual nature of behavior problems, identifying to what extent they correspond to avoidance, approach, and deficits is already a step toward identifying what needs to be done to improve these problems. However, more specific contextual variables need to be identified in order to achieve behavior change. We will come back to this point after we review the overarching goals and means of psychotherapy from a CBS perspective.

**What Are the Goals and Means of Psychotherapy Based on CBS?**

 Because psychological problems are defined by excessive behaviors that are ineffective and/or deficits in effective behaviors, the natural aim of psychotherapy is the modification of client behavior. CBS therapists[[1]](#footnote-1) need to resolve two main issues in order to achieve this apparently simple goal. The first pertains to identifying goals that are relevant to each client. The second issue pertains to activating actual change toward these goals.

 Just as problematic behaviors are defined in context, identifying effective behaviors also requires considering contextual variables. An action beneficial to one client in a given context might not be useful in another context or to another client. Thus for each clinical case, CBS therapists need to determine *with* their clients what directions need to be taken to improve well-being. What criterion can they use to identify what is effective? The answer to this question echoes the underlying philosophical foundations of CBS (see chapter xxx): what is selected is what works for a given purpose. Because each client might have different purposes, the overarching goal of therapy is to help clients learn to identify, choose, and actually engage in behaviors that serve their purposes (regardless of which purpose is pursued, as long as it promotes sustainable well-being).

The overarching goals of therapy based on CBS can be formulated as functional coherence and flexible sensitivity to the context (Villatte, Villatte, & Hayes, in press). The former refers to the capacity of making choices and conceptualizing life experiences in ways that serve sustainable well-being, and the latter to the capacity of responding to the context in ways that match these choices. Consider the following example of a client who is afraid of flying and thus doesn’t travel afar even though she would like to visit her family living in another country. Based on what the client cares about in this context (being with her family), choosing not to take planes can be seen as a failure of functional coherence. Her decision makes sense at some level (it is logical to avoid flying because it is probably the surest way to avoid dying in a plane crash), but it doesn’t make sense with regard to what she cares about in the context of connecting with her family. A functionally coherent choice in this case might be to fly to go see her family, while acknowledging the risk of dying in a plane crash and normalizing the painful emotions that this thought triggers.

In order to reach functional coherence, one needs to be in contact with relevant information and evaluate this information in terms of its effectiveness. The client in the example above may currently be avoiding traveling by plane because she is mostly contacting the fear of dying in a plane crash, and not enough of the desire to see her family. She is sensitive to a part of the context, and less sensitive to other parts. To come to the conclusion that flying is a more useful decision, she thus needs to be more aware of what she cares about.

Once the functionally coherent decision is made, the client may still struggle to actually engage in this new behavior. When the time comes to get on the plane, the impact of the fear of dying likely increases, while the impact of the desire to see her family decreases. Sensitivity to elements of the context needs to support functional choices or else, effective actions are not performed. Thus, flexible sensitivity to the context consists of responding to the desire of contacting her family and not responding to the fear of dying. Note that in another context, a reverse sensitivity to these elements of the context might be more functionally coherent. If the plane was not safe, it might be better not to take it to avoid dying in a crash, rather than attempting to satisfy the desire to see her family.

What can CBS therapists do to help clients reach functional coherence and flexible sensitivity to the context? Here again, the answer lies in the context. This is because contextual variables are the elements of the equation that can be reached to indirectly change behaviors. In contingency management interventions (e.g., Liberman, Teigen, Patterson, & Baker, 1973; Petry, 2000; Sallows & Graupner, 2005), therapists can arrange the context so that variables that sustain effective behaviors are added and others that maintain problematic behaviors are removed (e.g., giving and maintaining attention to children when they are behaving well or behaving in a neutral way and removing attention temporarily when undesired behaviors occur). These types of contextually-based interventions are generally effective, but they require concrete access to the situations in which problematic behaviors occur.

In many cases, however, the relevant aspects of the context are not directly reachable or they can’t be removed or replaced. This is generally the case in psychotherapy for at least two reasons. First, most relevant contextual variables within the lives of clients lie outside the therapy room. Second, while CBS therapeutic approaches acknowledge the controlling role that language may play in problematic behavior, and in that sense venture into the “heads” of clients, they are careful not to stay there and not to do so with the goal of replacing one way of thinking with another. Rather, thinking and other cognitive activities of clients are themselves viewed as more behavior situated within a broader contextual chain that may be linked to problematic behavior. Thus from a contextualistic perspective, the clinician rarely intervenes directly in the environment of clients outside the therapy room[[2]](#footnote-2), and never inside their heads, especially insofar as the relational and derived nature of language makes it almost impossible to remove or replace psychological experiences influencing client behavior (see chapter xx).

If therapists must alter the context to change behaviors, but can’t access or concretely change relevant features of the context, they can instead change the symbolic impact of these variables by using language. The CBS approach to language and cognition proposed by relational frame theory (RFT; Hayes, Barnes-Holmes, & Roche, 2001, see chapter xx) provides the tools to alter the way clients respond to contextual variables even if these variables are intrinsically unchanged. Consider again the example of the client who refuses to take planes, despite wanting to see her family. Therapists using CBS and RFT principles would, for example, help the client assess the effectiveness of her behavior with regard to what she cares about. They might ask questions such as “When you decide not to fly, what impact does it have on your relationship with your family?”, use exercises leading the client to contact the desired consequences of traveling afar by imagination (e.g., “Picture in your mind the arrival at the airport, and your family welcoming you at the terminal”), or present a metaphor drawing a parallel with the cost of avoiding anxiety. In each case, therapists use language (i.e., their “derived relational responding”) to change the function of avoiding the client’s fear of dying in a plane crash on the one hand, and of seeing her family on the other hand. Asking questions that attract the client’s attention to the consequence of avoiding flying increases sensitivity to the ineffectiveness of this behavior, and thus increases the perceived incoherence of this choice at a functional level.

In a nutshell, this is what CBS therapists do. They alter contextual variables, directly when they can, but most often symbolically in psychotherapy, to change the function (i.e., the impact or meaning) of these variables and as a result, increase clients’ flexible sensitivity to the context and functional coherence. Those overarching means and goals are what guide the CBS therapist and thus what needs to be measured in session on both sides of the therapeutic relationship.

**The Challenges of Measuring In-Session Behavior**

The advantages of a CBS approach to psychotherapy don’t come without certain difficulties. On the one hand, interventions can be specifically designed for each client and each contextual feature. On the other hand, the assessment of client behavioral problems and therapist skills can’t be defined out of context, which makes the assessment of treatment effectiveness and adherence more difficult than in approaches using protocols topographically defined.

Consider the example of a client who experiences social anxiety and avoids social interactions. If effective change is defined by a decrease of anxiety, it is theoretically possible to set a threshold under which anxiety is considered tolerable, perhaps by comparing the client’s level of anxiety to what average people experience in similar contexts. However, because CBS- based therapies don’t define psychological problems through emotional levels, but through the discrepancy between responses and meaningful life directions, reduction of anxiety is not sufficient or necessary to declare the success of an intervention.

Consider now an example of CBS-based intervention to treat this client’s problem. In a typical move from acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999, 2012), the therapist might say to the client:

So you are having the thought that you can’t engage in a conversation because

people will judge you. What do you feel in your body just as you are about to

 speak with another person? Can you stay in touch with this sensation for a

moment, without defense, just as a way to fully experience this fear of others’ judgment?

 In this short turn of speech, the therapist attempts to alter the context around the fear of judgment (by reframing it as a thought), and evokes an alternative response by creating a context of exploration and compassion. The intention of the therapist is that these symbolic alterations of the context will lead to a transformation of function of the fear of judgment, and eventually to a more effective response based on flexible sensitivity to the context and functional coherence (e.g., engaging in enjoyable conversations and social interactions even if fear of judgment is present).

Now consider the same therapist’s turn of speech with a client similarly reporting fear of judgment and avoidance of social interactions if reporting this experience in session is driven by the desire to receive attention from the therapist. In this case, altering the context around fear of judgment will have little effect. The client’s problem is elsewhere, perhaps in his or her difficulties to build relationships based on authenticity. A CBS-based intervention can’t be defined out of context.

The success of measuring client behavioral changes and therapist skills in session thus requires a constant inclusion of the context. The therapist attempts to alter the context and observes whether the function of the relevant variables are transformed as a result, which should be reflected by a different response from the client. For example, a therapist might ask clients who express no interest in any activity, “If you could do anything you want just now, what would you be doing?” as a way to reconnect them to sources of life meaning. A client response of “I would be riding my bike” would be quite different than “I don’t know”, and perhaps even be a first step toward identifying genuine values. If the client responded “I don’t know”, the intervention has likely not worked, unless the change of function occurs in a delayed fashion, as when clients begin a new session saying “I have been thinking of what you said last time . . .” Even in this case, the marker of change is a new response indicating greater flexible sensitivity to the context and functional coherence. In the example above, the client identifying that he would be riding his bike might be a sign of greater sensitivity to available satisfying activities. This type of verbal response is key to assessment in psychotherapy because it can be observed in session. Most of the time, therapists will have to trust their client’s verbal reports or self-monitoring diaries of what they actually do in their lives outside, except if functionally similar behaviors occur in the therapy room, as we will see later in this chapter.

Thus, verbal reports constitute the core matter of observation in therapy, but observation must be conducted within a functional contextual framework to provide information on the relevance and success of a CBS-based intervention. In the next two sections, we will review more concrete means therapists can use to ensure that assessment of clients’ problems and improvement is conducted in accordance with CBS principles.

**Assessing Function and Context Through Verbal Reports**

Because context and function are the pillars of CBS, therapists using this approach need methods of assessment that focus on the functional relationships between relevant behaviors and contextual variables. As explained earlier, these relationships are potentially different for each client and each situation. Therefore, therapists need overarching strategies that guide their assessment in a functional contextualistic way, regardless of the specific experience being reported or directly observed. Such overarching guidelines can be found in the assessment of behaviors (avoidance-escape, approach, and deficits) and their sources of influence (antecedents, consequences, and rules). This process is described particularly explicitly in dialectical behavior therapy (i.e., “chain analysis”; Linehan, 1993). For example, clients who report difficulties doing complex tasks at work might be influenced by anxiety of not doing their job well (immediate antecedent), short term relief of postponing the task (immediate consequence), the belief that they are not competent, and that they therefore should decline complex tasks (rule). Unfortunately, the long-term or delayed consequence of this chain may be failure to advance in a job or career, or even termination of employment. Once the relationship between behaviors and contextual variables has been identified, the therapist has a baseline against which future behaviors can be compared. A new response to a similar variable indicates change, and moreover effective change, if this new response allows clients to improve their overall functioning and well-being. In this example, client acceptance of complex tasks even in the presence of anxiety, thoughts that they are not competent, and temptation to find relief by declining such assignments, would reflect effective change.

This approach is grounded in the principles of functional analysis, which is not surprising given the behavioral roots of CBS. However, doing psychotherapy primarily through verbal interactions requires therapists to adapt their methods of assessment. Relevant behaviors, contextual variables, and new responses are generally not directly observed, but reported. Fortunately, therapists can use these reports as long as they conduct verbal interactions in a functional contextual fashion, and recognize that the verbal behavior of clients is also contextually determined by historical and current situational factors, including the actions of the therapist. In practice, therapists encourage clients to report what they are doing and what they are not doing outside of therapy as well as the antecedents, consequences, and rules surrounding clinically-relevant behavior.

Strategies to evoke descriptions of behaviors include questions about what the client does in a variety of situations, at different times, and in various interpersonal contexts. For example, a therapist might ask “What does a usual day look like for you?”, “What do you enjoy doing?”, “What would you like to do more?”, and “What would you like to do less?” As simple as these questions are, they constitute important tools to orient clients to what is in their control and what they will be able to change. Often, clients spontaneously report experiences over which they have little or no control at all, even with the help of a therapist. For example, a client might say “I came to see you because I worry all the time and I want to feel more confident. ” Although successful therapeutic work often indirectly decreases anxiety and increases confidence, CBS therapists prefer targeting behaviors that clients can choose to do or not do. Thus, a response from a CBS therapist to the statement above might be “What do you do and not do when you worry? What impact does it have in your life?” Such questions help identify responses to the previously reported experiences and give some first indications of what clients care about in life.

Antecedent sources of influences can be explored by orienting client reports to what they experience before engaging in a problematic behavior (or before they miss an opportunity to do something effective). The therapist asks questions such as “In what situations do you \_\_\_\_? What do you notice just before you \_\_\_\_? Who is generally present with you when you \_\_\_\_? How do you feel before you \_\_\_? (Blanks filled with relevant behaviors)”. Consequential sources of influence can be explored by orienting client reports to what happens after relevant behaviors. The therapist asks questions such as “What happens when you \_\_\_\_? What do you notice as a result of \_\_\_\_? How do people react when you \_\_\_\_?” Rules can be explored by orienting client reports to what they think before they engage in relevant behaviors or to how they justify their behaviors. The therapist asks questions such as “What comes to your mind before you \_\_\_\_? Why do you think you \_\_\_\_? Do you have a particular intention when you \_\_\_\_?”

Because rules can be followed for different reasons, it is useful to distinguish between tracking (i.e., following the rule is reinforced by the consequence described by the rule) and pliance (i.e., following the rule is socially reinforced based on a correspondence between the behavior of the rule-follower and the behavior described by the rule, regardless of the correspondence between the experienced consequence and the consequence described by the rule) (see Hayes, 1989; Torneke, Luciano, & Valdivia Salas, 2008;)[[3]](#footnote-3). The latter is often involved in the persistence of problematic behavior because rule-followers can lose contact with the effectiveness of their actions very quickly in these conditions. The therapist can identify pliance by asking questions that virtually remove social approval such as “If nobody knew what you are doing, would you still do it?”, “If people’s reaction to your behavior was different, do you think you would still \_\_\_\_?”, and “If the consequence of doing that was different than what you expect, would you still consider that it is the right thing to do?”

As suggested earlier, some problematic behaviors are contingency-shaped and can be successfully modified by directly manipulating situational variables, as is commonly done in applied behavior analysis. Problematic behaviors, however, may present an even greater clinical challenge when they arise from following rules that are inapplicable or inaccurate. In particular, rules describing short-term consequences, but neglecting to mention more important long-term effects, or rules describing the behaviors of others, or actions that can’t be performed are useful to notice. The therapist can ask questions such as “It seems like you get what you want in the moment when you do that. How about in the long run?”, “So, you are saying that if your partner was more kind to you, you’d be happier. What would you need to do so that she is more kind?”, and “So, you are saying that if you could go back in time, you would make a different choice and be happier now. What do you think the next step is for you?”

It is important that assessment is not done in a unilateral way, or else function and context may end up defined from the perspective of the therapist alone. In other words, although therapists guide the assessment process, they are not the only ones to observe and analyze client behavior. To ensure that the assessed information actually leads to a functional understanding of the problem at hand, clients must be fully included. Ultimately, they are the only one who can tell if a behavior is problematic, unless their judgment is severely impaired (e.g., in acute psychotic episodes), or if causing harm to others doesn’t impact their perceived well-being (e.g., in psychopathy). Given the private nature of many salient human experiences and reactions (thoughts, emotions, sensations), only clients can directly observe the functional relationship between these variables and their problematic behaviors

An example will illustrate the potential risk of assessing psychological matters without a clear involvement of the client in the process. Imagine that a client reports to her therapist that she doesn’t want to have sexual intercourse in a romantic relationship. She doesn’t enjoy sex and doesn’t see that as a problem, but given that her relationship to sex is incompatible with her boyfriend’s interest in it, they have decided to break up. If the therapist, who experiences satisfaction in sexual intercourse in her own life, approaches the functional relationship between the absence of sexual interest and the break-up from her own point of view exclusively, there is a risk that she will see that as a problem regardless of what the client actually experiences. She might for example see the break-up as problematic avoidance of sexual intimacy. This might then lead to a biased exploration of sources of influence, as she looks for what is maintaining avoidance regardless of whether avoidance is involved in this situation. Even if avoidance was actually involved, not all avoidant behavior is dysfunctional, and only the client could tell if it is a problem that needs intervention. Of course, noticing that avoidance is involved and evaluating whether it is a problem or not requires awareness skills that therapy often aims to increase, but this doesn’t mean that the therapist can a priori assume what the client is experiencing.

Strategies to conduct a collaborative assessment include reflective listening and validation of clients’ psychological experiences; reformulations that state functional relationships without taking away opportunities for clients to observe on their own; sharing of observations with distance and openness to contradicting feedback; and encouragement to observe and describe without arbitrarily praising reports that match the therapist’s own observations and analysis (even subtlety through smiles or increased attention). Including clients in the assessment process is also a step toward behavior change insofar as flexible sensitivity to the context and functional coherence naturally require awareness of one’s own behaviors and sources of influence on these behaviors.

**Assessing Function and Context Through What Happens in Session**

The therapy room is a sort of experimental lab. Although the context created by a warm and caring therapeutic relationship is nothing like the impersonal atmosphere of a scientific study, a therapy session is an opportunity for the client and the therapist to observe processes and test hypotheses together. In the previous section, we reviewed ways to use verbal reports to assess behaviors and contextual variables happening outside the session. Through verbal interactions and other symbolic moves (e.g., gestures, postures, music, pictures), the therapist can also create a context that allows for relevant behaviors to be observed in the here and now – an approach at the core of functional analytic psychotherapy (FAP, Kohlenberg & Tsai, 1991) as well as being historically central to other models of treatment (e.g., psychoanalysis).

A first general method is the use of antecedents that are able to trigger a problematic or effective behavior in session. For example, with a client who struggles with accepting help from others, the therapist might offer problem-solving advice. If the client usually withdraws, feels ashamed and then quickly gets angry, it would be useful to observe signs of a similar sequence in therapy. The client might, for example, stop looking at the therapist, blush, and then frown. The evocation of a relevant behavior is useful in addition to the report of occurrences outside the therapy room because the therapist can observe the event with the client more directly and also instigate alternative ways of responding. The client and therapist can establish a common understanding of the client’s experience, avoid misinterpretations of it, and conduct a more fine-grained analysis of the behavioral sequence together. If necessary, formal exercises can also be used for evoking problematic or effective behaviors. Many experiential therapies use exercises in which a specific thought is contacted (e.g., a painful memory or a hypothetical future episode of the client’s life) so as to observe the client’s reactions in this context (e.g., emotional avoidance, identification of values, etc.). As clients engage in the relevant behavior, the therapist helps them notice this occurrence and checks if it actually belongs to the same functional category (e.g., “I notice you stopped looking at me. Is that similar to your withdrawal when you are offered help by others in your life?”).

Another method, derived from the approach described above, is to evoke relevant behaviors by bringing external or imaginary situations to the here and now through metaphors and perspective taking. There is a long tradition of using metaphors in therapy (McCurry & Hayes, 1992) but in CBS-based psychotherapy, their application aims in particular to help clients observe concrete features of a situation and functional relationships between relevant behaviors and the context (Stewart, Barnes-Holmes, Hayes, & Lipkens, 2001; Villatte, Villatte, & Monestes, 2014). For example, a typical ACT metaphor consists of drawing a parallel between driving a bus with passengers shouting in the back and living one’s life with difficult psychological experiences (Hayes et al., 1999, pp. 157-158). The goal of using this metaphor is to help clients notice what consequences result from attempting to control their experiences. If the metaphor is presented in a brief and didactic manner, there will be limited opportunity for the client and the therapist to actually observe relevant behaviors. In contrast, presenting the metaphor as a role-play, perhaps even with other people acting as the passengers as is it often possible in group therapy or workshops, allows for engaging in the behavior rather than just reporting on it. When it is not possible to physicalize the metaphor, the therapist can use techniques to make the metaphor more experientially-based and the relevant behavior more likely to occur (Villatte et al., in press, 2014). For example, the therapist can use the present tense, draw the client’s attention to concrete features of the situation included in the metaphor, and mix the vocabulary from both situations (e.g., “You are driving your life and your thoughts are shouting in the back, can you hear them now? What do you feel like doing at this moment?”).

Perspective taking techniques also allow for contacting distant or hypothetical situations without leaving the therapy room [see McHugh & Stewart (2012) for a book-length CBS-approach to perspective taking]. The therapist can orient the client’s attention to a variety a situations, times, or interpersonal interactions and bring them into the here and now through perspective shifts. For example, the therapist might say “Imagine that I am your sister now, and I’m telling you that I am sorry. How does that make you feel? What do you want to tell me?” Other perspective-shifting questions might include “If you were 10 years from now, and nothing had changed, what would you tell yourself?” and “If we were in your office right now, what would I see you do?” Variations of these techniques are numerous, and they are used in many different psychotherapy approaches for varied purposes [e.g.. in cognitive therapy (Alford & Beck, 1998) and gestalt therapy (Perls, 1969)]. In CBS-based therapy, the explicit goal is to alter the symbolic context so that relevant behaviors may occur in the therapy room and interventions be applied more directly.

Clinically-relevant behaviors can also happen spontaneously in therapy. Because different behavioral topographies can have the same function, therapists must be ready to notice occurrences of relevant behaviors that sometimes look very different than what clients experience in their lives. For example, a client who goes out late every night to avoid being alone at home and as a result is unable to function well in his professional life might have a hard time ending a session. He might begin a new topic of conversation when the therapist is wrapping up, or he might ask for advancing their next session. Here also, it is useful for the assessment process – at the beginning of therapy and as the therapeutic work progresses – that therapists share observations with their clients and verify if they are instances of problematic behavior.

**An Example of an Assessment Protocol Based on CBS: Creative Hopelessness**

Some CBS psychotherapies organize the different methods of assessment in session through verbal reports or direct observations into a sort of protocol guiding the therapist through the steps of identifying relevant behaviors and their sources of influence. An example of such a protocol is that which engenders *creative hopelessness* in ACT by exploring strategies used by clients to control unwanted psychological experiences (Hayes et al., 1999). It can also be applied to address attempts to reach inaccessible, unsafe, or costly sources of positive reinforcement as can be the case for example in addictions, eating disorders, or procrastination.

After collaboratively identifying sources of suffering in the life of clients (e.g., anxiety, obsessive thoughts, traumatic memories, interpersonal conflicts, etc.), the therapist initiates the exploration of contexts in which the difficulties are experienced (e.g., “In what situations do you experience this feeling?”). Then, the therapist enquires about client responses to psychological events and the consequences of doing so (e.g., “What do you do when you experience this feeling? What happens as a result?”). The experiential dimension of this protocol resides in that the therapist doesn’t provide answers to these questions, but encourages clients to notice the potentially relevant features of the situation for themselves. Clients are also encouraged to draw functional conclusions at a pace that respects the progression of their own reasoning.

Often, reporting difficulties experienced outside the therapy room brings difficult emotions into the session. Beginning to realize that past and current strategies are not effective is often a source of confusion, and sometimes of distress for clients. They may begin to envision alternative approaches to their difficulties, but also contact the painful realization that considerable energy and time have been spent, sometimes for years, in ineffective actions. The related pain and resistance to change that often shows up during this process are rich opportunities to observe and intervene in session. The therapist might, for example, ask “What do you feel, as you notice that what you have tried to do to fix this problem has not worked so far?”, “Do you have urges to do something about this feeling?”, and “What do you think will happen if you do that now?” The process of observation and description of experiences and functional relationships among these experiences is thus brought from the content of verbal reports to the current situation.

Numerous metaphors and exercises are employed in instigating creative hopelessness with the purpose of assessing the effectiveness of client behavior and increasing their awareness of the behavioral sequence. For example, the man in the hole metaphor (Hayes et al., 1999, pp. 101-104; 2012, pp. 192-196) invites clients to imagine falling into a hole and attempting to escape it while the only tool available is a shovel. As clients notice that continued digging will only take them deeper into the hole, the therapist helps them consider if what they’ve been doing in life might be similar. Associated exercises may consist of asking clients to engage in a preferred experiential control strategy with less emotional material, to observe the result in-session (e.g., trying not to think of a white bear for a few minutes to notice the counter productivity of thought suppression; see Wegner, 1989).

**Assessing Changes in Client and Therapist In-Session Behaviors**

**Assessing Client Behavioral Change**

In the previous section we focused on the assessment of client problematic behaviors and sources of influence maintaining these behaviors. The therapist and the client also need to recognize when effective change is happening so that interventions can be evaluated and new useful behaviors strengthened. Although effective change depends on idiographic parameters (i.e., a behavior is evaluated with regard to its function in the context of clients’ lives), there are overarching methods to recognize when clients begin to respond in ways that support their well-being. We mentioned earlier that flexible sensitivity to the context and functional coherence are the two overarching skills that clinical interventions based on CBS aim to develop in clients. These skills need to be specified further to facilitate in-session observations. This is possible if more specific categories of behaviors that support these overarching sets of competences are defined.

Flexible sensitivity to the context and functional coherence require (a) awareness based on function and context (clients must be able to notice their experiences, what they do, and what happens as a result); (b) effective “sense-making” (clients must be able to draw conclusions and make decisions that support their well-being); (c) response flexibility (clients must be able to engage in different responses if the context demands it); (d) a flexible sense of self (clients must be able to conceptualize their experiences as normal and distinct from the perspective they have on these experiences); (e) a sense of meaning based on positive, intrinsic, overarching, and inexhaustible reinforcement (clients must be able to identify overarching goals and qualities of actions in their lives); and (f) augmenting of the reinforcing qualities of meaningful actions (clients must be able to connect their actions to what they care about even when they are not immediately satisfying or are difficult to perform).

These subsets of skills are more specific than the overarching goals of clinical interventions, but it is possible to go even further in order to provide more guidance to assessment of change in session. As mentioned earlier in this chapter, what happens in the therapy room is essentially verbal. Clients report about their experiences outside the session, and communicate about what is happening in the here and now. Language is not only a means to communicate; it is also a relevant behavior in its own right that takes part in the development of psychopathology *and* in the resolution of psychological problems. For this reason, the way clients speak is an important indicator of clinically-relevant change.

While RFT was early linked to the development of clinical tools (Hayes et al., 1999), it is only recently that its *direct* use in therapy has been more explicitly and systematically formulated (Villatte et al., in press; see also Luciano, Rodrí­guez Valverde, & Gutiérrez Martí­­nez, 2004; Torneke, 2010 for examples of earlier explorations in this area). At the core of this formulation, therapy transcripts are analyzed through types of relational framing at a broad level. For example, a client statement of “When I come home, I need to drink a lot of alcohol in order to feel less anxious”, can be analyzed as a frame of condition linking coming home, feeling anxious, drinking, and feeling less anxious. These conditional relations indicate that the client feels anxious in certain situations and that drinking decreases anxiety. Furthermore, this way of relating experiences indicates that from the client’s perspective, drinking is necessary. Because drinking such amounts of alcohol is likely problematic, at least for the client’s health, it is reasonable to conclude that the client currently lacks flexible sensitivity to the context (i.e., he responds to the relief of anxiety rather than to the damage to his health) and functional coherence (i.e., he believes that it is what he needs to do).

From an RFT perspective, a sign of effective change observable in session in the example above would be reflected by a new way of relating experiences. In particular, the client would include his health in the relational network through a relation of condition (e.g., “If I keep drinking this way, I will gravely damage my health”). Deictic framing (perspective taking) would also be expected as a sign of awareness of the process (e.g., “I can see better what I am doing now”) and hierarchal framing as a sign of functional coherence (e.g., “I don’t want to damage my heath further. It is too important. I want to put my health above my need to feel better”). Naturally, not drinking excessive amounts of alcohol anymore when contacting anxiety is key to effective change in this situation. Increased response flexibility, however, will also be reflected by the client’s way of relating his experiences, in particular through coordination framing taking over opposition framing between painful psychological experiences and effective behavior (e.g., from “I want to live a healthy life, *but* I feel anxious” to “I want to live a healthy life *and* I feel anxious”). This method can be applied to the different areas of intervention listed earlier, while taking into account the specifics of the targeted domain (e.g., hierarchical framing in meaning and motivation, deictic and hierarchical framing in the flexible sense of self, and so on).

Approaching client changes with behavioral principles is not incompatible with assessment based on midlevel terms (e.g., values, self-as-context, committed action in ACT), but they allow for more precision. A sufficiently trained therapist is able to read the clinical situation, recognize changes in processes at the levels of both basic principles and midlevel terms, and can go back and forth between these two levels depending on what is most practical in a given situation.

**Assessing Therapist Skills and Behavior**

Assessing therapists’ skills from a CBS perspective entails similar difficulties to those in assessing client behavioral change. What the therapist does also needs to be viewed through a functional contextualistic lens. For this reason, defining what a therapeutic intervention should look like is a challenge for clinical researchers and trainers (Plumb & Vilardaga, 2010). To date, attempts to describe CBS therapists’ skills have consisted of listing overarching rules or processes consistent with the overall model and broad enough to include a variety of topographies (e.g., Kholenberg & Tsai, 1994; Luoma, Hayes, & Walser, 2007; Twohig et al., 2010). These strategies are useful because they give therapists and assessors of treatment adherence a general direction, but in some cases, they have paradoxically led to a narrowing of the range of techniques that CBS therapists can use. For example, “self-as-process” in ACT is often defined as the awareness of on-going psychological experiences that therapists ought to train through observation in the present moment (e.g., Foody, Barnes-Holmes, & Barnes-Holmes, 2012). For example, clients might be invited to observe the flow of their sensations and thoughts moment by moment, and to notice how they change overtime. Yet, it is possible to develop a sense of self-as-process detached from specific and rigid definitions and experiences by observing a variety of contexts and noticing how these experiences and definitions change (Villatte et al., in press). For instance, clients rigidly attached to the self-definition “I am socially anxious” might be invited to recall what emotions and sensations they feel in the presence of different people, and how they see themselves across these situations, in order to notice that experiences and definitions linked to social interactions are more various than what they were originally noticing.

Another example is the proscription of strategies to ostensibly change client’s thoughts or to encourage rational thinking in ACT (Twohig et al., 2010, see Plumb & Vilardaga, 2010 for the full treatment adherence manual). While from an RFT perspective, it makes sense to generally recommend that therapists avoid attempts to eliminate or replace client thoughts (Hooper, Saunders, & McHugh, 2010), it is possible to develop alternative thoughts that exert a new and more useful influence on the client behavior (Villatte et al., in press). As long as the therapist’s strategy relies on adding and strengthening new ways of thinking without removing thoughts already present in the client’s repertoire (i.e., increasing the flexibility of derived relational responding), the intervention is consistent with RFT and CBS. Interestingly, this approach has always been at the core of ACT (e.g., defusion techniques encourage the client to reformulate thoughts with “I have the thought that” or with “and” instead of “but”, Luoma et al., 2007), but attempts to discriminate ACT therapists’ skills from more traditional forms of CBT may have given the impression that ACT excluded these types of interventions. Rational thinking can also be useful and has arguably always been part of ACT (e.g., in values and committed action) if what is meant by “rational” is “functionally coherent”.

The recent efforts to include RFT principles more directly in clinical practice might constitute a new path allowing for greater precision in the definition of CBS therapists’ skills without losing the benefit of the functional contextual framework. Therapists’ interventions might be defined with the types of framing they use during their interactions with clients in session. For example, values can be defined as positive overarching goals and qualities of actions situated at the top of a hierarchical network that includes specific goals and actions at its base (Villatte et al., in press). With this definition in mind, therapists can use a variety of framings to help clients build the hierarchical network. They can explore values by connecting actions to overarching goals through hierarchical framing questions (“what would doing this action be part of?”) or identify actions consistent with values (“what are the things you could do that would be part of this value?). They can help clients build broad patterns of actions using distinction and coordination framing (“if you could not do this action, what else could you do that would have a similar function?”).

Such a principles-based approach doesn’t completely avoid the difficulties that midlevel terms entail insofar as identifying a type of framing is also subject to interpretation. However, combined with the overarching goals and means of CBS therapy described earlier in the current chapter, it is arguably a more precise way of defining what therapists do, and it may help prevent the rigid interpretation of midlevel terms overtime. Although further research is needed to support the utility of using RFT principles in the definition of CBS therapists’ skills, recent studies in the area of the self are promising in this regard (Foody, Barnes-Holmes, Barnes-Holmes, & Luciano, 2013; Luciano et al. 2011).

**Conclusion**

The CBS approach to assessment in therapy is to some extent very intuitive and similar to other approaches of psychopathology and clinical interventions. Problems are measured with regard to their impact on quality of life, and with attention to the features of the context in which these problems occur. However, assessment based on CBS requires a further step in that client behaviors and contextual variables need to be related in a functional way so that the information gathered in session leads to interventions that change relevant behaviors. The benefit of such an approach is to allow therapists to adapt their interventions to each client while staying in contact with universal principles of psychology and evidence-based strategies. The challenge in assessing function and context is that no psychological problem or effective change can be described topographically. For this reason, therapists need to apply overarching strategies firmly grounded in the functional contextual philosophy underlying CBS, and gather and interpret information using experiential techniques.

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1. Throughout this chapter, I use the term CBS therapy (or CBS therapists) to refer to all psychotherapeutic practices based on, or compatible with contextual behavioral science. As discussed by Herbert, Forman, and Hitchcock in the previous chapter, this definition would clearly include, but not be limited to acceptance and commitment therapy (ACT), although several instances of therapist behaviors that will be discussed throughout this chapter exemplify how ACT is typically conducted. [↑](#footnote-ref-1)
2. Even when the intervention consists of changing the clients’ environment outside the therapy room (e.g. creating a more peaceful place for working or sleeping, setting an alarm to cue certain behaviors), it still requires clients to make these changes themselves. [↑](#footnote-ref-2)
3. Augmenting has also been recognized as yet a third functional class of rule-governed behavior. Because the primary focus here is on the discriminative control that rules may exert over problematic behavior, a discussion of augmenting is beyond the purpose of this chapter. Interested readers are encouraged to consult Hayes et al, (2001) for an extensive coverage of it. [↑](#footnote-ref-3)