Cognitive Behavioral Therapy for Psychosis (CBTp)

AUTHOR: KATE HARDY, CLIN.PSYCH.D
Stanford University Department of Psychiatry and Behavioral Health

What is Cognitive Behavioral Therapy?

Cognitive Behavioral Therapy (CBT) is an evidence-based talking therapy that concentrates on how an individual’s thoughts, behaviors, and emotions are connected. CBT helps individuals become aware of their thoughts and behaviors, with a focus on exploring how these impact their emotions. The “here and now” focus allows for the development of skills to identify and address unhelpful thinking patterns and behaviors. As part of CBT, formulation (or case conceptualization) allows for the exploration of past experiences to gain an understanding of:

- how predisposing factors may have underpinned the current links between experiences, thoughts, emotions, and behaviors; and
- how that increases the individual’s vulnerability to developing mental health problems.
CBT is recommended as a first-line intervention for the treatment of mild to moderate depression and anxiety (NICE, 2014) and as an adjunct to medication management in the treatment of more serious mental health problems. CBT is a structured therapy with sessions that follow a similar course and outline regardless of the presenting problem. This outline includes: a review of the week; development of an agenda for the session; review of homework; cognitive and/or behavioral skill acquisition related to an identified problem area; and, finally, setting homework so that the client can practice these new skills in their own environment. The therapist may summarize the session or ask the client to do so and will request feedback so that subsequent sessions can be tailored to fit with what the client found most helpful. Adaptations to this format may be required depending on the client population. Table 1 shows a list of the key features of CBT (Beck, 1995).

**TABLE 1: Key features of CBT**

| • Collaborative with active participation |
| • Builds on a strong therapeutic alliance |
| • Structured |
| • Time limited |
| • Goal and recovery oriented |
| • Formulation driven |
| • Draws upon a variety of cognitive and behavioral techniques |
| • Generalization of skills through homework |

**What is Cognitive Behavioral Therapy for psychosis?**

Psychosocial interventions were long overlooked as a treatment for psychosis. Cognitive Behavioral Therapy for psychosis (CBTp) was initially developed as an individual treatment, and later as a group-based intervention, to reduce the distress associated with the symptoms of psychosis and improve functioning. Studies have demonstrated that CBTp can result in decreased positive symptoms, improvement in negative symptoms, and improved functioning (Wykes et al., 2008; Burns et al., 2014; Turner et al., 2014, van der Gaag, Valmaggia & Smit, 2014). In addition, there is evidence to suggest that CBTp can be effective in preventing, or delaying, the transition to full psychosis when used with individuals identified as being at risk of developing psychosis (Stafford et al., 2013). From these studies, CBTp has emerged as an evidence-based intervention recommended as an adjunct to medication management (Dixon et al., 2010; NICE 2013; NICE 2014).

Different treatment protocols exist, and recently the field has moved toward delineating different levels of CBTp treatment. These include:

- **Full CBTp**, defined as the intention to provide 16 or more one-to-one sessions over at least six months by a CBT therapist (a therapist with CBT background/
qualification and additional CBTp training)—for example, formulation-driven CBTp (Morrison, 2017);

- **CBT-informed interventions**, defined as interventions provided by mental health practitioners not meeting the criteria of a full CBTp therapist, such as Coping Strategy Enhancement (Tarrier et al., 1993) and nurse-delivered CBT-informed interventions (Turkington, Kingdon, & Turner, 2002);

- **Targeted CBTp interventions**, targeting clearly specified mechanisms with a CBTp therapist, such as Worry Intervention (Freeman et al., 2015), AVATAR therapy (Leff et al., 2014), Cognitive Therapy for Command Hallucinations (Birchwood et al., 2014), and Individual Resiliency Training (Penn et al., 2014).

CBTp is grounded in the guiding principles of CBT. However, Brabban et al. (2016) propose that three features have emerged as essential:

1. The collaborative development of a shared formulation to inform the understanding, and maintenance, of psychotic symptoms and to aid in making sense of these experiences
2. Normalization of the psychotic experience to address the stigma that often is associated with psychosis
3. Acceptance of psychotic symptoms, which highlights the primary goal of this approach to reduce distress relating to the symptoms, rather than attempting to alter the occurrence of the symptoms.

CBTp typically progresses through the following phases:

1. **Engagement and befriending**
   Brabban et al. (2016) emphasize the importance of the therapeutic relationship in CBTp, arguing that this feature is an essential aspect of the approach while also a preference prioritized by consumers. This phase may occur over an extended period if a consumer is reluctant to engage in therapy, has had previous negative experiences with mental health providers, or is experiencing symptoms that impact their ability to engage in a therapeutic relationship, such as paranoia. During this phase, the client will be supported to identify the key issues with which they are currently struggling in the form of a “problem list” and to develop corresponding goals to aid in their recovery.

2. **Assessment of experiences**
   CBTp requires the clinician to support clients in exploring their symptoms while also “sitting on the collaborative fence.” This is defined as a collaborative exploration of these experiences, with the therapist dropping the expert role and assumptions that they might hold about these symptoms, as well as being open to multiple possible explanations. By doing this, the therapist is modeling flexibility in thinking, openness to alternate explanations, and collaboration.

3. **Formulation development**
   The formulation aims to help the client, and his/her therapist, gain a better understanding of the links between the client’s early experiences, core schema,
unhelpful thinking patterns, and maintenance of current symptoms. Importantly, the formulation informs intervention since it highlights changes that may need to take place to address distressing symptoms. Figure 1 shows a maintenance formulation as an example. This type of formulation helps the client understand the link between their interpretation of the event and subsequent behavioral and affective responses, and in particular highlights the role that the interpretation and behavior have in maintaining the emotion.

Figure 1

4. Application of intervention and skill building
Drawing upon the formulation, and in collaboration with the client, interventions are developed that address issues identified by clients in their “problem list” in order to support them in achieving the goals established at the beginning of therapy. A range of cognitive and behavioral interventions exist that have been developed to target specific psychotic symptoms. These include, but are not limited to, coping skills for managing voices, exploring the evidence for unusual and distressing beliefs, and increasing functioning by addressing negative symptoms.

5. Consolidation of skills
Since CBTp is a collaborative therapy, it requires the active participation of the client within the session as well as between sessions. This allows the client to actively test the skills discussed in session in the real world and to provide feedback to the therapist on the efficacy of the intervention, allowing for adaptation where necessary. Ultimately, the aim is to support the client to become their own CBTp therapist by teaching them the skills outlined above.

CBTp and early intervention in psychosis

CBTp is recommended for those experiencing a recent onset of psychosis and those at risk of developing psychosis (NICE, 2014). As such, CBTp has been widely adopted as an individual therapy approach within early psychosis service settings. As shown in Table 2, the principles of CBTp are well aligned with the principles of early intervention in psychosis as laid out in the Early Psychosis Declaration (Bertolote and McGorry, 2005).
TABLE 2: Early intervention principles and CBtp

<table>
<thead>
<tr>
<th>Early intervention principles (based on Bertolote and McGorry, 2005)</th>
<th>CBtp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide interventions with demonstrated efficacy</td>
<td>Evidence based</td>
</tr>
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</table>
| Provide services that actively partner with young people (shared decision-making) | • Client-generated problem list and goals  
• Collaborative approach (the “collaborative fence”)  
• Development of shared understanding through formulation |
| Challenge stigmatizing and discriminatory attitudes | Normalization |
| Generate optimism and expectation or positive outcomes and recovery | • Problem list and goals  
• Focus on functional recovery (not symptom reduction)  
• Development of skills and tools to support and maintain recovery  
• Wellness planning |
| Culturally sensitive services | Individualized formulation |
| Respect the right for family and friends to participate in treatment | Include family and important support people in sessions and wellness planning as desired by the consumer |

Individualized Resiliency Training (IRT; Penn et al., 2014) is another well-established individual therapy model specifically designed for individuals experiencing a recent onset of psychosis. IRT has been implemented widely in the United States as part of the RAISE NAVIGATE model (Heinssen, Goldstein, & Azrin, 2014). IRT similarly draws on a CBT background and consists of 14 modules (seven standardized and seven individualized modules) covering a range of topics, including education about psychosis, processing the psychotic episode, relapse prevention planning, developing resiliency, managing distress, coping with symptoms, improving social functioning, and addressing substance abuse. This manualized approach includes handouts for each of the module topics that summarize pertinent information and also provides worksheets. It is provided over the course of 6 to 24 months (sometimes longer), depending on client goals, needs, and preferences. IRT and CBtp share many common features. While CBtp emphasizes the role of individualized formulation to inform intervention selection (that may draw upon a wide range of treatment approaches), IRT draws on a broad range of psychosocial treatment methods, psychoeducation, motivational enhancement, cognitive restructuring, coping skills enhancement, and social skills training. These models can be seen as complementary in nature, and clinicians working with early psychosis may benefit from familiarity with and training in both approaches since individual consumers may have a preference for one over the other.
Intervening early with CBTp: A case example

Below is an example of a typical client presenting with concerns relating to auditory hallucinations. To demonstrate the skills discussed, the presentation is oversimplified, with a focus on treating the distress related to hallucinations. However, it is common that people presenting for CBTp will be experiencing multiple problems, and an initial goal of therapy may be to support the individual to specify the problems and identify what they want to focus on first.

Cesar is a 19-year-old Hispanic male who was recently accepted into the early psychosis service following the onset of distressing auditory hallucinations and paranoia (for a case example of CBT for clinical high risk of psychosis, see Hardy & Loewy, 2012). Cesar has reluctantly agreed to meet with a case manager who is trained in CBTp. The following outline provides an example of his treatment using this approach.

1. Engagement and befriending

   Cesar’s pathway into care included an involuntary hospitalization following an increase in paranoia. Cesar had been found by the police wandering around a parking lot, mumbling to himself, and acting erratically. When approached by the police, he had attempted to run away but was quickly apprehended. The police, recognizing that Cesar was experiencing auditory hallucinations, took him to the ER, where he was admitted involuntarily. Following this experience, Cesar is wary of services and mental health professionals but has reluctantly agreed to attend sessions at the early psychosis service program at the request of his parents. The case manager, Tony, initially focuses on engaging Cesar and exploring his strengths and interests, and learns that he has a passion for fishing. As such, Tony and Cesar arrange to meet in the local park and plan to conduct their initial sessions there, with Cesar taking the lead in teaching Tony how to fish. During this process, the case manager is able to support Cesar to create a problem list and corresponding goals (Table 3). The problem list identifies three problems, but for the sake of simplicity this case example will focus on the first one.

2. Assessment of experiences

   Tony and Cesar continue to fish weekly, and during the process Tony takes the opportunity to try to learn more about Cesar’s experiences using curious
questioning to explore the onset and development of the voices. This helps normalize Cesar’s experience and reduce his self-stigmatizing view of what auditory hallucinations represent and how Cesar makes sense of this experience.

Tony: So, when did you first hear a voice?
Cesar: I dunno, like six months ago maybe.
Tony: Huh, so what was that like the first time?
Cesar: It was weird, man. … I dunno, I kind of just ignored it at first. Then it got louder, and started saying mean stuff. Then it was harder to ignore.
Tony: What do you know about hearing voices?
Cesar: Just that it means you’re crazy.
Tony: Really? Hmm, did you know that it is actually a pretty common experience?
Cesar: No.
Tony: Yeah, people have all kinds of different experiences, but it is really common to hear things that other people can’t hear, especially at times of stress. I’ve heard a voice before.
Cesar: You?
Tony: Yeah, not long after my abuela died. I was in bed about to fall asleep, and I heard her call my name. It was actually kind of nice to hear her, even though I knew she wasn’t really there. Are you OK with us talking about this stuff?
Cesar: Yeah, I guess.
Tony: So why do you think you hear the voice? Any theories?
Cesar: It’s confusing. I used to be pretty sure that it was kids at college messing with me. I thought they had somehow got access to my phone and were transmitting messages through it to me, saying mean stuff, that kind of thing. But then I went to a hospital and they started me on medication and now I am not sure. I mean, I still kind of think that’s what’s going on, but the doctors and my parents tell me that the voices aren’t real, even though they sound very real to me. What do you think? Are the kids messing with me, or am I crazy?
Tony: Wow—neither of those sound like great options. Y’ know, I wonder if that is a question that we could keep thinking about together. Seems like you have been doing a lot of thinking about this, and I reckon if we put our heads together we might be able to come up with an explanation that makes sense, and it might not be either of the two that you mentioned. What do you think?
Cesar: Yeah, we could do that.

3. Formulation development

The information gathered in these initial sessions is used to develop a formulation collaboratively. Initially this consists of a maintenance formulation that illustrates how Cesar interprets the threatening voice that he hears and how this interpretation impacts how he feels and acts. Figure 2 demonstrates this idiosyncratic formulation. This simple maintenance formulation is a typical starting point for CBTp, as it helps to identify interventions to address thoughts and behaviors. Later sessions may build on this formulation, and further assessment of symptoms and past experiences can yield information that helps inform a longitudinal formulation. This type of formulation draws on an individual’s early experiences to help understand how certain core
beliefs, or rules for living, may have formed and how, in turn, these core beliefs inform the interpretation of an event. This can help clinicians, or a clinical team, gain a better understanding of how a client responds to certain situations and help the client recognize and more effectively respond to patterns in their thinking and behavior. Although formulation is done in collaboration with the client, complex case formulation can be used as a core feature of clinical team meetings to support team treatment planning (Berry et al., 2015). Figure 3 (based on Morrison, 2001) illustrates an example of this for Cesar, demonstrating how his experience of his father being deported to Mexico when he was just 7 years old and his own bullying from the ages of 8 to 12 had an impact on his world and self-view. With the core beliefs of “I am not safe” and “Others can’t be trusted,” it is understandable that he interprets the auditory hallucination as negative and threatening.

4. Application of intervention and skill building
The maintenance formulation is used initially to identify where intervention may be the most helpful. To support the collaborative nature of CBTp, Tony asks Cesar to review the formulation and identify where he thinks it might be important for them to focus. As with any CBT intervention, it is possible
to intervene at either the cognitive or behavioral level (or both). Choosing the intervention level will be dependent on client choice and the goals of therapy. Given that Cesar wants to learn skills to manage how stressed he feels when hears the voices, they agree to focus on his behaviors, in particular addressing how much he ruminates about the experience. Tony introduces Cesar to a list of coping skills for managing voices, and they review this together and identify three skills that he will be willing to try out at home. In later sessions, they begin to explore the thought “The kids at school are sending me messages” (Table 4). Together, Tony and Cesar explore evidence for and against this thought, with Tony asking Cesar to rate how much he believes this thought before and after they have examined the evidence. During this process, Cesar is relieved to find that there is limited evidence to suggest that the students at school are sending him messages and that it is more likely that he is experiencing an auditory hallucination. However, given that Cesar has already shared that he believes that people who hear voices are “crazy,” is it important that Tony now works with Cesar to examine this new interpretation of his experience. Together, they are able to come up with a realistic and more helpful interpretation of the experience, with Cesar identifying that he experiences hallucinations when he is stressed and tired, ultimately seeing these experiences as an understandable response to being overwhelmed.

**TABLE 4: Exploring the evidence**

<table>
<thead>
<tr>
<th>THOUGHT: The kids at school are sending me messages. (90% sure this is true)</th>
<th>EVIDENCE FOR</th>
<th>EVIDENCE AGAINST</th>
</tr>
</thead>
<tbody>
<tr>
<td>I hear mean things.</td>
<td>This happens when my phone is off and covered up.</td>
<td></td>
</tr>
<tr>
<td>They don’t like me.</td>
<td>When I checked, no one else can hear it.</td>
<td></td>
</tr>
<tr>
<td>I heard one of the people at school talking about using phones to spy on people.</td>
<td>A few people at school do like me, and they don’t think this is happening.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>It’s unlikely that school kids could access technology that could send messages through a phone that wasn’t turned on.</td>
<td></td>
</tr>
</tbody>
</table>

| THOUGHT: The kids at school are sending me messages. (40% sure this is true) | ALTERNATIVE THOUGHT: It’s an auditory hallucination. (60% sure this is true) |

5. **Consolidation of skills**

The interventions described above are all supported by Cesar practicing the skills discussed in session at home. Cesar tries out the coping skills at home and reports to Tony how successful they were in reducing his stress, thereby allowing them to fine-tune these skills over subsequent sessions. Exploration of the thought “The kids are sending me messages” required Cesar to do some investigating at home and at school, including asking trusted family and friends about this experience and reporting back to Tony what he learned through this process. The final stage of therapy for Cesar is a review of the skills he has learned and the development of a wellness plan that allows Cesar to think about what he will do if his stress levels increase in the future (Table 5). This wellness plan is shared with his parents and the rest of the early intervention team.
**TABLE 5: Wellness plan**

<table>
<thead>
<tr>
<th>Level</th>
<th>Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Use my coping skills</td>
</tr>
<tr>
<td>75%</td>
<td>Talk to my mom and aunty, take medication as needed, call Tony</td>
</tr>
<tr>
<td>100%</td>
<td>Consider going to the ER</td>
</tr>
</tbody>
</table>

**What are the training requirements for CBTp?**

Clinicians who want to practice CBTp should receive training in this approach from a professional with expertise in this area. Training is typically conducted over multiple days and requires the clinician to have a good working knowledge of the basic principles of CBT. However, didactic training in this approach is just the beginning. Studies have shown that 50 percent of implementation efforts result in failure (Klein and Knight, 2005); as such, sustainable practice change needs to be supported through regular consultation following the training (Stirman et al., 2010). This consultation process allows clinicians to discuss the real-world application of the skills they have learned; troubleshoot problems as they arise; and celebrate successes while allowing the training to ensure that the skills are applied in a manner consistent with the model.

To fully establish that the clinician has been able to integrate CBTp into their clinical practice, clinicians are typically required to submit taped sessions for competence review. The revised cognitive therapy scale (CTS-R; Blackburn et al., 2001) is commonly used to determine the competence of the clinician on a range of domains of CBT practice. A clinician is typically deemed to be competent in this approach when they have submitted three consecutive tapes that are scored at 50 percent or above using the CTS-R. Other competence measures exist and may be used to establish clinical competence; however, the same requirement of submitting a fixed number of sessions that exceed an established competence cut-off is commonly applied. Once clinical competence is established, clinicians benefit from ongoing case consultation (Brabban et al., 2016) to discuss complex cases with a team, troubleshoot difficulties, and remain current with innovations in this approach.

Although the training model outlined above is directed at clinicians learning full CBTp, there are benefits to all team members being involved in this process. In particular, it can be helpful for team members to have a good understanding of the interventions offered by the service, regardless of their role on the team. In addition, CBTp interventions often draw upon support people, such as family members or non-therapy staff, to test new hypotheses, execute behavioral experiments, and practice coping skills. As such, a coping skill developed in session with the clinician may be put into practice in the school environment, with the supported education and employment worker assisting.
WHERE CAN I LEARN MORE?
http://www.psychosisresearch.com/cbt/

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REFERENCES


