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Cognitive processing therapy (CPT) is an evidence-based, cognitive-behavioral treatment designed specifically to treat posttraumatic stress disorder (PTSD) and comorbid symptoms. This chapter will first review the theoretical underpinnings of the intervention and then provide more detail about the actual protocol including a clinical case description. We then will review several special considerations and challenges in administering the protocol to specific groups of trauma survivors and finally end with an overview of the published randomized controlled clinical trials demonstrating the efficacy of the therapy.

10.1 Theoretical Underpinnings

The theoretical basis of CPT is cognitive theory, one of the most prominent theories explaining the onset and maintenance of PTSD. A predominant notion underlying cognitive theory of PTSD is that PTSD is a disorder of non-recovery from a

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traumatic event (Resick et al. 2008b). Thus, PTSD is not a condition with a prodromal phase or one in which early signs and symptoms are observed. Rather, in the majority of cases, the widest variety and most severe symptoms of PTSD are experienced in the early days and weeks after exposure to the traumatic event has ended. With time, the majority of individuals who have been exposed to a traumatic event(s) will experience an abatement of PTSD symptoms, or a natural recovery from the trauma. In a substantial minority of cases, individuals will continue to experience symptoms consistent with a diagnosis of PTSD. In other words, for this minority of all trauma survivors, natural recovery from the trauma has been impeded.

According to cognitive trauma theory of PTSD, avoidance of thinking about the traumatic event, as well as problematic appraisals of the traumatic event when memories are faced, contributes to this non-recovery. More specifically, individuals who do not recover are believed to try to assimilate the traumatic event into previously held core beliefs that are comprised of positive or negative beliefs about the self, others, and the world. Assimilation serves as an attempt to construe the traumatic event in a way that makes it fit, or to be consistent, with these preexisting beliefs. A common example of assimilation in those with PTSD is just-world thinking, or the belief that good things happen to good people and bad things happen to bad people. In the case of traumatic events (i.e., bad things), the individual assumes that he/she did something bad that may have led to the event or that the event is punishment for something he/she may have done in the past. An example of this type of thinking by a sexual assault survivor: "If I just hadn't been drunk that night (i.e., bad behavior), then I wouldn't have been assaulted (i.e., bad consequence)." Another common type of assimilative thinking is hindsight bias, or evaluating the event based on information that is only known after the fact (Fischhoff 1975). We will see an example of hindsight bias later in our clinical case description. At its essence, assimilation is an effort to exert predictability and control over the traumatic event after the fact that paradoxically leaves the traumatized individual with unprocessed traumatic material that is perpetually reexperienced.

Another tenant of cognitive trauma theory is that problematic historical appraisals about traumatic events (i.e., assimilation) lead to, or seemingly confirm, over-generalized maladaptive schemas and core beliefs about the self, others, and the world after traumatization. In other words, individuals over-accommodate their beliefs based on the traumatic experience. Over-accommodation involves the modification of existing schemas based on appraisals about the trauma, but these modifications in schemas are too severe and overgeneralized. A common example of over-accommodation is when a traumatized individual comes to believe, based on his/her appraisals of his/her trauma, that the world is a completely unsafe and unpredictable place when he/she previously believed that the world was relatively benign or at least that bad things would not happen to him/her. Alternatively, traumatized individuals may have preexisting negative schemas, usually a result of a history of prior traumatization or other negative life events, that others cannot be trusted or that they have no control over bad things happening to them. In these cases, traumatic experiences are construed as proof for the preexisting negative schemas. Borrowing from earlier work by McCann and Pearlman (1990), cognitive trauma

theory identifies beliefs related to the self and others that are often over-accommodated and contribute to non-recovery. These beliefs are related to safety, trust, power/control, esteem, and intimacy. A strength of cognitive trauma theory of PTSD is that it accounts for varying preexisting beliefs in each area that may have been positive or negative based on the client's prior trauma history. In CPT, assimilated and over-accommodated beliefs are labeled "stuck points," describing thinking that interferes with natural recovery thereby keeping people "stuck" in PTSD. Stuck points are targeted in therapy.

According to cognitive trauma theory, clients must allow themselves to experience the natural emotions associated with the event that are typically avoided in the case of PTSD. Natural emotions are emotions that are considered to be hardwired and emanate directly from the traumatic event (perhaps sadness of loss of loved one during trauma, fear of the danger associated with the trauma, etc.). Natural emotions that have been suppressed or avoided contribute to ongoing PTSD symptoms. According to cognitive trauma theory, natural emotions do not perpetuate themselves and thereby, contrary to behavioral theories of PTSD (Foa and Kozak 1986), do not require systematic exposure to achieve habituation to them. The client is encouraged to approach and feel these natural emotions, which have a self-limiting course once they are allowed to be experienced.

In contrast, maladaptive misappraisals about the trauma in retrospect (i.e., assimilation), as well as current-day cognitions that have been disrupted (i.e., over-accommodation), are postulated to result in manufactured emotions. Manufactured emotions are the product of conscious appraisals about why the trauma occurred and the implications of those appraisals on here-and-now cognitions. In the case of a natural disaster survivor who believed that the outcomes of the disaster occurred because he/she or others did not do enough to protect himself/herself and his/her family (self or other blame), he/she is likely to feel ongoing guilt and/or anger and be distrustful of himself/herself or others. In this way, trauma-related appraisals are manufacturing ongoing negative emotions that will be maintained as long as he/she continues to think in this manner. The key to recovery with regard to manufactured emotions is to foster accommodation of the information about the traumatic event. In other words, clients are encouraged to change their minds enough to account for the event in a realistic manner without changing their minds too much resulting in overgeneralized and maladaptive beliefs.

10.2 Clinical Description of CPT

CPT has historically been administered over 12 sessions in individual, group, or combined formats. The administration of CPT can be most briefly explained in terms of phases of treatment. During the pretreatment phase (Phase 1), the clinician will assess the presence of PTSD as well as consider the host of usual treatment priorities (suicidality, homicidality) and the presence of potentially interfering comorbid conditions such as current mania, psychosis, and substance dependence. Special challenges to treatment will be discussed later in this chapter. The next

phase (Phase 2; sessions 1–3) consists of education regarding PTSD and the role of thoughts and emotions in accordance with cognitive theory described above. Phase 3 (sessions 4–5) consists of processing the actual traumatic event and allowing the client to engage with the trauma memory. The goals are the discovery of stuck points preventing the client's recovery and the expression of natural affect associated with the trauma memory. In Phase 4 of treatment (sessions 6 and 7), the clinician uses Socratic questions to begin to aid the client in challenging stuck points. This process is complemented by clinical tools (a series of worksheets) that aid the client in implementing formal challenging of stuck points between sessions at home. Phase 5 (sessions 8–12) often marks the transition to a more specific focus on over-accommodated stuck points with individual sessions dedicated to the trauma themes of safety, trust, power and control, esteem, and intimacy. Phase 5 also includes "facing the future" and focuses on relapse prevention, specifically targeting stuck points that might interfere with the maintenance of therapeutic gains. The following provides an overview of a recent case in our clinic of a young woman treated for PTSD secondary to a home invasion. Although, with this client's permission, this case depiction is based on true events, details have been altered to protect the identity of the client and those involved in the traumatic event.

Molly is a young woman who appeared in our clinic seeking assistance for distress she was experiencing following exposure to a traumatic event. She had recently moved to town to begin graduate training at a nearby university. She reported that she was trying to start a new life for herself and leave the past behind but, after a couple of months, realized that her distress actually seemed to be getting worse. We began the assessment process, typically a 2-h interview in which we take the time to hear the client's story, conduct a thorough clinical interview, and assess any psychopathology. Molly described a difficult childhood history in which she was raised primarily by her grandfather, who was physically and emotionally abusive to her and her siblings. During the interview, Molly demonstrated pride at her life accomplishments, getting herself out of a very bad neighborhood (while some of her siblings succumbed to drug addiction, engaged in criminal activity, and suffered from other types of psychopathology) and eventually graduating from the police academy and taking a job on the force in a major city on the East coast. She served as a police officer for 4 years with excellent reviews and even an early recommendation for promotion.

Approximately 3 years into her job as a police officer, she left work one night and headed over to visit an old friend (Jack) who was in town visiting his grandmother and mother. When she arrived, Molly was delighted that Jack's sister, Beth, had also come into town with her three kids to visit their uncle. The grandmother, mother, Beth, and kids went to bed and eventually Jack walked Molly to her car. At the curb, two hooded gunmen approached and demanded money. Molly and Jack did not have anything of value, so the gunmen forced them back into the home. They woke Jack's mother, the grandmother, and Beth. The tension escalated and eventually Molly made the decision to physically charge at the gunman. Multiple shots were fired with Molly taking five bullets directly in the chest and upper body, Jack getting shot multiple times, and Beth being fatally wounded. During the

interview, Molly sobbed, repeating over and over that if only she had not made her move, this would not have happened and Beth would be alive. Molly met full criteria for PTSD and major depression. The event had occurred 2 years ago.

We began a course of CPT. During session 1, the results of Molly's diagnostic assessment were discussed with an emphasis on explaining the disorder of PTSD. In general, the goals of session 1 include gaining a thorough understanding of PTSD and why we believe (from a cognitive theory perspective) that some people develop the disorder. Our job in therapy was described as taking Molly's trauma memory and "airing it out," looking for places where interpretations about the actual event may not be entirely accurate (assimilation) and places where one might have drastically (and inaccurately) altered worldviews (over-accommodation). These inaccurate beliefs likely played a role in keeping Molly "stuck" in the recovery process. So we labeled such inaccurate beliefs as "stuck points." Throughout the assessment and into session 1, the therapist offered the example of a possible trauma-related stuck point that she had heard Molly repeat several times, "If I had not attacked the gunman, Beth would be alive today." In other words, Molly believed that Beth's death had been her fault. The role of emotion was also discussed in session 1, and Molly was clearly able to assert that she avoided memories of this event and any feelings associated with the memory whenever possible, even to the extent of cutting off old relationships and moving out of town. Molly agreed that it would be helpful to spend some time thinking about the beliefs around why that night happened and the influence of those events on her current beliefs by writing an impact statement (CPT assignment 1) for session 2.

Through the course of reading her impact statement and expanding on the information therein, we accumulated more examples of assimilated stuck points and present-focused stuck points (over-accommodated beliefs). Molly blamed herself for nearly every aspect of the events that unfolded during the home invasion. Specifically, stuck points such as, "I should have given the gunmen the keys to my car and they never would have gone in the house," "I should have fought them outside the house and never let them in," "I should have gone to the back of the house with them and they would have left," and "I never should have attacked them." We also identified a number of over-accommodated stuck points demonstrating substantial shifts in the way Molly viewed herself, others, and the world since the traumatic event. "I am a failure," "I am incompetent," "The world is a dangerous place and I am unsafe in it," "I cannot trust myself or my abilities," and "I am not the person I thought I was." We collected and recorded these on Molly's stuck point log and talked through the relationship between these types of thoughts and the significant distress that they were causing her. She agreed to continue this process outside of session by recording events, thoughts, and feelings on ABC sheets (a worksheet used in CPT to aid clients in identifying thoughts that might lead to emotion as well as help the client to understand the relationship between thoughts and emotions) for session 3.

The use of Socratic dialogue to challenge stuck points is termed the "cornerstone of CPT practice" in the training workshops and manual. Session 3 most typically begins the start of this Socratic process by gently challenging the stuck points that

most likely lie at the heart of PTSD. Although the extent of the challenging can differ across clients in session 3 (depending on how tightly they are holding onto the beliefs, defensiveness, emotional arousal, etc.), Molly responded very well to this process from the start despite significant distress and the firmly held conviction that she was at fault. She made significant advances on several assimilated stuck points during this session. The following discourse is an example of a section of this dialogue, starting about a third of the way into the session.

Therapist: Tell me more about how this all started on that night. You mentioned that you should have given them your car keys at the very beginning and they wouldn't have killed Beth...

Molly (sobbing): Yes, if I had given them my car keys, they would have taken off. Better my car than Beth.

Therapist: Tell me about that moment when the gunmen came up to you and Jack. What were the choices and decisions that you were making at that moment?

Molly: Well, I did not want Jack to get hurt. I figured these were just punks that were trying to get some quick cash. I did not want to give them my car keys because my own weapon and uniform was in my gear bag on the seat.

Therapist: Oh, so it sounds like you were worried about them getting another weapon and where that would go? What about the car? Were you worried about that getting stolen?

Molly (kind of laughs): No, the car was a piece of junk. But I didn't know if their guns were real or loaded. It was so dark. I did know that my gun was very real with very real bullets. I was also worried about them seeing my uniform.

Therapist: Why is that?

Molly: They didn't know I was a cop, but if they found out, they might feel like they'd gone too far and couldn't risk getting caught. At this point, they hadn't even asked for my car keys, they'd just asked for cash. And neither of us had any on us.

Therapist: So, if we think back to what you've been telling yourself, the stuck point, "I should have given them the car keys and they wouldn't have shot Beth," it almost sounds as if the choice were between your car and Beth? But when we think it through a little more, would you say that was accurate? Was Beth even in the story at this point?

Molly (after a long pause): No, I was more worried about protecting Jack, making sure these guys didn't get hold of my gun and not letting them know I was an officer and freaking them out even more. You know, I never even considered that they actually never even asked for my car keys. I just remember being so focused on making sure they didn't get my gun...

Therapist: So, given the information you had at the time and not having any idea at all about the eventual outcome, what do you think about not giving the gunman your car keys?

Molly: I think at the time, keeping the perps away from my car was the priority. That changed quickly.

Therapist: Ok – How about we do this? How about if you take some time between now and the next session and write out in detail exactly what happened that

night? I wonder if, by going slowly through some more of this event, we may find other places that are keeping you stuck. (Therapist then assigns trauma narrative for session 4).

Sessions 4 and 5 allowed the client the opportunity to really engage with the trauma memory. Molly wrote out her whole trauma narrative in significant detail and was able to express natural affect throughout both sessions. Socratic questions continued in both sessions around assimilated stuck points. Molly tightly held onto the idea that she could have prevented Beth's death and that her actions and decisions throughout the night caused the shooting. Specifically, two big stuck points included "I should never have let them in the house." and "I should never have attacked the gunman." The former stuck point was fairly easily challenged as Molly recalled that Jack had panicked and let the gunmen into the house before she could intervene. She had actually said that they did not know who lived in the house. Molly recalled considering at the time trying to fight or run for help, but after Jack let the gunmen in, she was more concerned that she would be leaving all the inhabitants of the house helpless and would infuriate the gunmen further by escaping. At the time, she felt the best plan was to get them what they wanted and get them out of there as quickly and calmly as possible. In other words, she was thinking like the trained officer that she was.

The big stuck point, "If I had not attacked the gunman, the shooting would not have started and Beth would be alive" remained. At session 5, the Socratic questions around this stuck point (following the reading of the second trauma narrative) transpired as such:

Therapist: Let's take a minute and think more about the stuck point that your action caused Beth's death. From what I'm understanding about your story, the gunmen became more and more agitated as time went on. They had tried to force Beth into the basement and Jack's mom had become extremely upset, screaming, "don't go down there, Beth." Where were you at this point?

Molly: They had me on my knees with my hands over my head facing a wall. When they told Beth to go down to the basement, I shouted for Beth to come to me and she ran over to me. I'll never forget her eyes. It was like she wanted me to do something about all this. I stood up and told the men I would go down to the basement.

Therapist: Why did you do that?

Molly: Because I thought that they were going to rape Beth and I knew she would scream and further exacerbate the situation. I thought I could survive being raped and would be able to handle it. But they wouldn't agree to it and then decided everyone had to go to the basement. Things got quickly out of control. I was terrified that the sleeping kids would wake up and come down with all the screaming and shouting. I knew that these guys had no plan and were getting agitated and crazy. The whole time, I had been thinking I needed to get my gun, but I could not figure out a way to get out of the house.

Therapist: So it sounds like things were quickly spiraling out of control.

Molly: Yes – before I had thought they were just looking to rob us and get out, but they were acting crazy and they hadn't really gotten anything of value. I knew that if we went down to the basement, no one was coming up out of there. There was no other reason to bring everyone down there.

Therapist: That sounds like an important piece of the puzzle. Things were rapidly changing, giving you the impression that going down to the basement was not going to have a good outcome? When you think back now, do you still think that going down there would have been terrible?

Molly (thinks about this): Yes, I do.

Therapist: So, in weighing your options in that moment, was there a choice?

Molly: I think the choices at the time were to go down and probably be killed, or fight. There was no reasoning with them. I should've fought sooner?

Therapist: Why didn't you? What was different sooner?

Molly: A few minutes earlier I had thought Beth was going to be targeted, and I tried to prevent that by offering to take her place. But they said no. This was the first time in the whole ordeal that it seemed like they were going to lose it and we were all going down. I remember thinking if I was going to die anyway, I was going to give the rest of them a fighting chance by taking one of them down with me.

Therapist: And so you tried to save everyone's life by literally throwing yourself in harm's way?... (long pause) See, it's almost as if you are now, in hindsight, assuming that no action would have had a better outcome. But it sounds like there is very little in your story to suggest these guys were going to suddenly decide to leave? (silence as Molly thinks about this for a couple of minutes). Is it possible that, as bad as the outcome was and I understand how very awful it was, it could have been even worse if you had not defended everyone? (Molly is nodding and sobbing. We sit with this for awhile.)... Who caused Beth's death?

Molly: Those men.

Therapist: Yes, I agree... It sounds like you did absolutely everything humanly possible to prevent Beth's and others' deaths.

We continue this conversation a little while longer and weave the next practice assignment (the challenging questions worksheet) into challenging this big stuck point. At session 5, the therapist introduces the first of the worksheets designed to help the client formally challenge stuck points on his/her own between sessions. Molly agrees to continue this work at home as well as to practice challenging other stuck points from her log. Molly returns to session 6 and has struggled a bit with the worksheets. We review them in session and figure out the pieces that troubled her. Her affect is much brighter and she reports that she has done a lot of thinking about the event and honestly feels as if a weight has been lifted off her shoulders. Her PTSD symptoms have substantially decreased as assessed by our self-report measure. We introduce the next of the worksheets designed to help the client identify overall patterns of thought in which she tends to engage.

When Molly returned to session 7, her belief that it was her fault had significantly decreased. She reported feeling quite a bit of sadness and spending time thinking

about Beth and her children who now have to go through life without their mom. The sadness was hard but felt a lot different than the awful guilt she had been carrying. The focus of therapy shifted to some of the more present-focused (over-accommodated) stuck points including, “I don’t trust myself,” “I am powerless/incompetent,” and “There is danger everywhere.” The last five sessions of CPT specifically focus on five types of beliefs that are typically disrupted following the experience of a traumatic event, including safety, trust, power/control, esteem, and intimacy. We used the final worksheet (the challenging belief worksheet) to challenge stuck points in each of these areas. At one point prior to session 10, Molly traveled home for Jack’s wedding. She saw everyone who had been present during the crime and felt enormous guilt. She returned to therapy thinking again as if she had somehow caused Beth’s death by doing something wrong or not doing enough. Using the full worksheet and relying on Socratic questions, this old stuck point was fairly easily challenged. At this point in the therapy, Molly took the reins of challenging and thinking through stuck points with the therapist acting as a consultant. By the end of session 12, Molly no longer had PTSD or major depression. Almost a year later, she has begun a new career, remains PTSD free, and has recaptured her life.

10.3 Special Challenges

We are frequently asked how long a therapist should work with a client prior to starting CPT. The answer changes depending on a number of variables. If this is a new client, CPT can start right away after an initial assessment definitively determining a diagnosis of PTSD. If the therapist has been working with the client for a long time using more supportive or unstructured therapy, it may be necessary to discuss how CPT will look different in terms of the structure of the session and the homework expectations than what was previously being done in therapy. We often find that delaying the start of trauma treatment causes the client’s avoidance to increase and reduces the likelihood that he/she will stay committed to the protocol. In fact, we commonly see that the therapist’s avoidance or belief that the client “cannot tolerate” CPT is more often the reason for the delay of treatment than the client’s desire to hold off.

Because the efficacy of CPT was tested with women who described complex trauma histories as well as a variety of comorbid psychological disorders, most clients can complete the treatment protocol as designed. For example, in clinical and research settings, we have implemented the protocol with individuals who were recently traumatized (days) and those who were 70 years posttrauma. In addition, the protocol has been utilized with those who are sub-threshold for PTSD diagnosis as well as those individuals who meet the full criteria for PTSD. Finally, we have successfully implemented the full protocol [CPT or CPT-cognitive only (which is CPT with the written trauma narrative component of the therapy removed)] with individuals who have been additionally diagnosed with many Axis I and all Axis II disorders (Chard, et al. 2011; Kaysen, et al. 2014; Walter et al. 2012). Most typically, in our research trials, individuals can have a diagnosis of bipolar disorder or

schizophrenia; however, we first stabilize any manic or psychotic symptoms prior to commencing the trauma-focused work. To our knowledge, CPT has not been tested with individuals diagnosed with dementia.

There are a few situations in which delaying the start of trauma-focused work, such as CPT, may be warranted (such as stabilizing a client physically or psychologically). Ensuring that the individual is not a danger to self or others and in personal danger due to a current abusive relationship is an important consideration before beginning any kind of therapy. If danger is a concern, then safety planning needs to be prioritized before CPT is considered. Conversely, we have successfully treated individuals who are likely to face trauma in their near future with CPT, e.g., military service members, police, and firefighters. The likelihood of experiencing trauma in the future is a universal risk, so the possibility of future violence or trauma exposure should not be a reason to delay trauma treatment but should be an area where additional stuck points can be identified and challenged. Additional areas of physical safety that may delay treatment include those individuals with an eating disorder that places them at a severe health risk or those engaging in potentially lethal self-injurious behaviors. In both of these cases, attempts to stabilize the client should be made prior to starting CPT.

Another factor that may delay the start of CPT treatment is the client's psychological functioning. For example, if depression is so severe that the client is rarely attending sessions, if dissociation is so significant that he/she cannot sit through most of a therapy hour, or if severe panic attacks are preventing discussion of the trauma even in remote detail, then other therapeutic interventions may need to precede CPT (e.g., coping skill building, panic control treatment (See Chap. 17 and Part IV "comorbidities"). With respect to concurrent substance use disorders, we have commonly implemented the CPT protocol with those who are abusing substances with great success, but typically not in an outpatient setting if they are substance dependent and requiring detoxification (Kaysen et al. 2014). However, once someone has stabilized after detoxification, the individual is typically able to engage in CPT. Both research studies and clinical effectiveness trials have found that symptoms of depression, anxiety, substance use, anger, and guilt all decrease after CPT and individuals maintain these gains at treatment follow-up. Finally, if an individual has an unmedicated psychotic disorder or unmedicated bipolar disorder, it will likely be necessary to stabilize the individual on a medication regimen prior to starting CPT.

Several studies have shown that individuals with comorbid personality disorders (including borderline personality disorder; BPD) do very well in CPT. Although their initial PTSD score may start higher than individuals without a comorbid personality disorder, participants with BPD features (Clarke et al. 2008) and with full BPD (Walter et al. 2012) show equivalent gains in therapy as compared to those without personality disorders. The challenge for many therapists working with clients who have a personality disorder and PTSD is keeping the treatment on track with the protocol and not getting derailed by unrelated issues. We have found that clients often have developed maladaptive cognitions and coping strategies to manage their reactions to the trauma. These beliefs and behavioral patterns most likely

served a functional purpose at some point in the person's life and eventually became dogmatic schemas about the world. The client then began to view all experiences through these schemas, ignoring or distorting information that challenges these beliefs. Our goal is to remain trauma-focused and provide the client with additional skills for specifically challenging trauma-related cognitions in an effort to reduce posttraumatic distress.

Modifications of the protocol are most often not recommended. That being said, our studies have shown that specific modifications may occasionally be necessary to achieve optimal outcomes (Galovski et al. 2012; Resick et al. 2008b). For example, we have used the protocol with individuals who have minimal formal education (4th grade) and those with an IQ around 75. However, in several of these cases, we have had to simplify the protocol. In addition, with the number of returning veterans with a history of traumatic brain injury (TBI), many clients with PTSD are also coping with post concussive symptoms that resulted from their injury. Clinical data supports the use of CPT or CPT-C in their current formats with a majority of these clients, but if the client is struggling to comprehend the purpose of the assignment, the worksheets have been simplified for different levels of understanding (Chard et al. 2011). For example, we have created versions of the worksheets that can be used throughout the treatment instead of moving on to the more advanced sheet. Bass et al. (2013) completed a randomized controlled trial of group CPT-C (cognitive-only version without accounts) in the Democratic Republic of Congo, in which the clients were illiterate and had no paper and the therapist had only a few years of education beyond elementary school. The worksheets and concepts had to be simplified so that the clients could memorize them. Results are discussed below.

In summary, therapists should not assume that CPT cannot be implemented with clients who have extensive trauma histories or be daunted by comorbid disorders accompanying PTSD. The decision the clinician must make in collaboration with the client is whether the comorbid disorder is so severe that it will preclude the client's participation in PTSD treatment. For the most part, however, the treatment of PTSD will improve the comorbid symptoms and may even eliminate the necessity of further treatment for those symptoms. Thus, decisions on when to start CPT, and with whom, should be made on a case-by-case basis in collaboration with the client.

10.4 Empirical Support

There is a large body of literature supporting the efficacy and effectiveness of CPT in diverse populations. The first randomized controlled clinical trial (RCT) compared CPT, prolonged exposure (PE), and a wait list (WL) control group in a sample of 171 female rape survivors (Resick et al. 2002). Results showed that both the CPT and PE groups demonstrated significant reductions in PTSD and depressive symptoms between pretreatment and posttreatment compared to the WL condition. There were very few differences between the two active treatments with the exception of significantly more improvement on guilt (Resick, et al. 2002), health-related concerns (Galovski et al. 2009), hopelessness (Gallagher and Resick 2012), and

suicidal ideation (Gradus et al. 2013) reported by the participants who received CPT. These improvements were sustained at the 3-month and 9-month follow-up points. A subsequent long-term follow-up assessment of these participants (Resick et al. 2012) revealed no significant change in PTSD symptoms 5–10 years following original study participation, indicating that treatment gains were maintained over an extended period of time.

In an effort to more fully understand the possible individual contributions of the theorized active ingredients in the full CPT protocol, a dismantling study of CPT (Resick et al. 2008a) next compared the full protocol to a cognitive-only version (CPT-C) that does not include the written account and a written account-only (WA) condition. One hundred and fifty adult women with histories of physical and/or sexual assault were randomized into one of the three conditions. Participants in all three conditions showed significant improvements in PTSD and depressive symptoms during treatment and at the 6-month follow-up. Although the initial hypotheses predicted that the complete CPT protocol would be superior to both the CPT-C and WA conditions, in fact, when examining PTSD symptoms over the course of treatment, the CPT-C group had significantly lower scores than the WA condition during treatment, while the CPT condition did not differ significantly from CPT-C or WA. This finding suggests that cognitive therapy is a viable option in the treatment of PTSD. Although the WA component of the CPT protocol is important for some individuals to facilitate the experiencing of previously avoided trauma-related emotions, CPT-C may be an effective alternative for individuals who have a tendency to dissociate, are reluctant to undergo focused retelling of the event, or have a limited number of sessions to attend treatment (Resick et al. 2008a, b).

CPT also is shown to be effective in veteran populations. Monson and colleagues (2006) conducted the first RCT with a veteran sample and found that veterans receiving CPT demonstrated significant improvements in PTSD symptoms compared to treatment as usual through 1-month follow-up. Improvements in co-occurring symptoms including depression, anxiety, affect functioning, guilt distress, and social adjustment also were found. Forbes and colleagues (2012) examined the effectiveness of CPT compared to treatment as usual in three veterans' treatment clinics across Australia. Results showed significantly greater improvements in PTSD and secondary outcomes including anxiety and depression for the CPT group. In the first RCT examining CPT in a sample of veterans with military sexual trauma, CPT was compared to present-centered therapy (PCT), an active control group (Suris et al. 2013). Results revealed that both treatment groups showed significant improvement through 6-month follow-up in PTSD and depression, although veterans who received CPT showed significantly greater reductions in self-reported PTSD symptom severity at the posttreatment assessment compared to those who received PCT. No differences were observed between the two treatments on clinician-measured PTSD as assessed by the CAPS.

Chard (2005) developed an adaptation of CPT (CPT-SA) for survivors of sexual assault consisting of 17 weeks of group and individual therapy specifically designed to address issues salient to abuse survivors, such as attachment, communication, sexual intimacy, and social adjustment. In an RCT of this treatment, 71 women were randomized to CPT or a minimal attention (MA) wait list control group. The CPT

group showed significant improvements from pretreatment to posttreatment compared to the MA group on PTSD, depression, and dissociation. PTSD symptomatology continued to improve from posttreatment to the 3-month follow-up and remained stable through 1-year follow-up.

Recent research has demonstrated effective ways in which CPT may be adapted to increase efficiency and accessibility of the treatment to a wide variety of populations. Galovski and colleagues flexibly administered a variable-length protocol of CPT (modified cognitive processing therapy; MCPT) in which the number of sessions is determined by client progress toward a predetermined good end-state functioning (Galovski et al. 2012). Results of an RCT in a sample of 100 male and female interpersonal trauma survivors found that MCPT demonstrated greater improvement on PTSD and depression, as well as secondary outcomes such as guilt, quality of life, and social functioning, compared to a minimal contact control group. Moreover, 58 % of participants receiving MCPT reached good end-state in fewer than 12 sessions, while only 8 % reached session 12 and 34 % required 12–18 sessions. Gains were maintained at the 3-month follow-up. These results suggest that the CPT protocol may be shortened for early responders, while adding additional sessions may improve outcomes for those previously deemed nonresponders after the standard 12-session protocol.

Another adaptation to CPT includes telehealth technology to deliver treatment. Morland and colleagues (2014) conducted an RCT in a sample of 125 male combat veterans in Hawaii comparing group CPT delivered via telehealth to in-person treatment. Results found that both groups had significant reductions in PTSD symptoms following treatment and maintained through 6-month follow-up. There were no significant between-group differences in clinical or process outcome variables. These findings support the feasibility and effectiveness of using telehealth technology to deliver CPT, which would greatly extend the reach of CPT and improve access to care for those with geographic limitations.

In the most unique adaptation of CPT to date, Bass and colleagues (2013) conducted a controlled trial with female sexual assault survivors in the Democratic Republic of Congo. Sixteen villages were randomly assigned to provide CPT-C (157 women) or individual support (248 women). CPT-C was delivered in a group format following an initial individual session. Results showed that participants in the CPT-C groups had significantly greater improvements in PTSD, depression, and anxiety symptoms than those in the individual support group, with effects maintained at 6-month follow-up. These findings demonstrate that CPT can be effectively implemented in diverse and challenging settings.

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