Chapter 1

Overview of CBT Spectrum Approaches

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Abstract

Cognitive behavioral therapy (CBT) is a psychosocial treatment with strong scientific evidence supporting its use with youth for a variety of emotional and behavioral problems. This chapter provides a broad overview of CBT with youth divided into three sections. In the first section, the behavioral and cognitive theories that underlie the CBT approach are described. We also discuss how the two theories have been integrated into theories used to guide CBT. In the second section, a description of specific techniques commonly found in CBT is provided along with a review of the typical modalities employed to deliver CBT. Finally, the third section focuses on the delivery of CBT.

Key words CBT, Youth, Behavior, Cognitive, Evidence-based treatment

1 Introduction

Cognitive behavioral therapy (CBT) is a specific psychosocial treatment that has garnered strong scientific evidence supporting its use with children and adolescents (hereafter called youth) for a variety of emotional and behavioral problems. The CBT model is based on the premise that cognitions, emotions, and behaviors interact to produce and maintain emotional and behavioral problems in youth. CBT has received empirical support for a variety of problems experienced by youth, including depression [1], anxiety [2], post-traumatic stress disorder [3], eating disorders [4], externalizing disorders [5], and substance abuse [6]. CBT is thus commonly used to treat a wide variety of presenting problems for youth. The goal of this chapter is to provide a broad overview of CBT divided into three sections.

The first section focuses on the theories underlying the CBT approach. CBT represents the integration of behavior and cognitive theories. Since the important behavioral (operant, classical conditioning, social learning) and cognitive (Aaron Beck's cognitive theory) theories emerged separately prior to the development of

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the CBT model, we provide a description of these prominent theories and how they are used in CBT. We then conclude the section with a brief description of how these theories were eventually integrated to form a theory designed to guide CBT.

The second section presents information about how CBT works to promote symptom reduction in youth. The behavioral and cognitive techniques commonly found in CBT programs are described. We also review the common modalities (e.g., individual, family-focused) used to deliver CBT to youth and their families.

The final section provides specific information about factors to consider when delivering CBT to youth with emotional and behavioral problems. The section is intended to describe the factors that promote the effectiveness of CBT by helping understand what therapist behaviors may optimize youth clinical outcomes.

2 Theoretical Background

In this section, we detail the theoretical underpinnings of CBT. We discuss the main behavioral and cognitive theories used to develop CBT. We also describe how the cognitive and behavioral theories were integrated to inform the CBT model.

2.1 Behavioral Theory

Behavioral theory is characterized by three types of learning processes: classical conditioning, operant conditioning, and social learning. Each of these theories has been used to develop the therapeutic techniques detailed in the next section.

2.1.1 Classical Conditioning

The theory of classical conditioning, most often associated with Ivan Pavlov [7], posits that learning occurs through repeated pairings between a neutral stimulus and a stimulus that naturally produces a behavior. An unconditioned stimulus (UCS; something that triggers a naturally occurring response) leads to an unconditioned response (UCR; naturally occurring response following the UCS). When the UCS is closely preceded by a conditioned stimulus (CS; an initially neutral stimulus) the CS will eventually produce the same response, termed the conditioned response (CR; the acquired response to the formerly neutral stimulus; [8]).

Classical conditioning is used to explain the development and maintenance of some psychological problems, especially anxiety disorders. For example, if a youth is bitten by a dog (UCS), they are likely to experience a fear response (UCR). The experience of seeing a dog (a previously neutral stimulus) and being bitten by a dog might lead to an association between seeing a dog (CS) and a feeling of fear (CR), potentially leading to the development of a specific phobia of dogs. CBT techniques that target these emotions are based on the principles of classical conditioning. For example, exposure, a therapeutic technique, is based on the principles of

classical conditioning theory. To reduce a youth's anxiety about dogs, treatment would involve repeated exposure of the CS (being around dogs) in the absence of the UCS (being bitten by a dog). After extended periods of exposure to the CS in the absence of the UCS, then the CS will no longer produce the CR (fear; i.e., extinction).

2.1.2 Operant Conditioning

The theory of operant conditioning, generally credited to B. F. Skinner [9], emphasizes the role of events in the environment on behaviors. Specifically, it suggests that the likelihood that a behavior will be repeated is a function of events that immediately precede or follow the behavior. In operant theory, behaviors are influenced through positive reinforcement, defined as the addition of a stimulus that leads to an increase in behavior (e.g., giving a youth a toy to reward desired behavior), negative reinforcement defined as the removal of a stimulus that leads to an increase in behavior (e.g., removing a chore to reward desired behavior), positive punishment defined as the addition of a stimulus that leads to a decrease in behavior (e.g., adding a chore to discipline undesired behavior), and negative punishment defined as the removal of a stimulus that leads to a decrease in behavior (e.g., removing a toy to discipline undesired behavior; [10]). The contingencies of reinforcement are a main focus of operant conditioning: antecedents defined as a cue for a youth to engage in a behavior (e.g., caregiver instructions to do homework), behaviors defined as the behavior that is to be altered (e.g., doing homework), and consequences defined as what follows the behavior that makes it more or less likely to happen again (e.g., caregiver verbal praise). Understanding how these three components operate in unison to explain behavior is an important step in understanding the factors that serve to cause (antecedent) and maintain (consequence) a target behavior. This understanding, in turn, is used in CBT to inform the development of interventions that target antecedents or consequences intended to alter the behavior. Operant conditioning thus provides the foundation for many of the assessment and intervention procedures used in CBT designed to increase, or decrease, the frequency of behaviors.

2.1.3 Social Learning

Social learning theory, considered to have developed through the work of Albert Bandura [11], focuses on the influence of social contexts of behavior on the learning process. Its central premise is that behaviors are learned from the environment through observational learning. Specifically, new behaviors, skills, or information is acquired, and existing behaviors are altered, through observing others. While reinforcement and punishment are not a necessary aspect of social learning, social learning theory and operant theory can interact to explain behavior change. Rotter [12] proposed that

an individual's behavior is determined not only by observing another, but by their expectation of receiving a reward or punishment. For example, a youth may be more likely to repeat an observed behavior if that behavior was rewarded, and less likely to repeat the behavior if it was punished, because they will then expect the associated reward or punishment in the future. Social learning theory has been applied to youth-focused CBT through the use of therapist modeling techniques employed to teach new skills, educating caregivers about the role modeling can play in influencing youth behaviors, and teaching caregivers to model desired behaviors for their youth [13]. Such interventions will be described in closer detail in the next section.

3 Cognitive Theory

Traditional behavior theory only focused on observable behavior and eschewed a focus on any internal processes. However, some were not convinced that behavior could be explained solely by observable stimuli and turned to the role of internal cognitions on behavior and emotions. The resulting "cognitive revolution" was a paradigm shift in psychology away from a sole reliance on observable behavior to an incorporation of unobservable cognitive processes [14, 15]. The new emphasis on the role of cognitions in psychology prompted the development of Aaron Beck's cognitive theory of depression [16], later extended to other psychological disorders. His theory assumed that cognitive processes become habitual and automatic over time, producing cognitive schemas (i.e., organizational frameworks based on patterns of internal experience), which shape our interpretations of events. These schemas may lead to inaccurate interpretations of innocuous experiences [13]. For example, if a youth holds a schema that they are "weird" or "awkward," they might interpret a group of youth laughing nearby as being directed toward them, ignoring alternative explanations (e.g., somebody told a joke). Beck described these inaccurate interpretations as "illogical thinking processes" [17], and maintained that they underlie emotional disorders.

Beck's cognitive theory suggests that different psychological disorders can be distinguished by their cognitive content. For example, the theory assumes that depression develops and is maintained through negative core beliefs about the self, the world, and the future (i.e., the cognitive triad), which interact with the environment to generate situation-specific negative cognitions [17]. Distinctly, anxiety is more likely to be characterized by cognitions about physical and psychological threat or danger [13]. Although initially conceptualized as relevant to anxiety and depression, Beck's cognitive theory was later applied to a wide

range of disorders such as eating disorders [18] and substance abuse [19]. In the 1970s, Beck applied his cognitive theory to the development of cognitive therapy, which eventually resulted in the emergence of CBT.

4 Integration: Cognitive Behavioral Theory

CBT integrates theories that focus on internal (cognitive) and observable (behavioral) processes to explain the development and maintenance of emotional and behavioral problems [20]. Specifically, CBT assumes that our cognitions, behaviors, and emotions are reciprocally linked, and that altering one will result in changes in the others [21]. These reciprocal relationships serve as the central foundation for CBT. CBT integrates strategies that emphasize the influence of cognitive factors and behavioral contingencies, with the goal of altering an individual's cognitions and behaviors in order to reduce negative emotions and encourage positive behaviors.

5 CBT Techniques

Practicing CBT involves a mix of specific behavioral and cognitive techniques that are delivered within a collaborative relationship formed with the youth and their family. In this section, we review specific behavioral and cognitive techniques typically found in CBT programs for youth emotional and behavioral problems. Our coverage is designed to help highlight some of the most common CBT techniques and do not represent a complete list. The section also provides a brief description of the different modalities that have been used to deliver CBT, such as individual and group.

6 Behavioral Techniques

Behavioral techniques are primarily designed to increase the frequency of desired behaviors and decrease the frequency of undesired behaviors. The behavioral techniques are guided by operant, classical conditioning, and social learning theories (see previous section). Some of the most prominent behavioral techniques are described below.

6.1 Relaxation Training

This technique involves teaching a youth a method for self-calming. Relaxation training is found in many CBT programs and can range in type and focus. The simplest form of relaxation is diaphragmatic breathing, which involves training youths how to breath more deeply from the diaphragm. This form of relaxation training has

the advantage of being brief and easy to use, which makes it a practical tool for youth in many situations. A somewhat more complicated relaxation strategy is progressive muscle relaxation, which involves teaching a youth to tense and relax different muscle groups. This can be paired with a personalized cue word (e.g., "calm") in cue-controlled relaxation. These more involved strategies help youths recognize tension in their body, so they can identify tension and then engage in relaxation strategies.

6.2 Activity Planning

Activity planning is a common technique used to reduce depression; however, it is also used with youth who may experience chaotic life situations, or perfectionism issues. Activity planning can be done by setting up a regular schedule with a youth. The schedule can include specific activities planned for each day, and a discussion about ways to increase the likelihood that the youth will be able to complete the activity. More specific planning increases the likelihood that an activity will be done. For example, instead of planning "hanging with friends," specifying which friend(s), what to do, where, and how/when to contact the friend increases probability that the activity will be done.

6.3 Exposure

Exposure is a behavioral technique mainly used with youth who experience problems with anxiety. The aim of exposure is to teach youth to approach and cope with a feared stimulus. Exposure is typically comprised of four phases [22]. The first phase is preparation and psychoeducation, in which the youth is provided a rationale for doing exposure. Hierarchy development is the second phase, in which a list of feared stimuli is created. The third phase involves repeated gradual exposure to feared stimuli with post-processing following each exposure task. Generalization and maintenance is the final phase in which exposures are conducted in a variety of contexts to promote generalization. Through repeated practice facing a feared stimulus, the negative emotions associated with that stimulus are eventually extinguished. Repeated practice allows for habituation toward the feared stimulus. Ratings of anxiety during the exposure tasks help the youth learn that anxiety reduces over time. Exposure can be conducted imaginally (i.e., the youth visualizes the feared stimulus), in role play (i.e., an analog situation that is intended to approximate the feared situation), or in vivo (i.e., exposure to an actual feared stimulus).

6.4 Contingent Reinforcement Plans

These techniques are commonly used to increase or decrease the frequency of behavior and often are used with youth who engage in misbehavior. Contingent reinforcement plans (also called reward plans) can be set up to directly shape a youth's behavior using positive reinforcement (e.g., rewards). Reward plans can be used in-session by the therapist; however, it is more common for the therapist to teach the caregiver or the youth themselves to

administer the rewards. A reward plan consists of two components: (a) a list of clearly defined target behaviors that will be rewarded; and (b) a menu of rewards and a schedule for administration. Based on the principles of operant conditioning, reward charts can involve positive reinforcement (i.e., providing a desired consequence, such as a token or money, when the desired behavior is performed) or negative reinforcement (i.e., removing or reducing something undesirable, such as a chore or even a punishment, when the desired behavior is performed). At times, the reward plan can also include negative punishment (also called response cost), as when a desired consequence or situation is removed for an undesired behavior. The simplest example is when a youth has a privilege removed following behavior, such as having screen time reduced or removed for a day for emitting a nondesirable behavior.

7 Cognitive Techniques

Cognitive techniques are designed to address thinking patterns that influence the behavior and emotions of youth. An essential notion guiding cognitive techniques is that cognitions may negatively or positively influence our emotions and/or behaviors. This is particularly so in situations that involve intense or difficult emotions. Cognitive techniques fall into two general categories. First, cognitive techniques can help build cognitive processes designed to help youth cope with difficult situations or emotions (e.g., problem solving) by providing a new way of processing information about the world (e.g., psychoeducation). Second, cognitive techniques can help change unhelpful ways of thinking and counteract cognitive errors (e.g., cognitive restructuring).

7.1 Problem Solving

Teaching problem solving skills is a central technique that has cognitive and behavioral components. With problem solving skills, the therapist teaches a youth to cope with difficult situations or emotions by using specific problem solving steps. Problem solving typically involves identifying the problem, listing multiple solutions to the problem, considering the pros and cons of each solution, selecting and using a solution, and then reviewing the results. Youths are often encouraged to reward themselves for performing productive problem solving.

7.2 Psychoeducation

This is a commonly employed technique with cognitive components. Psychoeducation provides new information about the symptoms, diagnoses, and treatment process. Providing information about each of these components helps the youth (or their parents) better understand what they are experiencing, normalize their experience, and instill hope regarding the treatment.

7.3 Cognitive Restructuring

This is a core cognitive technique used in CBT programs for a wide variety of presenting problems for youth. This entails attempting to alter dysfunctional cognitions into more functional cognitions. This process can include three stages: (a) identification of current cognitions and the negative feelings and maladaptive behavior that emerge from them along with underlying assumptions and schemas; (b) challenging of the dysfunctional cognitions; and (c) generating alternative cognitions that do not lead to dysfunctional feelings and behaviors, but help the youth cope with certain situations better.

Determining which cognitions lead to improved or impaired feelings is an important first step. It is critical to teach youth that focusing on some cognitions may help control and manage a difficult situation, whereas focusing on other cognitions may escalate and complicate feelings and subsequent coping in the situations that elicit the cognitions. The second and third steps involve challenging dysfunctional cognitions and generating alternate cognitions. In practice, these two steps are often included in the same exercises. Ways of accomplishing these steps include asking for evidence, evaluating how much the youth believes in the cognition(s), and checking for alternative cognitions that modify the initial cognition into a more helpful self-instruction. Besides asking for evidence, lists of questions are often provided, which youth can pick from to challenge their cognitions. Examples of challenging cognitions for anxiety or depression are "Is it really?" "What proof do I have?" "Am I forgetting the positive?" Examples of challenging cognitions for aggression are "What would … (a cool role model) think or do in this situation?" "What would I think about this 5 years from now?" By teaching youth to challenge their cognitions they automatically move forward to the third step which is to help them generate alternative adaptive cognitions. Asking the youth to rate the credibility of their "original cognition" (i.e., anxious, depressed, or aggressive) and the "new cognition," one can explore the power of the "new cognition." This also invites the youth to carefully consider and evaluate the usefulness of the new cognition.

7.4 Self-Monitoring

Monitoring can help increase awareness of feelings, behaviors, and cognitions. When such topics are being monitored, this may increase the client's (and the therapist's) insight of the quality, frequency, and intensity of the topic. Self-monitoring can be administered in many variations. Two common approaches are the use of a diary or brief measures that permit data collection that can be used to build graphs. Monitoring is often a starting point for treatment, and it helps establish the baseline and offers room to discuss realistic goalsetting. Most CBT programs involve self-monitoring activities. For example, CBT programs for depression include mood monitoring and CBT for disruptive behavior problems include monitoring of positive and negative behaviors [23].

8 Techniques Targeting Emotion Regulation

Emotions, including awareness and regulation, are a target of CBT that involves both cognitive and behavioral techniques. A common first step is evaluating emotional competence to determine their basic understanding and awareness of emotions. Emotive education involves building the prerequisites for emotion regulation: emotion recognition or understanding. For young children, emotive education is likely to include information about the difference between cognitions, feelings, and behaviors along with recognition of nonverbal behavior and facial expressions. Education about emotions can also include helping a client understand the physiological basis of their emotions. This may take the form of psychoeducation about the nervous system, and body mapping tasks to identify from where in the body physiological signals derive.

The second component involves grading emotions, which is typically done using various forms of scaling (e.g., 0–8 to rate level of anxiety). Teaching youth to grade their emotions is an important building block on the road to improved regulation. That is, increased awareness of the intensity of emotion is essential to help youth learn how to regulate their emotions. Developing a system to grade emotions in terms of intensity is a useful tool in subsequent evaluations of CBT tasks (e.g., did an exposure reduce the youth's fear?) and is also helpful to address youth expectations. For example, if it turns out that a youth expects to always feel no sadness (a "0") following CBT for depression, psychoeducation about realistic outcome expectations may be required. Finally, and related, developing a benchmarking system for youth's emotional experiences helps prepare them for behavioral tasks. For example, if a youth with agoraphobia rates their anxiety for taking a one-hour bus ride during rush hour with the same intensity as approaching a bus station outside rush hour, further work may be needed to develop a more nuanced fear hierarchy. Learning how to grade emotions is thus an important target in itself as a CBT technique and it is an essential mean for more successful delivery of subsequent CBT tasks.

9 Modalities of Cognitive Behavioral Therapy

CBT can be delivered in many different modalities that involve youth, caregivers, and other family members to varying degrees. Depending on the presenting problems, some modalities may be a better fit than others. Other factors, such as cost or number of available therapists, can also determine which modality is best.

9.1 Individual CBT

In individual CBT, the primary focus of treatment is the youth. Thus, this modality is a one-on-one collaborative and interactive process between the therapist and youth [13]. With this modality, there is a variable level of caregiver involvement. For younger children the level is likely to be higher, as children below age 12 cannot be relied upon for accurate information and are dependent upon their caregivers to get to the treatment location. Moreover, this offers a natural opportunity to involve caregivers in the treatment process (e.g., by explaining homework assignments to both youth and their caregivers).

9.2 Group CBT

In group CBT, treatment is delivered to multiple individuals in a group setting. Several factors make group CBT desirable: cost-effectiveness, opportunities for socialization, normalization of psychopathology, and positive peer influence on the group process [13]. Group CBT can be either youth-, caregiver-, or family-focused: that is, the groups can consist of youth only, caregivers and youth together, or caregivers and youth separately. In youth with antisocial behavior, participation in group treatment may be contraindicated due to the 'peer-contagion effect' or 'deviancy training' [24].

9.3 Family CBT

Family CBT involves regular and intensive involvement of caregivers. Sometimes, other family members, such as siblings, may be involved. There are several variants of this approach. In some versions of family CBT, the caregiver and the youth meet with a therapist at the same time. In other versions, the caregiver and the youth meet individually with the therapist. With family CBT, the caregivers can be regarded as co-clients or co-therapists.

9.4 CBT and New Technologies

Blended CBT refers to the use of internet- or computer-delivered CBT with face-to-face CBT. Ebert et al. [25] explain that using the computer or the internet to provide CBT may overcome some of the limitations of traditional treatment services. Advantages of computer- and internet-based CBT include: (a) availability; (b) anonymity; (c) accessibility at any time and place; (d) flexibility in self-direction and self-pacing; (e) reduced travel time and costs for both clients and therapists; and (f) the appeal of interactivity and visual attractiveness of internet-based programs [25].

Tele-CBT refers to CBT by means of telephone or other communication mode that is not face-to-face. Tele-CBT has been evaluated primarily with adults for a variety of problems, but evaluation of the approach with youth has begun. Tele-CBT is particularly well suited for rural and underserved areas and thus shares some of the advantages as with blended CBT. *Serious games* are defined as alternative education tools that go beyond entertainment with the aim of enabling learning in a digital and interactive fashion (i.e., a

game [26]). A *serious game* tends to be brief and implemented for a specific objective and can be used to enhance desired outcomes. *Virtual reality therapy* includes the use of a three-dimensional computer generated environment in which a person can move around and interact as if they were in that world. Due to the reality of that world, the application of techniques such as desensitization and exposure are facilitated. Virtual reality exposure therapy has been supported by meta-analytic findings [27]. For youth, *serious games* and *virtual reality therapy* are promising avenues, and are not restricted to the treatment of anxiety.

10 CBT Delivery

Our final section focuses on general factors that need to be considered when using CBT to address emotional and behavioral problems experienced by youth. The CBT techniques outlined above can be delivered with varying levels of therapist competence, which can influence the effectiveness of CBT for youth with emotional and behavioral problems. Therapist competence is defined as the extent to which the therapist balances technical and relational skills and uses them to facilitate therapeutic change. This is a broad concept that encompasses skillfulness and responsiveness in delivering specific CBT techniques [28]. The past decade has witnessed an increased focus on accountability and the importance of establishing therapist competency in the education and practice of psychology (e.g., [29, 30]) and other areas of mental health [31]. This section therefore focuses on aspects of CBT delivery that can help foster the development of therapist competence.

11 Assessment

Assessment plays a key role in the delivery of CBT and is defined as the process used to collect, interpret, and use clinical information to produce a description of a youth [32]. Most CBT models emphasize the importance of continuous data collection over the course of treatment. Typically, these data are used to help shape and guide the treatment process from intake to termination. When grounded in science and theory, assessment can help make CBT more efficient and effective [33]. For example, symptom and diagnostic measures that help a clinician arrive at the correct diagnosis can inform the development of a case conceptualization and facilitate the subsequent delivery of CBT. Assessment can thus play an important role in guiding CBT over the course of treatment.

Increasingly, the principles of the evidence-based assessment movement have informed the use of outcome monitoring and evaluation in CBT. This method is defined as an approach to clinical

evaluation that utilizes science and theory to guide the assessment process [34]. A critical aim of the movement is the development and promotion of guidelines to direct research, structure training, and inform clinical practice [34]. The principles represented in the movement include a scientific approach to assessment, a strong emphasis on the score reliability and validity of tools, and a data-informed approach to clinical practice. While it is beyond the scope of the present chapter to provide a thorough review of evidence-based assessment, readers interested in learning how the principles of this movement can be used to guide the treatment selection and planning process can *see* McLeod et al. [35].

12 Case Conceptualization

Case conceptualization represents an important tool used to guide the delivery of CBT and is defined as a set of hypotheses about the causes, antecedents, and maintaining factors of a youth's presenting problems [36, 37]. Considered an important component of evidence-based practice by the American Psychological Association, the association states that "The purpose of evidence-based practice in psychology is to promote effective psychological practice and enhance public health by applying empirically supported principles of psychological assessment, case conceptualization, therapeutic relationship, and intervention" (p. 273 [38]). A good case conceptualization identifies the factors that serve to cause and maintain a youth's target problem(s) and helps the therapist understand how best to translate findings from the empirical literature for use with a particular youth. Assessment tools used through the course of treatment are critical to generating data used to inform the development and refinement of a case conceptualization [39]. Thus, the two skills–assessment and case conceptualization—ideally are used together in CBT.

13 Cultural Considerations

CBT delivery should be informed by knowledge of ways in which culture and diversity can influence the experience and expression of youth emotional and behavioral problems. Culture is defined as "an integrated pattern of human behavior that includes thought, language, action, and artifacts and depends on man's capacity for learning and transmitting knowledge to succeeding generations" (p. 5 [40]). The failure to take a person's nationality, ethnicity, acculturation level, socioeconomic status, and gender into consideration can lead to poor clinical outcomes. For example, behavior may be labeled as pathological when the behavior is, in fact, accounted for by cultural factors. Therapists thus need to take

into consideration culture when determining how to deliver CBT. First, therapists must understand how the expression of symptoms or distress may be influenced by culture. The available evidence suggests that the expression of psychological distress may vary across cultures [41]. This variation may be due to value systems that find different symptoms more, or less, acceptable. Second, therapists must be aware that cultural factors may influence reporting practices. The acceptability of certain symptoms may influence what symptoms are reported as problematic. Understanding how symptom expression and reporting practices may be influenced by culture is an important component of conducting a culturally sensitive assessment. Therapists can use the Diagnostic and Statistical Manual of Mental Disorders Cultural Formulation Interview [42] with youth and their families to understand how cultural and diversity issues may influence the treatment process. Finally, it is important to consider cultural factors in treatment planning and delivery. Some treatment components may need to be modified or replaced altogether in order to be relevant and appropriate for the individual. For example, many cultures do not approach thoughts and feelings as firmly distinct concepts, so general psychoeducation about the relation between thoughts, feelings, and behaviors may need to be adjusted.

14 Developmental Considerations

One of the most distinguishing characteristics of youth is rapid change and this has direct implications for the delivery of CBT. Differentiating between developmentally appropriate behavior and disorder-specific behavior is important. At certain age-periods, normally developing youth may show anxiety for ghosts, show rigidity with regard to rules, oppose limit-setting, cross social boundaries, get absorbed in computer games, or have difficulties with homework planning. Youth with emotional and behavioral problems may show such behaviors with an inappropriate intensity, frequency, or at an inappropriate age. When behaviors exceed what is typical for normal development and lead to clinical impairment, CBT may help, either directed at the youth, their caregivers, or their family. Understanding family dynamics and triggers that precede inappropriate behavior are crucial to target the right 'problem' in treatment. Likewise, many factors are important to take into account to determine whether CBT is appropriate, or for whom CBT is appropriate.

How CBT is delivered should be influenced by knowledge of developmental norms. Developmental factors determine what delivery approaches (e.g., play-based, talk) will provide the most accurate and valid information as well as increase client involvement and motivation. Language development and comprehension

directly influence a youth's ability to understand questions, report and reflect upon their experience, and be comfortable in different clinical situations (e.g., play versus interviews). Therapists should therefore take a developmentally informed approach to delivery and select an approach from the perspective of developmental norms.

In general, CBT is offered to youth aged eight or above, though some have questioned the use of CBT with younger youth [43]. Grave and Blissett argued that the cognitive capacities of young children are still developing and that a rational approach, as with CBT, may not be suitable. Notably, a previous meta-analysis on CBT for youth anxiety did not show age effects on treatment outcome [44]. Treatment programs for younger children tend to include adaptations to fit with the developmental level of the participants. Finding a fit to the developmental level of a youth and their family may require adaptations to language, materials, activities, or timing of treatment [45]. If, and how, to involve caregivers may change over the course of a youngster's life from toddler to young adult. For instance, The Incredible Years program stresses the importance of spending positive time together (e.g., participating in youth's play; [46]). Obviously, it would be misjudgment to ask caregivers to involve an adolescent to participate in building a tower. Translating 'shared play' into 'shared activities' may be fitting for younger adolescents, whereas for older adolescents, translation into 'shared time' is most fitting.

15 Relational Skills

The delivery of specific CBT techniques does not take place in a vacuum, but needs to be adapted to youth developmental stage, mood, temperament, and personality. All specific CBT techniques are intertwined with the therapists' relational skills and abilities to create a facilitative therapeutic process. The alliance is commonly defined as the quality of the youth–therapist affective bond and the degree of collaboration between the youth and therapist on therapeutic activities [47]. The alliance has consistently been shown to predict outcomes of treatment with youth [48, 49]. A stronger alliance has also been associated with more consistent youth attendance [50] and higher youth treatment satisfaction ratings [51, 52].

Given the link between a strong alliance and positive clinical outcomes, an important issue for therapists is how the alliance can be enhanced. Broad therapist competencies associated with forming a strong therapeutic relationship in CBT have been identified [45, 53]. These include instillation of hope and optimism for change, and engaging youth with developmentally appropriate activities. The suggestions also include a focus on alliance building early in treatment, using reflective statements, using collaborative

language (e.g., *we*, *us*, and *let's*), and tracking and validating feelings. It is important to work with youth and caregivers to achieve mutually agreed upon treatment goals and activities. This is because youth rarely refer themselves to treatment, so they may not initially agree with their caregivers about the goals for treatment, especially in youth with externalizing disorders. It is also recommended that therapists provide a treatment rationale linking the purpose of the treatment activities to the overall treatment goal each time a new treatment activity is introduced [53]. In terms of instilling hope and optimism, therapists can assess for unrealistic treatment expectancies, provide psychoeducation about the expected length and outcome of treatment, give an explanation of the treatment rationale, and set up therapeutic activities that help build youths' self-efficacy. Using these approaches to strengthen the alliance can help maximize youth involvement in treatment, defined as the youths' active participation in the therapeutic activities, including homework compliance.

16 Conclusions

CBT is a potent treatment approach developed through the integration of two separate theoretical traditions, behavioral theory and cognitive theory. CBT has been tested in a number of formats, including individual, family, and group. Evidence supporting CBT has been amassed for a number of problems common in youth, including anxiety disorders, depression, disruptive behavior disorders, and eating disorders.

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