# 3

# Evolution of REBT/CBT

At the conclusion of World War II, the Veterans Administration (VA) recognized that there were many unmet mental health needs of our returning soldiers (Baker & Pickren, 2007; Ciarrochi & Bailey, 2008). However, as Baker and Pickren pointed out, there was a shortage of psychiatrists to provide these services. Subsequently, the VA in conjunction with the National Institute of Mental Health (NIMH) began to increase funding for the mental health services and turned to psychologists to assist in this endeavor. Still, at this time psychiatrists and psychologists were enamored with Freudian psychoanalysis (Ciarrochi & Bailey, 2008).

One of Freud's cases in particular that served as a bridge to our current topic of REBT/CBT is that of Little Hans. Hans was 5 years old at the time. Hans' father contacted Freud about his son's phobia of horses. He had once heard someone say not to touch a horse or it will bite off your finger. When walking with his mother, Hans saw a horse fall down and thought it was dead. Freud (1909) wrote about this case demonstrating how Hans was actually jealous of his father. Freud wrote that the horse represented his father. His father's mustache was depicted by the black around the horse's mouth, and his father's glasses were depicted by the horse's blinders. Hans had engaged in masturbation and said he wanted to see his mother's penis. For Freud, this was a classic case demonstrating his belief in the Oedipus complex and how sexual urges were the foundation of phobias.

One of Freud's initial followers, Joseph Wolpe, served in the South African Army during World War II and was charged with treating soldiers with what we now know as Posttraumatic Stress Disorder (PTSD). He came to the realization that he was not having success with the Freudian approach. He subsequently wrote a serious critique of Freud's analysis of Little Hans

(Wolpe & Rachman, 1960) and began his own quest for explaining and treating phobias that was based on Pavlovian and Skinnerian conditioning. He moved to the United States and became a pioneer in behaviorism. This first movement away from Freudian psychoanalysis is considered the *first wave* challenge to psychoanalysis when behaviorism became prominent in understanding the basis of human actions (Ciarrochi & Bailey, 2008; Hayes, 2004a; Plum & Hebblewaite, 2013; Storaasli, Kraushaar, Wilson, & Emrick, 2007). Hayes (2004a) defined a *wave* as "a set or formulation of dominant assumptions, methods, and goals, some implicit, that help organize research, theory, and practice (p. 640).

Criticisms against strict behaviorism began to emerge (Bandura, 1974) and, as mentioned in Chapter 2, it was Ellis and Beck who recognized that cognitive variables also needed to be taken into consideration when examining human emotions and behaviors (Beck, Rush, Shaw, & Emery, 1979; Ellis, 1962, 1971a, 1977a, 2004). Sperry (1993) claimed that the "paradigmatic shift to cognitivism-mentalism, following centuries of rigorous materialism, is bound to have far-reaching consequences" (p. 879). This *cognitive revolution* is the *second wave* of behavior therapy (Ciarrochi & Bailey, 2008; Hayes, 2004a, 2004b; Sperry, 1993; Storaasli et al., 2007).

While still recognizing the importance of cognitions in therapy, more recently, counselors began questioning the need of directly challenging these irrational or negative beliefs (Longmore & Worrell, 2007). This has led to the *third wave* of cognitive behavioral therapy (Bhanji, 2011; Claessens, 2010; Cullen, 2008; Hayes, 2004a; Howells, 2010; Öst, 2008). In these therapies, the focus is not so much on *what* a person thinks, rather on *how* a person thinks. As Ciarrochi and Bailey (2008) mused, therapy has moved from the client lying on a couch with the counselor questioning her or him about childhood experiences to the counselor guiding the client to *mindfully* eat a raisin. In this chapter, I begin by discussing the core concept of mindfulness before going on to discuss important new schools of cognitive and behavioral approaches—Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy, Dialectical Behavioral Therapy, and Acceptance and Commitment Therapy. I conclude with research on the latest in neuroscientific findings as they relate to cognitive and behavioral approaches.

## Mindfulness

As discussed in Chapter 2, in his early career Albert Ellis was very skeptical about the compatibility of religious beliefs and a healthy emotional life (Ellis, 1976, 2010). However, he later acknowledged that he was open to spiritual philosophies, provided they were not rooted in a one-sided

dogmatism or fanaticism (Nielsen, Johnson, & Ellis, 2001). In fact, Christopher (2003) argued that Ellis and Buddha might be considered *soul mates* because of the compatibility between the tenets of REBT and the practices of Zen Buddhism. In particular is Buddhist mindfulness meditation. For this reason, a brief overview of Buddhism gives you insights into the connection with Third Wave CBT.

While Buddhism is a "plural tradition" (Dreyfus, 2011, p. 42), its origin can be traced back to the 5th century BCE when Siddhartha Guatama, a wealthy Indian coming from the privileged class, began his quest to understand suffering in the world (Bodhi, 1998). His teaching became known as *Dhamma* (*Dharma*). At the heart of the teachings are Four Noble Truths (Bodhi, 1998; Teasdale & Chaskalson, 2011a, 2011b). Bodhi (1998, 2011a, 2011b) described these Truths. The First of these is recognizing that mental and physical suffering does exist (*dukkha*). The Second deals with the origin of suffering. Suffering comes from ignorance, greed, and craving (*tanha*). The Third deals with eliminating ignorance through gaining wisdom (*nibbāna*, *nirvāna*). Finally, wisdom is gained by following the Noble Eightfold path (see Table 3.1):

**Table 3.1** Noble Eightfold Path of Striving

| |
|---|
| 1. Right View |
| 2. Right Intention |
| 3. Right Speech |
| 4. Right Action |
| 5. Right Livelihood |
| 6. Right Effort |
| 7. Right Mindfulness |
| 8. Right Concentration |

According to Bodhi (1998), mindfulness has a depth of meaning; it is more a "lucid awareness" (p. 19). He translated one of Buddha's specific teachings about mindfulness:

> And what, monks is right mindfulness? Here, a monk dwells on contemplating the body in the body, ardent, clearly comprehending, mindful, having removed covetousness and displeasure in regard to the world. He dwells contemplating feelings in feelings . . . contemplating mind in mind . . . contemplating phenomena in phenomena, ardent, clearly comprehending, mindful, having removed covetousness and displeasure in regard to the world. This is called right mindfulness. (p. 20)

## Mindfulness-Based Stress Reduction

As a student of Zen master Seung Sahn, Jon Kabat-Zinn (2011) recognized the healing power of mindfulness meditation. He was most interested in introducing *dharma* into the clinical setting, and in 1979 he founded the Stress Reduction Clinic at the University of Massachusetts Medical School (Kabat-Zinn, 2003, 2005, 2009, 2011). Here in this medical school, Mindfulness-Based Stress Reduction (MBSR) emerged.

Participants who come for this training engage in an intensive 8-week program (Baer, 2003; Fjorback, Arendt, Ørnbøl, Fink, & Walach, 2011; Kabat-Zinn, 1982). They are invited to cultivate mindfulness though formal practices such as sitting meditations, mindful yoga, and lying body scans. In the body scan, they are instructed to focus on all aspects of their body from the toes through the entire body. There are weekly 2- to 2.5-hour sessions and a whole-day retreat. They are asked to practice mindfulness meditations each day for 45 to 60 minutes. However, even during everyday activities such as walking, standing, and eating, participants are encouraged to practice mindfulness.

Kabat-Zinn (2003) defined *mindfulness* as "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (p. 145). It does however have a cognitive component involving comprehension and discernment (Dreyfus, 2011; Williams & Kabat-Zinn, 2011). The awareness focuses on what one may see, touch and/or feel, hear, taste, smell, or think (Olendzki, 2011). It begins with conscious breathing (Hanh, 1992; Kabat-Zinn, 2009).

Try it for yourself. Slowly breathe in and out. Be aware of your breathing. Concentrate on breathing in and out. Be aware of your breathing in. Think to yourself, "I am breathing in." Be aware of your breathing out. Think to yourself, "I am breathing out." If you are distracted by your mind wandering or ruminating, try to refocus on your breath without self-criticism and with kindness. Hanh (1992) suggests reciting these four lines as you breathe in and out. "Breathing in, I calm my body. Breathing out, I smile. Dwelling in the present moment, I know this is a wonderful moment!" (p. 10).

***Clinical Evidence.*** This renewed interest in the mind-body connection, blending meditative practices with medical science, is a convergence of two ways of viewing the world. The appearance of scientific studies examining the effects of MBSR has grown exponentially over the past 30+ years (Kabat-Zinn, 2003, 2009). Initially, MBSR studies examined the effects on chronic pain. Kabat-Zinn (1982) began with 51 patients who were suffering from chronic pain such as facial, shoulder, neck, back, headache, and

angina. Various measures of pain indices as well as nonpain psychiatric and mood disturbances were completed by the patients after completing the MBSR course as well as follow-ups at 2.5, 7, and 11 months. Results indicated that the majority of patients reported significant reduction of pain, which continued at follow-up. MBSR can reduce pain symptoms.

In a similar study, Kabat-Zinn, Lipworth, and Burney (1985) compared results of chronic pain patients who were trained in MBSR with patients who being treated by other methods such as physical therapy, Transcutaneous Electrical Nerve Stimulation (TENS), and medications. Again, many measures of pain indices, anxiety, depression, drug utilization, and self-esteem were given pre- and posttreatment and follow-ups. Once more, the MBSR group showed significant improvement compared to the control group and these improvements continued at follow-up.

MBSR was also found to be successful in reducing the time of healing skin lesions for patients with psoriasis who were receiving ultraviolet light treatment (Kabat-Zinn et al., 1998), for reducing distress in and improving mental health in nonclinical samples (Evans, Ferrando, Carr, & Haglin, 2011; Greeson et al., 2011), reducing rumination in cancer patients (Campbell, Labelle, Bacon, Faris, & Carlson, 2012), and increasing self-compassion in a non-clinical population (Birnie, Speca, & Carlson, 2010).

Grossman, Niemann, Schmidt, and Walach (2004) conducted a meta-analysis of 20 MBSR studies involving patients with a wide range of clinical problems such as depression, anxiety, fibromyalgia, binge eating, and chronic pain. They concluded that MBSR is an efficacious treatment for many patients who have both clinical and nonclinical diagnosis.

Another meta-analytic study was done by Ledesma and Kumano (2009). They examined 10 studies that investigated the effectiveness of MBSR on the physical and mental health of patients diagnosed specifically with cancer. Of these, four were randomized controlled trials and six were not. Their results suggested that MBSR is very helpful for improving the mental health of cancer patients, although they concluded that more research may be warranted to show evidence in improving the physical health of cancer patients.

More recently, Fjorback et al. (2011) conducted a meta-analysis of 17 studies with randomized control trials involving MBSR. These authors concluded that MBSR for nonclinical patients was effective in improving mental health in all four of the studies. For clients with physical illnesses including multiple sclerosis, various cancers, chronic obstructive lung disease (COPD), rheumatoid arthritis, fibromyalgia, and HIV, positive results were shown in 9 of the 11 studies. In three of the studies, MBSR was equally effective as the control groups. The exceptions were with patients with COPD and rheumatoid arthritis.

Subsequent to these meta-analytic reviews, there have been many studies that continued to demonstrate the efficacy of MSBR. In the study of Henderson et al. (2012), women with early stage breast cancer were randomized into either MSBR, a nutritional education program (NEP), or usual supportive care (UC). Numerous measures including quality of life (QOL), coping skills, anxiety, personal growth or spirituality depression, and emotional acceptance were taken prior to treatment, after the treatment, and at follow-ups at 12 and 24 months. The MBSR groups showed significant improvement in QOL and coping measures compared to both the NEP and UC groups suggesting the benefits of MBSR. Likewise, Matchim, Armer, and Stewart (2011) found that cancer patients who participated in MBSR had lower cortisol levels and reported less stress. Similarly, Garland, Tamagawa, Todd, Speca, and Carlson (2013) found that MBSR decreased levels of stress in patients diagnosed with cancer. In comparing MBSR with CBT, Arch et al. (2013) found that although both treatments were significantly effective in reducing symptoms of anxiety, CBT may be more helpful in high anxiety patients, whereas MBSR was slightly more effective in patients with high levels of worry or other mood disorders.

In nonclinical populations, persons who participated in MBSR showed an increase in self-compassion, improved emotional regulation, were less absent-minded (Baer, Carmody, & Hunsinger, 2012), and reported lower levels of stress (Robbins, Keng, Ekblad, & Brantley, 2011).

## Mindfulness-Based Cognitive Therapy

After corresponding with John Kabat-Zinn about his work, Zindel Segal, Mark Williams and John Teasdale visited him in 1993 and they were invited to observe how MBSR classes were taught (Kabat-Zinn, 2005; Segal, Williams, & Teasdale, 2002). The three had been trained in CBT and knew that it had been shown to be an effective treatment for persons who are diagnosed with depression by challenging irrational beliefs or charting negative thoughts. However, they were interested in exploring the possibility of introducing mindfulness with their clients who had previously been treated for depression as a means of preventing relapse (Kabat-Zinn, 2005; Segal et al., 2002). They believed that persons, even when not experiencing full depression, could be taught to investigate their emotional experiences such as sadness and anger without the need to fix them, thereby avoiding the downward spiral into another full depressive episode. For this purpose, they developed a manualized group skills training program for what is now known as *mindfulness-based cognitive therapy* (MBCT; Segal et al., 2002).

Participants receiving MBCT meet weekly in a group for two-hour sessions that are modeled on MBSR for a period of eight weeks. Without explanation of the goal of the experience, the first session begins with each person in the group receiving a raisin. The group is led through the exercise of slowly examining it, feeling it, smelling it, putting it into their mouth, and finally eating it. The members are then asked to describe their experiences and thoughts. This is followed by a body scan exercise and discussion. The members are given a body scan tape to practice at home. Homework is a very important part of each session. The final exercise is a breath-focused exercise. Each subsequent session builds, and various exercises are introduced that include walking meditations, seeing and hearing meditations, poetry reading, filling out automatic thoughts questionnaires, and viewing and discussing the video *Healing From Within* (Segal et al., 2002).

***Clinical Evidence.*** In their initial research evaluating the effectiveness of MBCT, Teasdale et al. (2000) randomly assigned 145 persons who had recently recovered from depression to either treatment as usual (TAU) or treatment that added MBCT training. Compared to the TUA group, relapse was significantly reduced for those in the MBCT group who had three or more episodes of depression. For those with only two episodes, there was no significant difference.

Ma and Teasdale (2004) attempted to replicate the Teasdale et al. (2000) study as well as to explore why MBCT was not more effective with those persons who had only two episodes of depression. Persons were randomly assigned to either the MBCT or TAU group. Again, the relapse rate for those with three or more episodes of depression was significantly better for the MBCT group (36%) than the TAU group (78%). Their analysis of those with only two episodes of depression suggested that they were not similar to those with three or more episodes regarding time of onset and that the depression was related more specifically to some major life event.

Segal et al. (2010) also found that MBSR was as effective with patients who had been in remission from depression and not receiving antidepressant medication as patients who were being treated with antidepressant medication. In addition to MBCT being equally effective as antidepressant medication, Kuyken et al. (2008) found that the quality of life in the MBCT group had improved.

Since the above studies were conducted by the persons who had developed the treatment, others (Bondolfi et al., 2010; Godfrin & van Heeringen, 2010) wanted to see if the results could be replicated by persons who had not been involved MBCT's development. Both Bondolfi et al. (2010) and Godfrin and van Heeringen (2010) also found that relapse time was significantly delayed in the MBCT group compared to the TAU group.

***Therapeutic Alliance.*** As mentioned in Chapter 1, Bordin's (1979) notion of bonds, goals, and tasks as the necessary components of the therapeutic relationship was shown to be found in traditional REBT/CBT. The same is true for MBCT.

Felder, Dimidjian and Segal (2012) discussed how collaboration is central to MBCT. Prior to the first group session, the counselor explains the rationale for MBCT and reminds the individual that although the counselor at times may be teaching, it is the individual participant who is the real expert in living with his or her mood disorder.

Felder et al. (2012) explain that "mindfulness practices are led with a spirit of collaboration and mutuality" (p. 180). This collaboration is evidenced in the *inquiry* component of MBCT. This inquiry process is seen when the group counselor engages each in a dyadic conversation regarding his or her "moment-to-moment experiences of each mindfulness practice" (p. 179). Participants are asked to examine whatever thoughts, sensations, or emotions that may have occurred during the practice they have just experienced. The counselor also asks how the practice was different from their typical manner of behaving and how the practice might help in preventing relapse into depression. Even when the counselor asks about struggles a person may have with one of the practices, the group members also provide support by discussing their own difficulties. Collaboration and mutuality are also evident when the counselor not only guides each practice, but also participates.

## Dialectical Behavioral Therapy

In the 1970s, Dialectical Behavioral Therapy (DBT) was developed by Marsha Linehan as a form of CBT that was focused on treating patients diagnosed with borderline personality disorder (BPD) who were chronically suicidal (Linehan, 1987, 1993a, 1993b; Lynch & Cuper, 2010). Her contention was that persons with suicidal ideation lacked the necessary skills to build a meaningful life. In addition, she believed that these patients experienced stressors both personal and within the environment. In DBT, the role of the therapeutic relationship becomes a "potent environmental factor" based on radical acceptance of the client but one that focuses on helping that person achieve a goal of changing. Thus, the term dialectic: I accept you, but I want to encourage you to change.

As a treatment for persons diagnosed with BPD, DBT was designed as a manualized program that encompasses various modes of interaction. It involves a commitment to treatment goals on the part of both the counselor and client. In individual therapy, the counselor uses traditional CBT and

exposure techniques. However, Linehan (1993a) suggested that acceptance of the patient is most essential. Linehan (1993a) recommended that the counselor use specific dialectical strategies that are aimed at enhancing the therapeutic alliance. In a recent conference, Linehan (2012) reiterated that the only goal a DBT counselor insists on is that the client stay alive until the next session. She explained that she did not initially intend to develop a specific treatment but to show that cognitive and behavioral treatments would be effective. The manual was actually written by observing the sessions and writing down what worked.

## Dialectical (Irreverent Communication) Strategies

Linehan (1993a) encourages counselors to engage patients in *paradoxical* dialogue regarding their thoughts and behaviors. For example, "the counselor may say, 'If I didn't care for you, I would try to save you.' The patient may say, 'How can you say that you care for me if you won't save me when I am so desperate?'" (p. 207). In actuality, the patient must realize that the counselor cannot, in fact, save the patient.

Likewise, Linehan (1993a) explained that using *metaphors* is very helpful in DBT. For example, in describing how certain behaviors can interfere with progress, the counselor may talk about a "mountain climber's refusing to wear winter gear when climbing in the snow" (p. 210).

Similar to Ellis's disputation of irrational beliefs, Linehan (1993a) describes this in DBT as playing the *devil's advocate* role. The counselor may argue that the client doesn't really want to change since it is a painful process then asks the client for reasons that the counselor may be wrong.

Another dialectical strategy that is used in DBT is *extending* (Linehan, 1993a). Using this strategy, the counselor relates to the patient that he or she is taken very seriously, perhaps even more seriously than the patient takes herself or himself. This results in the counselor commenting that the patient may even want to fire her or him.

Linehan (1993a, 1993b) explained that it is important for persons with BPD to believe they have the capacity to develop a *wise mind*. This is the ability to make choices and decisions that are not based simply on emotions or reason. Rather a balance between the two. It might be described as an "aha" moment that comes after some crisis. It "may be experienced as grasping the whole picture instead of only the parts" (Linehan, 1993a, p. 215).

Another dialectical strategy that Linehan (1993a) suggested is "*making lemonade out of lemons*" (p. 216). A client's weakness may be seen as a strength. Stubbornness may be turned into action for good. However, it should not be used to humiliate the client.

## Problem-Solving Strategies

At the heart of DBT are strategies that are aimed at helping persons generate possible alternative coping skills (Linehan, 1993a, 1993b). In group, this first involves helping the participants do a *behavioral analysis* of the problem situation. What caused the problem? What stands in the way of a solution? Once the problem has been identified, a *chain analysis* is done to determine the specific events that led up to the situation.

For example, consider that Denise becomes extremely irate at her father-in-law. The precipitating event was his recent visit. He had a look of disgust when he came in from the yard and looked around the living room. Denise had the thought that the lawn needed to be mowed, the toys were all around the room, and the room needed painting. She became sad and ashamed and thought to herself that she must really be a loser. She then yelled at her father-in-law and told him he should come around more often and help out. He didn't agree, and then Denise lost her cool and screamed back.

In the case of Denise, the external event of her father-in-law's visit led to a series of painful thoughts and emotions. She will need to recognize each of these to better regulate her emotions.

## Validation Strategies

Validation is a way of letting clients know that their responses are understandable or reasonable given their history or situation (Linehan, 1993a, 1993b). Validation strategies require that the counselor strives to find some grain of truth in the client's response even if the behavior seems to be self-defeating. It involves being unbiased, empathetic, and accepting of the client. A client who had a history of being physically abused as a child and reported for hitting his child may be validated by the counselor telling him that while the behavior might not be acceptable, it is understandable given what he learned as a child.

## Commitment Strategies

Linehan (1987, 1993a) described a number of ways that the counselor should continually try to motivate the client to change. In addition to having the client evaluate the pros and cons of changing, while allowing the client the freedom to commit or not, she suggests that with the *foot-in-the-door* technique, client agreement on a small goal may eventually lead to agreement on a larger one. Similarly, when the client does not

agree to a rather large goal, the *door-in-the-face* technique increases the probability that the client will agree to a smaller one. The counselor also acts as the devil's advocate, encouraging the client to accept the challenge of changing.

In addition to individual therapy, those in the DBT treatment program participate in group skills training modules. There are specific acceptance skills and change skills that are taught in sequence with specific handouts and homework assignments.

## Mindfulness Skills Module

Linehan was also trained in the practice of Zen (Lynch & Cuper, 2010) and considers mindfulness skills as core to DBT (Linehan, 1993a, 1993b). These core mindfulness skills are described as *whats* and *hows*.

Persons are first taught to observe or attend to their behaviors, emotions, and external events without trying to change them. In group, they are then instructed to describe in words their emotions, behaviors, and responses to events. As in traditional REBT/CBT, they are taught that emotions are not the direct result of the external events but rather the cognitions. Finally, they discuss what it means to participate in an activity without being self-conscious about it. Think about something like riding a bike. Once you have this skill, you can get on your bike without being conscious about how to balance yourself.

Once the persons in the group are exposed to the *what* skills, they are reminded that *how* they attend, describe, and participate is very important. They are led to understand the importance of being nonjudgmental, that is, without evaluating behaviors and emotions as being either good or bad. They are then exposed to practicing how to focus on one specific task at a time rather than being distracted by other thoughts or worries. Finally, they are presented with the goal of being effective, doing what works rather than having to be right. It involves learning how to "read" people. It is explained as being the opposite of "cutting off your nose to spite your face" (Linehan, 1993b, p. 65).

## Interpersonal Effectiveness Skills Module

In this next 8-week module, persons are presented with ways of being more socially effective (Linehan, 1993a, 1993b, 1995). Throughout this module they are presented with an acronym to help remind them of things they need to practice (see Table 3.2).

**Table 3.2** DEARMAN

| | |
|---|---|
| D | **Describe** your current situation that you may be reacting to |
| E | **Express** your feelings and opinions: "I feel that I have worked hard enough to get a raise" |
| A | **Assert** yourself by asking or saying "No" |
| R | **Reinforce** and **reward** persons ahead of time: "I will really appreciate your understanding" |
| M | Be **Mindful** of objectives without distraction |
| A | **Appear** effective and competent |
| N | **Negotiate** alternatives |

## Emotional Regulation Skills Module

In this next module, persons are led to understand that it is possible for them to both tolerate and regulate even intense emotional reactions by recognizing the function of such emotions. They are taught to identify and label their emotions and recognize any obstacles that might stand in the way of changing. They practice being mindful of their current emotions and are encouraged to act in ways that might seem contrary to the emotions, such as being kind to a person who seems to be making them angry. Like in the Interpersonal Effectiveness module, persons are reminded of an acronym to help reduce their vulnerability (Linehan, 1993a, 1993b, 1995).

**Table 3.3** PLEASE

| | |
|---|---|
| P and L | Treat any **PhysicaL** illness |
| E | **Eat** a balanced diet |
| A | **Avoid** mood-altering drugs (unless medical condition warrants) |
| S | Set a regular **Sleep** pattern |
| E | **Exercise** regularly |

## Distress Tolerance Skills Module

The final module is aimed at helping persons be able to tolerate the discomfort that they may experience without demanding that things change. They are presented with strategies to help them survive a distressful crisis, but they are not used for emotional regulation. The first group of strategies is aimed at distracting the person from the stressful event. Again, an acronym: ACCEPTS (Linehan, 1993a, 1993b, 1995).

**Table 3.4** ACCEPTS

| | | |
|---|---|---|
| A | **Activities** can be distracting in a healthy way | Go for a walk, garden, fish, play golf |
| C | **Contribute** and **Commit** to positive actions based on your personal values | Volunteer at a soup kitchen or homeless shelter |
| C | **Compare** yourself with someone who may be less well off than you are | Think of persons from a recent tornado |
| E | Find activities that may help you experience an opposite **Emotion** | Go to an emotional movie, read emotional books, listen to emotional music |
| P | **Push** yourself away from the situation by leaving it or blocking it in your mind | Try putting your pain in a locked box |
| T | Distract by trying to change your **Thoughts** | Count the tiles on the floor, count to 20 backwards |
| S | Make other **Sensations** more intense | Put an ice cube on your neck, swim in cold water, take a hot shower |

Another set of strategies in this module involves self-soothing. The focus here is to help the person attend to the five senses of seeing, hearing, smelling, tasting, and touching.

Finally, this module helps persons find ways to improve their present moment. These include cognitive techniques that help persons reframe or change their evaluation or appraisal of the situation. The acronym is IMPROVE (Linehan, 1993a, 1995).

**Table 3.5** IMPROVE

| | |
|---|---|
| I | **Imagery** can help create a safe and secure environment |
| M | Discovering **Meaning** in one's life is often helpful even if a person is not religious |
| P | **Prayer** may be a way of expressing radical acceptance of oneself by asking "Why me?" |
| R | **Relaxation** techniques/tapes may prove to be helpful |
| O | Remember to take **One** thing at a moment |
| V | Take a **Vacation** from adulthood for a moment |
| E | **Encourage** yourself |

## Clinical Evidence

In the initial research examining the effectiveness of DBT, Linehan, Armstrong, Suarez, Allmon, and Heard (1991) studied 47 women who

were chronically suicidal and diagnosed with BPD and were randomly assigned to either DBT or TAU. While persons in both groups showed fewer symptoms of depression, hopelessness, and suicidal ideation, as well as improvement in reasons for living, the persons in the DBT group had fewer suicidal attempts, were more likely to remain in treatment, and had fewer inpatient hospitalization stays.

A second randomly controlled trial (RCT) was conducted involving women who were diagnosed with BPD who were also drug-dependent (Linehan et al., 1999). Again, they either received DBT or TAU. As in the above study, women in the DBT group were more likely to remain in treatment. Results also indicated that the drug use was significantly reduced for the women in the DBT group. They also showed greater gains on measures of social adjustment.

Another RCT was conducted by Linehan et al. (2002). These authors compared the effectiveness of DBT with a Comprehensive Validation Therapy, which included a 12-Step component with a group of women who were diagnosed with BPD and were also addicted to heroin. Unlike the above studies, the women in the DBT group were less likely to remain in treatment. However, while both treatment groups were effective in reducing opiate use, those in the DBT group maintained the reduction at the end of the 12-month period.

DBT was also compared to community treatment by persons who were experts in working with persons who were suicidal (Linehan et al., 2006). Women were randomly assigned to either DBT or enhanced cognitive-behavioral therapy (CBTE). Persons in both groups reported fewer symptoms of depressions. However, the women in the DBT group were more likely to remain in treatment and were less likely to be hospitalized for suicidal ideation.

In addition to the studies by Linehan and her colleagues, there are a number of other researchers who have replicated findings that demonstrated the effectiveness of DBT (Axelrod, Perepletchikova, Holtzman, & Sinha, 2011; Koons et al., 2001).

## Therapeutic Alliance

To Linehan (1993a, 1993b), the therapeutic relationship is absolutely essential. She and her colleagues recognized that it is a *common factor* that needed to be examined as a mechanism of change (Bedics, Atkins, Comtois, & Linehan, 2012). In addition, the relationship "*is* also the therapy" (Linehan, 1993a, p. 514). For the relationship to develop, the DBT counselor will need to be "sensitive, flexible, non-judgmental, accepting, and patient" (Linehan, 1993a, p. 514). She went to length to provide

strategies for developing this relationship (1993a). It begins with accepting the client in the current moment and being willing to enter into the client's struggles and pain. When the relationship becomes problematic for either the client or counselor, it is to be approached as a problem to be solved. Linehan (1993a) suggested that generalizations from the relationship be applied to the client's everyday life.

Not only does the relationship develop within the individual and group sessions, but also within the natural environment of the client (Lynch, Chapman, Rosenthal, Kuo, & Linehan, 2006). These authors explained that part of the DBT treatment includes contacting the counselor by telephone as a way of reinforcing the skills and reducing suicidal ideation. In addition, they are meant to provide the client with the opportunity to deal with any disruption in the therapeutic relationship.

In conclusion, counselors following the DBT model focus on acceptance and change, treat the whole client (not disease or disorder), and reinforce adaptive behaviors in a nurturing environment. It is important that both the counselor and client believe the client is empowered.

## Acceptance and Commitment Therapy

In contrast to the traditional CBT approaches that encourage clients to challenge and change their thoughts and feelings, Acceptance and Commitment Therapy, or ACT, as initially developed by Steven Hayes, focuses on helping clients simply notice and accept these experiences (Hayes, 2004a, 2004b; Hayes, Strosahl, & Wilson, 2012; Springer, 2012; Waltz & Hayes, 2010). An ACT counselor views attempts to change one's thoughts *as the problem* rather than the solution. In turn, the ACT counselor will help clients choose a valued direction and act on making that value come to fruition (Hayes, 2004a, 2004b). Like the other third wave therapies described in this chapter, ACT utilizes mindfulness strategies to help clients become aware of their cognitions and sensations. In addition, ACT emphasizes acceptance and behavioral strategies with the goal of improving *psychological flexibility*. Hayes et al. (2012) defined this as "contacting the present moment as a conscious human being, fully and without needless defense—as it is and not what it says it is—and persisting with or changing behaviors in the service of chosen values" (pp. 96–97). This may be understood as the ability a person has to become engaged in behaviors that are value-based even while being fully and consciously in touch with the present thoughts, emotions, or sensations.

ACT is an outgrowth of relational frame theory (RFT), which posits that human beings learn by relating things or events to each other (Hayes,

2004a, 2004b; Hayes et al., 2012). Initially, a child may say that a dime is less than a nickel but when the child goes to buy something that costs 10 cents, the child realizes that the context of function makes a difference. Language functions are seen to dominate especially when rules come into play and this may lead to an inflexibility. How can one alter these language processes that lead to inflexibility?

As a way of promoting *psychological flexibility*, ACT targets six core complementary interrelated processes:

1. *Acceptance* is contrasted with *experiential avoidance*. It is the willingness to be aware, in a nonjudgmental way, of any of your inner states such as thoughts, feelings, and bodily sensations. However, it is not to be misunderstood as tolerance of injustices.

2. *Defusion* is contrasted with *cognitive fusion*. Hayes (2010) offered a rather explicit example. How much saliva do you think you swallow in a day? What if you filled a half-cup with your saliva? What is your reaction if you thought you would have to drink it? There is an implicit rule that saliva is not for human consumption. This is cognitive fusion. On the other hand, consider a man who has been diagnosed with a malignant brain tumor. Suppose he thinks to himself that his life is now worthless. If these words lead him to avoid his favorite sport of golf, that would be fusion, but if he undermined the power of those words and went out with his buddies to play golf that would be defusion. Defusion takes place when psychological processes can make a difference in the way one behaves.

3. *Self as context* is contrasted with the conceptualized self. Can you experience the continuity of yourself from last year? The time you were a teenager? How about your earliest memories as a child?

4. *Contact with the present moment* is contrasted with rigid attention to past or future events. It is the ability to be aware in a nonjudgmental way of the actual here and now. Try being focused on the room you are sitting in. What sounds do you hear?

5. *Clarifying values* that are freely chosen is contrasted with behaviors that are rule-governed. What would you like to have written on your tombstone?

6. *Committed action* is choosing to take an action "*with* reason" as compared to "*for* reasons" (Waltz & Hayes, 2010, pp. 164–165). It is commitment to act in a way that is an outgrowth of the client's values. If you value personal self-care, how often do you go to the gym or take time for yourself?

## Clinical Evidence

By 2004, preliminary data began to emerge showing that ACT was an effective treatment for a number of different conditions (Hayes, Masuda, Bissett, Luoma, Guerrero, 2004). This included reducing the number of hair pullings for persons with trichotillomania (Twohig & Woods, 2004),

reduction of sick-leave and medical visits for persons with stress and pain symptoms (Dahl, Wilson, & Nilsson, 2004), increasing tolerance for persons with chronic pain (Gutiérrez, Luciano, Rodríguez, & Fink, 2004), and for increasing levels of smoking cessation (Gifford et al., 2004).

The clinical evidence in support of ACT has continued to mount (Arch et al., 2013; Forman, Herbert, Moitra, Yeomans, & Geller, 2007; Petersen & Zettle, 2009; Twohig et al., 2010). But how does it compare with traditional CBT? In a meta-analytic review, Ruiz (2012) looked at 16 studies that compared the gold standard traditional CBT with ACT on a variety of measures. Although there were many limitations to this study, results suggested that while there were no significant differences on measures of anxiety, there was a positive trend for ACT on measures of depression.

## Therapeutic Alliance

The therapeutic alliance (TA) is central to ACT. It is a collaborative effort based on trust (Lejuez, Hopko, Levine, Gholkar, & Collins, 2006). Although not an end in itself, it is considered a vehicle of change. It demands radical respect and honors diversity (Hayes et al., 2012).

Because the ACT counselor is not intent on changing the client's cognitions, Hayes (2004b) challenges the ACT counselor to "do as you say (rather) than say what you do" (p. 651) when feelings of frustration or confusion arise in therapy. In other words, the counselor learns to walk in the shoes of her client. Hayes concluded that "because of this quality, the therapeutic relationship is important, powerful, and deliberately equal in ACT" (p. 652). This relationship will require that both the counselor and the client develop cognitive flexibility (Hayes et al., 2012).

There is a two-mountain metaphor that has been used to describe the trusting and collaborative therapeutic alliance in ACT:

> The counselor and the patient are conceptualized as climbing their own separate mountains. While the counselor can help the patient, it is stressed that the counselor is an individual who has problems climbing his or her own mountain. Thus, while the counselor may be vulnerable to traps and pitfalls on his or her own mountain, the counselor does have a unique view of the patient's mountain that may be useful for assisting the patient in their struggles. Thus, as with TA, ACT is not hierarchical but instead a collaborative process. (Lejuez et al., 2006, p. 460)

As in DBT, the therapeutic relationship is at the core of ACT. If you think that you may be interested in becoming an ACT practitioner, you will

be opening yourself to relationships that are often intense but meaningful. You will be helping your clients recognize that in and beneath their pain lie their deepest values; significantly, from these values often comes their deepest pain. As an ACT practitioner, you will need to reflect on this in your own life as well.

## Neuroscience and REBT/CBT

Prior to the 1980s, the brain was considered to be a more permanent and fixed structure. Specific brain regions controlled specific functions. One of the exciting developments in psychotherapy today is research that is integrating the basic assumptions of CBT with the actual neurobiological evidence of brain neuroplasticity (Jokić-Begić, 2010). As Jokić-Begić remarked, the adage that "neurons that fire together, wire together; neurons that fire apart, wire apart" (p. 238) has gained much attention in neuroscience studies, particularly in the case of CBT. Jokić-Begić pointed out that changes in blood flow activity led to the discovery that the brain can actually change and create new neurons and there is a growing body of evidence that the brain may actually change as a result of cognitive behavioral interventions.

This was demonstrated by Paquette et al. (2003), who investigated CBT treatment effects on the fMRI imaging of persons with spider phobia. Prior to treatment, there was abnormal activity in the right dorsolateral area of the prefrontal cortex as well as in the parahippocampal gyrus. These abnormalities disappeared after CBT treatment and normal cortical processing was observed.

Bar (2009) theorized that there is a relationship between mood regulation and cortical activation. He based this on his findings on neuroimaging that revealed changes in three cortical regions: (a) the parahippocampal cortex in the medial temporal lobe, (b) the medial cortex in the parietal lobe, and (c) the medial prefrontal cortex. He proposed that researchers continue to explore this neuroscience hypothesis between mood disorders and depression.

In a longitudinal study, Kumari et al. (2011) examined the functional brain changes in 54 patients diagnosed with schizophrenia and two with schizoaffective disorder. Of these patients, 28 received specific manualized CBT treatment for psychosis, while the remaining 26 received treatment as usual without CBT. At baseline there was no significant difference in functional magnetic resonance imaging (fMRI) of brain activation in both groups. However, for those who received the CBT treatment, fMRI from baseline to follow-up showed a "significant decreased activation of the

inferior frontal, insula, thalamus, putamen, and occipital areas" (Kumari et al., 2011, p. 2396).

Newer neurobiological research also suggests that results from fMRI can be predictive of recovery with patients who are diagnosed with depression and are treated with CBT. Functional magnetic resonance imaging results have shown specific healthy changes in brain activity when treating obsessive compulsive disorder, panic disorder, unipolar depression, and spider phobia with CBT (Beauregard, 2009; Zurowski et al., 2012). CBT has been shown to change specific brain regions in the frontal cortex, cingulate, and hippocampus (Goldapple et al., 2004; Siegle, Carter, & Thase, 2006). Likewise, there is evidence that CBT may be considered a feasible alternative with patients who are diagnosed with schizophrenia but not prescribed with antipsychotic medication (Christodoulides, Dudley, Brown, Turkington, & Beck, 2008).

Beck (2008) himself is encouraged by the possibilities for research demonstrating the interaction between genetic, neurochemical, and cognitive factors in the development of depression. He proposed that there are both genetic and neurobiological correlates involved in understanding depression. He focused on research showing that the 5-HTTLPR gene, which is a serotonin transporter, seems to moderate depression. He proposed a hypothetical pathway that begins with the amygdala. He speculated that an amygdala, which is hyperactive combined with hypoactive prefrontal regions of the brain, may be linked to the diminishment of cognitive appraisal, which is associated with the onset of depression. He believes that it is essential to continue examining the evidence of neuroscience. In his own words, "I have reason to hope that future research will perhaps provide a new paradigm which for the first time can integrate findings from psychological and biological studies to build a new understanding of depression" (Beck, 2008, p. 976).

But whatever the evolution of a cognitive model may have regarding the interactions between biological mechanisms and cognitive processing, it is important to look at these developments from the lens of the common factors. Fuchs (2004) reminds us that neuroscience alone does not completely explain the "complex interpersonal process" (p. 484) that occurs during counseling. Even neuroscientists have acknowledged this. Montes (2013) has suggested that future counselors must take into consideration these neuroscientific developments. Yet at the same time he reminds us of what Ryan Melton, clinical training director of Portland State's Research Institute and strong advocate for weaving neuroscientific principles into therapeutic training, has said in this regard: "We still know that we get our best outcomes when we establish a strong therapeutic alliance with our clients" (Montes, 2013, p. 8).

## Summary

- Psychologists began to challenge Freudian psychoanalysis and examined behaviors (behaviorism) to understand the basis of human actions; this is known as the first wave. The cognitive revolution, led by Ellis and Beck, was considered the second wave, which now added recognition of the cognitive components needed when examining human behaviors. The third wave of cognitive therapy has less focus on what the person thinks and more focus on how the person feels. This wave led to the development of practices such as MBCT, DBT, and ACT.
- Mindfulness, awareness from paying attention on purpose, has a cognitive component and includes activities such as conscious breathing, meditation, mindful yoga, and lying body scans. The therapeutic relationship is enhanced when the counselor guides and participates in the mindfulness practice.
- DBT is a manualized program developed for BPD that focuses on accepting clients and encouraging them to change. DBT counselors use CBT and exposure techniques as well as paradoxical dialogue, metaphors, the devil's advocate role, and extending to help clients develop alternative coping skills.
- In DBT, the therapeutic relationship *is* also the therapy.
- ACT encourages clients to notice and accept thoughts and feelings and choose a direction and act on meeting the goal. This form of therapy emphasized acceptance and behavioral strategies.
- Neuroscience and neuroplasticity advances have advanced the efficacy of CBT, and it is vital to take the common factors perspective into consideration. Meaning, even neuroscientists found the best results when a strong therapeutic relationship was established with clients.