The Clinical Applications of Acceptance and Commitment Therapy With Clients Who Stutter

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Abstract

The field of fluency disorders has used Cognitive Behavioral Therapy (CBT) techniques to help clients who stutter manage their thoughts about stuttering by engaging in cognitive restructuring activities. In the late '90s, a new form of cognitive therapy called Acceptance and Commitment Therapy (ACT) emerged, stemming from classic CBT and Relational Frame Theory (RFT). Though there is only one documented study in which ACT is used with clients who stutter, there is tremendous clinical potential to assist clients who stutter of all ages using the six core principles of ACT (contact with the present moment, acceptance, thought defusion, self as a context, defining values, and committed actions). The core principles encourage clients who stutter to live a values-based life by assisting them in defusing adverse thoughts related to stuttering and choosing committed action behaviors and goals in accordance with their individual values through mindfulness practices. Participating in activities related to the core principles of ACT can help clients who stutter to become more psychologically flexible when managing their perceptions related to stuttering. Using ACT can further lead clients toward acceptance of all thoughts while learning to observe themselves in the present moment and make values-based choices for future behaviors.

Cognitive Behavioral Therapy and Stuttering

The field of communication disorders, specifically fluency and fluency disorders, has a long history of counseling clients who stutter using psychotherapy techniques (Blood, 1995; Botterill, 2011; Menzies, Onslow, Packman, & O'Brian, 2009; Mustofa, 2010). One of the main approaches used with PWS has been Cognitive Behavioral Therapy (CBT). The main purpose of CBT is to cognitively restructure negative thought patterns by eliminating abnormal behaviors and replacing these negative behaviors with new more favorable behavior patterns (Mustofa, 2010).

Blood (1995) developed the POWER^2 program, which is a CBT-based treatment for adults who stutter, focusing on how clients speak, think, and feel in an effort to decrease percent syllables stuttered. Blood's POWER^2 (Permission, Ownership, Well-being, Esteem of One's Self, Resilience, and Responsibility) program (partially based on the classic CBT practitioner Albert Bandura's self-efficacy model) was designed to address attitudes and feelings regarding stuttering and was tested with three clients. Some examples of cognitive restructuring techniques performed by Blood with these three clients were confrontation counseling, informational counseling, encouraging the client to share and explore thoughts related to stuttering, clarification of information discussed, and developing an empathetic ear. Blood reported finding positive attitude changes using this approach.

The Institute of Stuttering Research (ISTAR)–Comprehensive Stuttering Program (CSP) has reported the use of CBT with adolescents and adults who stutter (Kully, Langevin, & Lomheim, 2003). They reported using techniques like discussing psychoeducation related to stuttering, attitude modification with effective self-talk to support fluency skills, awareness and confrontation of cognitive-emotional concerns, and practicing communication in social skills training. These specific techniques depended on the individual client's ability to discuss emotions related to stuttering. When using CBT with less cognitively developed individuals (some teenagers), concrete language and behavior-based activities were used. When using CBT with more cognitively developed individuals (usually adults), emotions were discussed in a more abstract fashion. This program further supported the use of cognitive restructuring as a means to addressing stuttering from an emotional perspective.

Other clinicians/researchers in the field of fluency disorders have encouraged the use of CBT (Botterill, 2011; Craig & Tran, 2006; Stein, Baird, & Walker, 1996). They have used CBT to help clients create alternative thought patterns when addressing social anxiety and fears related to speaking situations. Additionally, they have used CBT to help clients connect thoughts with emotions, feelings, and external physical actions related to stuttering. Several studies exist which examined CBT as a treatment approach for clients who stutter using a CBT package created by Mattick, Peters, and Clarke (1989) and then adapted to clients who stutter by McColl, Onslow, Packman, and Menzies (2001) as noted in St. Clare et al. (2009). This adopted CBT package consisted of the following four domains: (1) Cognitive Restructuring, (2) Graded Exposure, (3) Behavioral Exposure, and (4) Attention Training. The cognitive restructuring domain taught clients to recognize irrational perspectives and structurally change anxiety-producing thoughts. The graded exposure domain allowed the client to face anxiety slowly by first experiencing low-anxiety speaking situations and subsequently working up to high-anxiety speaking situations. The behavioral exposure domain allowed clients to compare and contrast their pre-exposure thoughts with the thoughts they experienced during an exposure activity. The hope of repeated behavioral exposure was that with increased contact with anxiety-producing situations, the client's anxious thoughts and subsequent physical feelings would dissipate. Finally, the attention training domain engaged clients who stuttered in a structured breathing practice to replace negative automatic thoughts with alternative thoughts. The studies, which used the CBT package, found a positive increase in attitudes related to everyday living, an increase in the positivity of a client's reactions to stuttering, a decrease in perceived anxiety, and a decreased likelihood to be seen as possessing social phobic behaviors (Menzies et al., 2008; St. Clare et al., 2009). Collectively, the results showed strong support for the use of CBT with clients who stutter, in order to address attitudes and emotions connected to stuttering behaviors.

Setting the Groundwork for Acceptance and Commitment Therapy: Relational Frame Theory (RFT)

Acceptance and Commitment Therapy (pronounced as one word, ACT) is a clinical psychotherapy approach used to help clients address basic human suffering in the hope of

becoming more psychologically flexible with all thoughts related to suffering (Hayes, Strosahl, & Wilson, 2012; Luoma, Hayes, & Walser, 2007). ACT suggests that by connecting with the language used during painful moments, clients can accept their suffering and therefore live a fuller life (Harris, 2009.)

ACT's theoretical clinical foundation stems directly from Relational Frame Theory (Hayes, Barnes-Holmes, & Roche, 2001; Hayes & Smith, 2005). Relational Frame Theory (RFT) examines how humans manipulate and arrange thoughts and experiences with other thoughts and experiences; thus creating a network of relational frames that further facilitate the language learning process (Torneke, 2010). For example, when thinking about the word *cake*, an individual may think of birthdays, favorite flavors of cakes, and perhaps other foods and drinks that often accompany cake (e.g., milk, other pastries, chocolate). They may further rationalize perceived feelings about birthday parties (both good and bad), all stemming from the word *cake*. Thus a network of relational frames (cognitive boxes) is created by all of the thoughts and experiences related to the word *cake*.

The ability humans have to relate their thoughts and language to all experiences, including suffering, is what creates these relational frames. Relational frames rely on four fundamental cognitive behavioral principles (Ciarrochi & Bailey, 2008; "Relational Frame Theory: Implications for reducing human suffering", para 1). First, language processes can dominate over experience. The behavior of trying to control stress by avoiding it shows how humans use language to rationalize the potential benefits with very little evidence to support the reasoning. For example, "people will keep following rules even when their experiences contradict the rules" (Ciarrochi & Bailey, 2008; "Language Process can dominate over experience", para 10). Second, language changes experience, which means the use of emotional language (e.g, the use of polarizing words like "always" or "never") can change the perceptions of experiences. Third, language expands potential targets of avoidance. This principle refers to the human practice of avoiding thoughts as they relate to pain and suffering (experiential avoidance). Fourth, language processes are controlled by context. This principle suggests that external people and situations can reinforce and undermine the cognitive relations an individual creates (Blackledge, 2003; Ciarrochi & Bailey, 2008).

Relational Frame Theory is a behavioral language learning theory developed to show how internal and external behaviors can impact the ways in which humans connect experiences with chosen language. Together, RFT and CBT helped to set the foundation for the clinical application of Acceptance and Commitment Therapy (ACT) and the development of the six core principles of ACT.

Research With Acceptance and Commitment Therapy

ACT has generated a wealth of empirical research as a psychological clinical treatment in a variety of disciplines. For example, ACT has been used to decrease sexual behaviors in adolescents at STD clinics (Metzler, Biglan, Noell, Ary, & Ochs, 2000), to treat a variety of anxieties (Block & Wulfert, 2000; Dalrymple & Herbert, 2007; Zettle, 2003), to treat psychological challenges with chronic pain (Bach & Hayes, 2002; Dahl, Wilson, Luciano, & Hayes, 2005; Gaudiano, Miller, & Herbert, 2007; Twohig & Woods, 2004; Vowles & McCracken, 2008; Wicksell, Melin, & Olsson, 2007), to treat obesity (Lillis, Hayes, Bunting, & Masuda 2009; Tapper et al., 2009), and to help individuals who struggle with substance abuse (Hayes, et al., 2004; Luoma, Kohlenberg, Hayes, Bunting, & Rye, 2008; Twohig, Shoenberger, & Hayes, 2007).

Despite the variety of health and mental health related disciplines who use ACT for clinical treatment, only one study to date has utilized ACT with clients who stutter. Beilby, Byrnes, and Yaruss (2012) integrated ACT into group therapy with 20 adults who stuttered. This study used ACT in 2-hour group therapy sessions for 8 weeks. Beilby et al. (2012) incorporated the six core principles of ACT (to be discussed later in this article) with stuttering

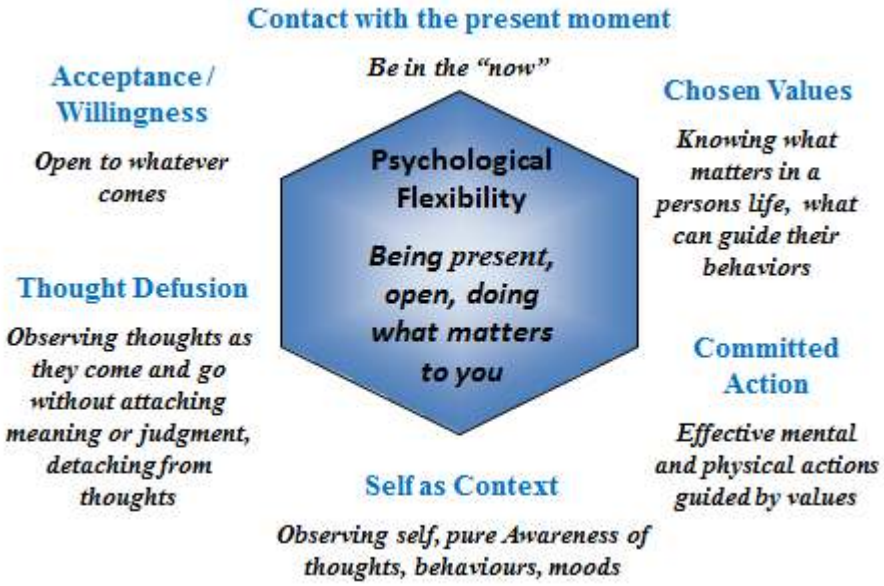
modification techniques. The results showed that "participants experienced significant reductions in the adverse impact of stuttering on their lives (OASES), an increase in their readiness for change (SOC), an improvement in their mindfulness skills (MAAS and KIMS), and a reduction in overall frequency of stuttering (%SS)" (p. 296).

The importance of the Beilby et al. (2012) study was that it encouraged the use of a psychotherapy approach to teach clients who stutter how to increase their awareness of thoughts from a neutral and nonjudgmental perspective. This differs from classic CBT, which assumes "that clinical improvement depends on changing cognitions" (Springer, 2012, p. 205). In other words, ACT does not demand that success is determined by cognitively restructuring, but rather by opening up an individual's awareness and willingness skills to all thoughts through contact with the present moment and by developing less judgmental thoughts through the creation of options-based language (to be discussed later). Furthermore, Beilby et al. (2012) opened the doors to the clinical application of ACT in the field of fluency and fluency disorders.

The Hexaflex Model: The Core Principles of ACT

Before clinicians can use ACT with clients who stutter, they must first understand each of the core principles. The six core principles of ACT are displayed as a hexagon shape, called a Hexaflex (see Figure 1). The core principles are as follows: (1) *Contact with the present moment*, (2) *Acceptance*, (3) *Thought defusion,* (4) *Self as a context*, (5) *Defining values*, and (6) *Committed actions*. These principles work in conjunction with one another, contributing to the central purpose of assisting clients in becoming more psychologically flexible and therefore living a values-based committed life. Even the acronym ACT provides meaning to the foundation of this approach. Being pronounced as one word, and not as separate letters, can remind clients and clinicians of the volitional choices (actions) taken to create a values-based existence (Ciarrochi & Bailey, 2008; Harris, 2009; Hayes, Strosahl, & Wilson, 2012).

Figure 1. The Hexaflex Model. The Core Principles of Acceptance and Commitment Therapy



Contact With the Present Moment

The first core principle of ACT involves being willing to connect with the present moment. Being present can be defined as "paying attention to your experience in this moment as opposed to being "caught-up" in your thoughts" (Harris, 2009, p. 8). However, many times

people consciously choose to avoid the present moment. The two ways people usually avoid contact with the present moment is by worrying about future events and/or ruminating about past experiences. The practice of worrying involves thinking about potential future experiences in order to avoid past mistakes, while rumination takes on the role of reviewing past experiences in order to avoid future errors. The basic tendency to worry and ruminate may be ways an individual can possess perceived control of thoughts related to the past in order to prevent mistakes from happening in the future. Wilson and DuFrene (2012) summed up the two cognitively experiential avoidance techniques of worry and rumination as "planning is important and so is reviewing the mistakes we've already made. But when planning and reviewing become full-time jobs, we miss out on a lot of things that are happening- right now" (Wilson & DuFrene, 2012; p. 16).

Clinical applications. For clients who stutter, avoidance of the present moment by judgmentally reviewing the past and/or worrying about the future can be costly (see Figure 2). The cost may include missing out on life experiences as they unfold from moment to moment. Clinicians can teach clients to connect with the present moment through a variety of meditation and mindfulness activities. It is strongly recommended that before performing any meditation activities with clients who stutter, clinicians should attend an ACT workshop or training to learn the correct ways to deliver meditation activities.

Figure 2. Dominance of Past and Future Thoughts Hexaflex

One form of meditation called Vipassana (translated from the Pali language; meaning "insight") increases conscious awareness by focusing on different scripts related to breathing. This mindfulness practice, like most, has its roots in Buddhism from Southeast Asia (Gunaratana, 2002). Vipassana teaches clients to "see things with wisdom […] without prejudice or bias" (Gunaratana, 2002, p. 47), thus allowing clients to practice observing thoughts without judgments or labels.

Breathing-focused meditation, similar to Vipassana, has been used with clients who stutter (Reddy, Sharma, and Shivashankar, 2010). Reddy et al. (2010) performed CBT in conjunction with mindfulness mediation deep breathing relaxation techniques with five adolescent and adult case study participants who stuttered. The CBT and breathing activities were found to be effective at "reducing dysfunctional cognitions and improving quality of life" (p. 52). In addition, Reddy et al. (2010) reported a decrease in stuttering moments with participants.

One way clinicians can use Vipassana meditation with clients who stutter is to lead the client through a version of Vipassana in which the client counts relaxed breathing (i.e., counting one through four, either out loud or in one's head, for each relaxed inhale and exhale). Clinicians can begin each session with this activity in order to allow the client a structured time to develop an atmosphere of openness to all thoughts. Within this opening mediation, the clinician reminds the client that thoughts may arise—thoughts about your day and thoughts related to life. The clinician can then guide the client to recognize these thoughts, allow them to come, and then to let them go, like a cloud passing in the sky. This repetitive cue of welcoming thoughts with open arms and then choosing to let them go is an important skill related to managing all thoughts. Mediation can also help clients separate themselves from the stories they have created regarding emotions in order to "return attention to the energy of the emotion itself, separating raw experience from narrative" (Silverman, 2012, p. 67–68).

Another meditation practice, used in ACT, is called "Six Breaths on Purpose" (Wilson & DuFrene, 2012, p. 24). During "Six Breaths on Purpose," clients are prompted to let their eyes fall closed and take notice of how their breathing is affecting their body (e.g., the rise and fall of their lungs within their chest, the air traveling through their nasal and oral cavity). Clinicians then ask clients to take six long and deliberate breaths before coming back to the thoughts challenging the client. When working with clients who stutter, talking about thoughts related to stuttering is often anxiety provoking. The practice of taking a break and breathing deliberately six times during a cognitively intense moment can provide a gap of stillness to stimulate a connection with the present moment without avoiding thoughts. This break also allows the client time to process the words he or she uses in those moments of anxiety. "Six Breaths on Purpose" also can assist a client in regrouping when he or she is getting off-topic. Finally, clinicians must remember the importance of debriefing with the client following each mediation practice. The clinician and client can debrief with the clinician asking the client a few follow-up questions, which allow them to discuss any thoughts related to the meditation experience (e.g., "What were you thinking about during our meditation?"). Additionally, the practice of debriefing allows the client to discuss perceptions that surfaced during meditation. Debriefing can be a powerful tool because it allows clinicians and clients to explore the moments that arose during meditation without judgment.

Meditation can be used with clients of all ages. Even young children can benefit from the practice. Clinicians can modify versions of Vipassana meditation and "Six Breaths on Purpose" for children by creating visual images displaying each step in the mediation process.

The use of mindfulness practices to guide clients in making contact with the present moment has increased in the field of fluency disorders over the past several years. Plexico and Sandage (2011) discussed mindfulness activities as a coping device to decrease avoidance behaviors. They stated that "once disengaged, an individual develops an increased clarity and flexibility that can facilitate behavioral change and improved well-being" (p. 46). Beilby et al. (2012) supported the combined use of mindfulness activities, ACT activities based on the core principles, and fluency techniques with 20 adults who stuttered in group therapy sessions. Last, Silverman (2012) recently released a book focused on ways in which mindfulness concepts can be applied to stuttering; thus, providing a foundation for continued use of mindfulness and meditative practices with PWS.

Acceptance

The second core principle of ACT is acceptance. This principle is viewed as the continuous road to discovering a values-based life (Luoma et al., 2007). Acceptance does not suggest that a client needs to like the thoughts that weigh them down or even enjoy something that challenges them (like stuttering). Instead, acceptance suggests that a client can sit with his or her thoughts and experience them as they surface without judgment.

In order to understand acceptance, it is helpful to first discuss experiential avoidance. The unwillingness to open up and be present in personal moments of suffering, in order to escape from adverse experiences, is called experiential avoidance (Hayes & Wilson, 1994).

Wilson and Dufrene (2008) reported that experiential avoidance includes memories, images, physical sensations, and behavior predispositions "that are clusters of thoughts, emotions, and urges that typically precede an act" (p. 46). When discussing experiential avoidance with clients, it can be eye opening to explore the difference between *responsibility* and *response-ability* (Hayes & Smith, 2005; p. 38). *Responsibility* focuses on the basic human tendency that accepting responsibility usually involves judgmental cognitive relations, like blame. On the other hand, accepting *response-ability* is the practice of teaching clients to create alternative choices to their reactions. In the end, clients can develop several options for how they can respond based on the choices they make. The cognitive experience of creating and taking responsibility for choices is a continued practice that when combined with mindfulness activities can assist clients in accepting suffering thoughts with decreased judgment.

Clinical applications. Clients who stutter often experience both the physical behavior of stuttering and the negative cognitive associations related to their stuttering (see Figure 2). Many of these clients who stutter often feel like they have no control over their stuttering—that regardless of what they do, a stuttering moment may or may not arise. This perceived loss of control often contributes to negative thoughts about stuttering and potential avoidance of certain speaking situations. However, even in these moments, an individual who stutters can choose to talk, choose to stutter openly, and choose to acknowledge all the thoughts related to stuttering that may arise. The choice to accept all thoughts that arise during these moments and the choice to act in a way that matches one's values can be explored by the client and clinician in a variety of ways. For example, acceptance can become easier when clients relate their behaviors and thoughts to values such as "being an honest person" or "being an open person."

Clinicians may choose to begin the session with an acceptance and willingness exercise. During this activity, the clinician and client sit facing each other. They will then stare into each other's eyes for 1 minute without talking. Typically individuals will look away, smile, laugh, or display physical symptoms of anxiety (e.g., sweaty palms, increased heart rate). Once the minute has passed, the client and clinician can discuss the thoughts and reactions that arose during the activity and from where those thoughts may have stemmed. The clinician and client can then repeat the activity with a new prompt: "We are sharing this moment. I am here for you; you are here for me." Typically this time, clients may keep eye contact and actually feel less anxious about staring into another person's eyes. Again, following this second experience the client and clinician can debrief about what they experienced; this time exploring the similarities and differences between the two activities. This experiential exercise can show clients who stutter that their thoughts and perceptions of a situation can have an impact on physical reactions and further can show them how experiential avoidance can occur. The clinician also can connect this concepts of experience avoidance and the power of thoughts with physical reactions and the client's perceptions (both positive and negative) to their stuttering – specifically the ways in which going into a situation with a certain mindset can influence the outcome of the situation.

Another activity clinicians can use with their clients, when focusing on acceptance, is one in which clients learn to carry their negative thoughts with them. Clients are first prompted to think of a challenging speaking situation with their stuttering. Then on a note card, clients are asked to write down all of the thoughts that come to mind when thinking about their stuttering and this situation. It is important that the client write down all thoughts without trying to judge them or escape from them. The client is then asked to carry the note card in his or her wallet, purse, or book bag for a week. At the next session, the clinician and client can discuss the experience of carrying this card with them all week. The central idea of this activity is that clients can face their fears and negative cognitive perceptions by being aware of them, observing them without evaluation (the act of describing thoughts), and accepting thoughts without avoiding them by carrying them every day. It can teach clients that

they can accept all thoughts related to stuttering and thus accept stuttering as a piece (a *small* piece) of them, among many other pieces (i.e., values).

Acceptance is an ongoing, day-to-day process. Therefore, many other acceptance-based activities and repetition of the activities listed above may be needed in order for a client who stutters to come in contact and touch all thoughts they'd rather avoid or escape. However, the more a client faces their negative thoughts related to stuttering, with a decreased need to judge these thoughts, the more psychologically flexible they can become.

Thought Defusion

The third core principle of ACT is thought defusion. Cognitive fusion of thoughts occurs when an individual blends "verbal/cognitive processes and direct experiences such that the individual cannot discriminate between the two" (Hayes et al., 2012, p. 244; see Figure 2). Thought defusion teaches clients to deconstruct judgmental perceptions by observing thoughts (Harris, 2009), thus separating the cognitive mind from the physical world and experiences. The goal of thought defusion is not to change or restructure cognitive behaviors, but to examine the words chosen by an individual in order to develop a more flexible approach to managing thoughts.

Clinical applications. The more humans try to suppress, avoid, or fight thoughts, the more the thoughts come back (Ciarrochi & Bailey, 2008; Sullivan, Rouse, Bishop, & Johnson, 1997). Clients who stutter may spend a lot of energy attempting to mentally avoid stuttering and get overwhelmed with the perspective of "fixing" speech (chasing fluent speech). Clinicians can help clients to explore and express all thoughts (negative and positive) about their stuttering and then connect thoughts with the client's defined values.

One way to address thought defusion is by mirroring what a client reports with verbal cues such as "I hear you saying…" or "It sounds like you are saying…". This type of feedback takes the vocabulary clients use and desensitizes the words of emotional attachment and judgment; essentially stripping the vocabulary of meaning and leaving just words. By using this skill, clinicians are not trying to restructure the cognitive language clients choose to use; instead, they are helping to facilitate clients' abilities to look at their own thoughts from an outside perspective. Thus, facilitating increased cognitive flexibility when similar thoughts may arise in the future.

Another way to address thought defusion is to assist clients in understanding the ways in which humans attach to or connect to words. First, clinicians can ask clients to think of, or say, a relatively innocuous word (e.g., milk). Next, the client is asked to list all of the associations they might have thought about connected to this word. Clinicians can discuss how the client developed these associations and thoughts related to the specific word, without being told to think about these associations specifically. By breaking down the idea of fusing to vocabulary, clients have the opportunity to experience an unconscious cognitive behavior on a conscious level. This can increase the client's awareness of the words they may use daily to explain experiences. Through continued practice of thought defusion, a client who stutters can then defuse and discuss thoughts related to more personal challenges and suffering related to stuttering; thus, learning to break down binding negative perceptions which may perpetuate inflexible actions, like avoidance of speaking situations.

A third way clinicians can aid in the thought defusion process with clients who stutter is to teach them about the use of *word prisons* (Wilson. 2012). Word prisons demonstrate the power that words can have on thoughts and actions. A few examples of word prisons associated with cognitive fusion, as discussed by Wilson (2012), are the following: should, shouldn't, must, can't, always, hard, impossible, right, wrong, fair, unfair, but, everyone, no one. With repeated use of word prisons, clients may cognitively set themselves up for failure. This idea of fusion with words was supported by Blood (1995) who reported that "global feelings and attitudes (use of the words like ALWAYS, NEVER, SHOULD HAVE, EVERYONE) may not be realistically describing the events" that clients who stutter experience" (p. 177). For

clients who stutter, examples of fused thoughts could be "I ALWAYS stutter" or "EVERYONE is bothered by my stuttering." The use of inflexible words like "always, never, cannot, but" close off psychological flexibility (options); thus, influencing external behaviors related to experiential avoidance. Clinicians can introduce more flexible words like "and, can, try" in hopes of teaching clients to avoid using *word prisons* and to increase psychologically flexible behaviors. Again, the goal of thought defusion is to help clients create optional thoughts related to stuttering with simple adjustments in the cognitive vocabulary they use.

Self as Context

The fourth core principle of ACT is *self as context*. People often associate themselves with expressions in the form of labels, such as "I'm smart" or "I'm dumb." Giving oneself a label is relating to content, not *context*. The most common reason people may define themselves in terms of content, instead of context, is to avoid suffering-based thoughts (negative perceptions) in order to fuse with cognitive behaviors which may be explicit or implicit (Wilson & DuFrene, 2008). These avoidance actions can be perceived as a sense of security, which is a basic survival instinct to protect oneself. On the other hand, self as *context* refers to the *pure self* or the *observing self*. The practice of observing self occurs when a client can create external perspectives of one's self without judging thoughts (Harris 2009; Hayes & Smith, 2005; Wilson & DuFrene, 2008). This unique perspective allows clients to let go of emotions and feelings in order to examine the words they use to create their fused perceptions. Facilitating a self as context perspective involves guiding clients through mindfulness activities. In doing so, clients can see the thoughts they cling to, or are fused with, by coming into contact with emotions, feelings, and changes in body state observations. The clinician then can begin a conversation centered on how the client sees himself or herself and then guide the client in recognizing problematic perceptions while seeing other options of a given thought (Bowden & Bowden, 2012).

Clinical applications. Clients who stutter may use self as content behaviors to avoid facing the reality of stuttering. For example, a client might say "I stutter. That's all I do. Because of my stuttering, I do poorly in school and never meet new people," (see Figure 2). Thoughts like this may create a personal connection to stuttering as a permanent fixture to the client. Furthermore, this type of merging of content related to stuttering and creating rules of blame (e.g., "makes me do poorly in school and never meet people") perpetuates the negative fusion between the client and content.

Clinicians can work with clients who stutter to see themselves as *context* and not as content. One activity helpful with clients who stutter to facilitate self as *context* is to have the client explore their role as a communicator. This can be done in a variety of ways. When the client first arrives at a therapy session, the clinician can shake the client's hand and introduce himself or herself to the client. The clinician can observe the client's verbal and nonverbal language during this process. Following the introduction, the clinician and client can discuss what makes a powerful communicator. During this discussion, the clinician may model several introductions to help contrast a powerful and nonpowerful communicator. A nonpowerful communicator may look away and have a weak handshake. A powerful communicator, on the other hand, will look into the conversational partner's eye (even during a stuttering moment) and will have a firm handshake. The clinician and client can further explore attributes of powerful communicators. Chmela and Campbell (2012) used the acronym A.C.E. (Assertive Confident Effective) to define a powerful communicator. Clinicians can list these words on the board, ask the client define them, and then discuss how they relate to communication. This simple task allows the client to step outside of themself and observe their behaviors while at the same time discussing their cognitive perceptions of a powerful communicator.

Once the client has a solid definition of what it means to be a powerful communicator, the clinician can ask the client to create a list of his or her "conversational boxes" (Chmela & Campbell, 2012). A conversational box consists of the conversational partners, the setting of the conversation, and the topic of the conversation (e.g., answering a question in math class).

The client and clinician then can compare and contrast the various conversational boxes and determine the conversational boxes in which it may be more difficult to be a powerful communicator. The client then can practice communicating in these various boxes in order to increase communication confidence and success, thus potentially defusing any negative thoughts related to stuttering and creating cognitive flexibility by seeing themself as an outside observer.

These exercises can assist the client in separating themselves from thoughts like "I am a bad communicator because of my stuttering" (self as content) and recognizing that they can be a powerful communicator regardless of whether they stutter (self as *context*).

Defining Values

The fifth core principle of ACT is defining values. In order to live a values-based life, it is helpful for clients to develop an understanding of the behaviors that truly represent them. Values can be defined as "chosen actions that can never be obtained as an object, but can be instantiated (represented) moment by moment" (Luoma et al., 2007, p. 21). Values are "constructed, global, desired, and chosen life directions," which can be expressed as adverbs or verbs (Luoma, et al., 2007; p. 131). Presenting values as verbs perpetuates the concept of taking action. Some examples of values might be treating people kindly, honestly talking with people, or compassionately listening to other people speak.

When teaching values, it is important for clinicians to instill the notion of *choice*. *Choice* refers to the behaviors an individual can perform based on nonjudgmental thoughts and unexplained/unjustified actions as compared to judgmental perceptions. ACT differentiates *choices* from *decisions* in the following way. *Decisions* are performed due to reasons. Reasons are created by processing positives and negatives about a given behavior which then support, or justify, the behavior (Hayes, et al., 2012). *Choices* may still be based on past experiences; however, these behaviors involve little thought, and are performed almost implicitly without the justification of pros and cons to determine perceived appropriateness. Therefore, they are more likely to be connected with a person's values.

Clinical applications. There are several activities clinicians can use when helping clients to define values. The first values-based exercise is called the Eulogy Exercise (Hayes, Strosahl, & Wilson, 1999). This activity involves a client visualizing the closest person to them and then writing down/stating aloud what that person would say at the client's funeral. In general, clients tend to write down values (e.g., "He was a kind person" or "She was a caring friend" or "He was a compassionate individual"). Discussing these thoughts and then talking about how values can become lost when lists of reasons, based on judgmental perceptions, influence decisions can help clients consciously define values. By helping clients to become conscious of their values as actions, a clinician can relate any decision or choice to those identified values. This practice can be a powerful tool of growth for clients when addressing the suffering in their lives related to stuttering. After a client has identified values, the clinician and client then can discuss if they have been living by those values in their daily life behaviors, including when they participate in a variety of speaking situations.

Another way to address values with clients who stutter is to create a *Values Tree* (Palasik, Ladner, Reeves, & Wood, 2011; see Figure 3). The first step to this activity is asking the client to draw a tree on a piece of paper (any size paper works; however, poster board size seems to be the best, as it allows plenty of room to keep adding information). Once the tree is created, the clinician can explain that the branches of the tree represent the behaviors and qualities that people can see about the client from the outside (external behaviors). Secondly, the roots of the tree are the client's values (these are sometimes not visible to the outside world). These roots are the foundation of the tree, thus an extremely vital part of each person. Finally, the trunk of the tree signifies all of the thoughts (cognitive behaviors) related to external behaviors and values. When creating the trunk of the tree, the client and clinician can generate a wealth of dialogue by defusing language and observing experiential avoidance

behaviors along with breaking down judgmental reasons that undermine values in order to create more automatic *choices*.

Figure 3. A Sample Values Tree

Another values-based activity is called a Valued Living Questionnaire (Wilson & DuFreen, 2008; Wilson & Murrell, 2004; Wilson, Sandoz, Kitchens, & Roberts, 2010). This questionnaire asks clients to rate the importance of 10 values on a scale of 1 to 10 (1="Not at all important" to 10="extremely important"). Values on this questionnaire consist of: family, intimate relations, parenting, friends/social life, work, education, recreation/fun, spirituality, citizenship/community life, and physical self-care (diet, exercise, sleep). Clients are then asked to rate how consistent their behaviors have been in relation to their values for a given week with another 10-point scale (1=not at all consistent, 10=completely consistent with my values). This tool can be used continuously to measure the fluctuations of perceptions for clients who stutter in relation to chosen speaking situations. Finally, this activity can transition nicely into the final core principle of ACT—committed actions.

Committed Actions

The final core principle of ACT is committed actions. This core principle is the summation of becoming consciously aware of both internal behaviors (thoughts) and external behaviors. This principle also encompasses thought defusion and acceptance practices by helping the client to observe all behaviors and develop attainable goals in accordance with their defined values. When discussing goals with a client, it is important that the goals are all client-specific, client-guided, and individualized according to what the client wants and values they have defined in previous therapy sessions. Because ACT stresses the concept of choice with respect to behaviors, developing values-based goals allows clients to take ownership of their actions related to chosen goals (Hayes et al., 2012). When clients feel a sense of ownership over their therapy, they may feel more involved and motivated to continue to move forward in therapy.

Clinical applications. One way to facilitate committed action goals with clients who stutter is by using Commitment Scaling (Wilson & DuFrene, 2008). Commitment scaling is the

verbal process of discussing goals. The client starts off by brainstorming how he or she wants to connect values with actions (e.g., engaging in speaking situations). The clinician may facilitate this brainstorming process by using a mindfulness activity, like meditation, to help the client who stutters focus on a personally sensitive or challenging speaking situation. The client then can construct a major committed action followed by the smallest possible committed action. The smallest committed action does not have to be anything the client or others can see externally. It can be something as simple as a mental commitment. The clinician can explain to the client who stutters that *committed actions* are moment-to-moment commitments to living, and not a promise for the client's future to be better or worse (Hayes et al., 2012). Once the client has established a major committed behavior and a small committed behavior, the clinician can ask the client to discuss any goals (actions) between the these polar opposite committed behaviors. This discussion can generate a continuum of committed actions (e.g., a small committed behavior might be to possess nonjudgmental perceptions regarding going through a drive-thru to order fast food, whereas a major committed behavior might be to go to a drive-thru and order a full meal). By developing a variety of committed action goals on a continuum, the client fosters the development of their observational skills and mindfulness practices, which may help to manage thoughts related to stuttering moments from past experiences.

For clients who stutter, developing committed actions with respect to speaking situations could be used in conjunction with a hierarchy of challenging stuttering situations. For example, clients who stutter may choose to create values-based committed goals directed at speaking situations with dating. They may create small committed goals, like smiling and saying "hi" once a day for a week, and major committed goals like generating a conversation or asking a person out on a date two times a month. Again, after the small and large committed actions goals are developed, other committed action goals between the small and large goals can be discussed to provide a variety of behavioral options. This same process can be addressed with all speaking situations on a hierarchy for a client who stutters. It is important that clinicians encourage any attempt toward a goal and keep returning to a client's values upon completion of any committed actions; thus, reinforcing the idea of action in connection with living a values-based life.

The process of choosing and moving forward with committed values-based actions is not always as simple as talking about the actions. Clients may associate the idea of choosing actions with the need to experience a deep emotional struggle. However, deep pain and suffering does not have to be present to make a committed action choice. When committed actions are chosen based on values, those choices often become more automatic (with less cognitive pushing and pulling). A common metaphor clinicians can use when discussing chosen behaviors (both internal and external) is the chessboard metaphor (Hayes et al., 1999; Hayes et al., 2012; Luoma et al., 2007). This metaphor starts out by the clinician explaining that a chess board is used for two things—moving pieces and holding pieces. Every thought and action is another piece on the chess board. Clients can choose to take action with each piece or hold on to the piece. The problem is that a chess board can only hold so many pieces before it overflows. This metaphor further stresses the principle of self as context and being willing to observe all behaviors along with choosing committed actions. Furthermore, the chessboard metaphor can show a client that they have the control of the chess pieces (thoughts), instead of the thoughts having control of the client.

One of the challenges to discussing goals and values-based committed actions is that clients who stutter may assume that by meeting goals they will have a better, happier, and more successful life; in essence, a life void of the suffering they previously experienced due to their perceptions of stuttering. However, this may not be the case. It is important that the client understand that by creating goals, he or she has the potential of living a life more in line with who he or she is at the core (values). The objective of moving toward committed action

goals is not to avoid negative thoughts about stuttering, it is to continue to grow and evolve toward living a life in line with values.

Conclusion

Acceptance and Commitment Therapy (ACT) has great potential in the field of fluency disorders. There is only one research study related to the use of ACT with clients who stutter; however, strong historical support exists for the use of cognitive behavioral therapy with clients who stutter. Acceptance and Commitment Therapy has the potential to assists clients who stutter in developing a more psychologically flexible perspective about their stuttering behaviors (both cognitively and physically), and in doing so, guide them in developing the opportunity to change how they manage their speech. Similar to CBT, ACT may not directly influence stuttering severity; instead, ACT may impact the client's ability to positively cope and manage stuttering (both physical and cognitive perspectives related to stuttering) and possibly improve implementation of stuttering techniques designed to reduce stuttering severity and increase fluency.

The six core principles of ACT (contact with the present moment, acceptance, thought defusion, self as a context, defining values, and committed actions) can serve as a means of counseling clients of all ages by teaching them a practical way of living everyday life. More research is needed, focusing on the use of ACT with clients who stutter; however, the vast successes of ACT in other mental health and health-related fields encourage applying ACT with clients who stutter. According to Bernstein-Ratner (2005), the reliance on psychology and cognitive behavioral related therapies can be seen as an "endorsement of wisdom that they can be used to combat speaking fears and anxieties to stuttering" (p. 178). This endorsement, along with the few articles written about ACT and CBT with clients who stutter, can provide the field of speech-language pathology with confidence in moving forward with this form of psychotherapy in order to perform empirical testing pertaining to the efficacy of ACT for clinical use with clients who stutter.

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