BEHAVIORAL THERAPIES

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ANXIETY AND RELATED DISORDERS

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Behavioral Therapies

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Behavioral therapy for anxiety disorders offers advantages for both therapist and client. Behavioral techniques are research-based. Thus, as both therapist and client consider using a behavioral intervention, they have some assurance of the effectiveness of the treatment approach. Also, except for the most extreme cases, these interventions involve short-term therapy. Given the constraints on treatment length imposed by managed care and the increasingly limited resources of publicly funded mental health clinics, the availability of an effective, brief treatment is a real plus.

EXPOSURE THERAPY

Exposure therapy is the treatment of choice for most phobias and obsessive-compulsive disorder (OCD). Also, it may be useful in the treatment of post-traumatic stress disorder (PTSD; Foa, Rothbaum, Riggs, & Murdock, 1991; Keane, Fairbank, Caddell, & Zimering, 1989). Exposure therapy consists of exposing the client to exactly those stimuli he or she fears. It is an extremely effective approach, which may be flexibly applied to a variety of

feared situations.

Treatment Parameters

Imaginal vs. In Vivo Exposure

In general, direct exposure to the feared stimuli is more effective. However, imaginal exposure has a strong place in the treatment of anxiety disorders. It is a useful tool when it is not practical to arrange for *in vivo* exposure. For example, it would be quite expensive for a person who fears flying to purchase multiple airplane tickets to use for *in vivo* exposure to flying. A more economical approach would be for the therapist to provide several sessions of imaginal exposure to be followed by an actual airplane flight. In addition, imaginal exposure often affords the only means to provide exposure treatment for individuals with PTSD.

Imaginal exposure also has a key role in the treatment of OCD (Foa, Steketee, Turner, & Fischer, 1980). In many of these cases, it is important that the client be exposed not only to the feared stimulus, but also to the anticipated consequences of dealing with the stimulus. Frequently, imaginal flooding is the only ethical and practical means of providing such exposure. For example, an OCD checker may fear that leaving the house without checking to be sure that all electrical appliances are switched off will result in fire. In such a case*, in vivo* exposure and response prevention would be used

to help the client leave home without checking. Imaginal exposure would be used to facilitate habituation to excessive guilt for having behaved negligently and allowing the house to be destroyed.

Therapist-Assisted vs. Independent Practice

In vivo exposure is a time-consuming undertaking. For this reason, therapists may consider implementing exposure via homework assignments. There are indications from research in the treatment of agoraphobia and OCD that successful exposure may be accomplished with a minimum of therapist time (Emmelkamp, van Linden van den Heuvell, Ruphan, & Sanderman, 1989; Ghosh & Marks, 1987). However in clinical practice, therapists may anticipate treating more severely avoidant clients whose initial level of motivation is not optimal. In such cases, exposure treatment will probably be more successful if the therapist accompanies the client during the exposure exercises. The client should also complete exposure homework between therapist-assisted sessions.

Frequency of Sessions

Early in the history of exposure treatment, it appeared that clients benefited more from intensive scheduling of sessions (Foa, Jameson, Turner, & Payne, 1980). In a typical protocol, the phobic client would undergo ten exposure sessions, conducted daily except for weekends. Results of recent

studies, however, (Chambless, 1990; Emmelkamp et al., 1989) indicate that more gradual spacing (typically, twice weekly) of sessions is just as effective. Therefore, it would seem that, depending on scheduling constraints, either approach may be considered.

Conducting in Vivo Exposure

Prior to undertaking exposure, the therapist will want to meet with the client several times to assess the nature and extent of the fears and the ways in which they interfere with daily functioning. It is helpful if the therapist and client work together to establish a hierarchy of feared situations that will be used for exposure. It is often useful to instruct the client in the use of Wolpe's (1973, p. 120) Subjective Units of Discomfort Scale (SUDS), where 0 represents the complete absence of anxiety and 100 signifies the most extreme terror. Exposure typically begins with a situation to which the client assigns a SUDS score of 50 and progresses systematically to items in the 100 range. However, if there is an activity that would make a major difference in the client's quality of life, the clinician may consider using that situation earlier than indicated by the hierarchy in order to boost the client's morale.

A hierarchy for a client having panic disorder with agoraphobia might consist of visiting a large shopping mall accompanied (50 SUDS), driving on residential streets alone (55 SUDS), entering a shopping mall alone (60

SUDS), driving on city streets alone (70 SUDS), driving on expressways accompanied (85 SUDS), and driving on expressways alone (100 SUDS). If this case involves a mother who desperately wants to be able to pick her child up from school, the therapist should consider starting with having her drive on neighborhood streets alone, then gradually progress to entering shopping malls alone and driving on expressways alone.

Therapist and client should allow at least 90 minutes per exposure session, as it is important for the anxiety to attenuate before the client leaves the situation. A client fearful of expressway driving, for example, might start with driving just one exit length repeatedly until habituation occurs. Then, the increments in distances traveled on expressways would be increased and, again, practiced until habituation occurs. The client should be instructed to focus on the stimuli associated with the situation. For exposure to be maximally effective, the client needs to remain mentally aware of the stimuli confronted.

Sometimes clients have a habit of breathing rapidly when made anxious by their phobic stimuli. They may experience symptoms of hyperventilation syndrome (e.g., heart palpitations, dizziness, and dissociation) that compound their anxiety and interfere with habituation. These clients should usually be instructed in respiratory control. An exception to the rule would be some panic-disordered clients who respond fearfully to interoceptive cues. For

these clients, the therapist may need to repeatedly guide them in hyperventilating for several minutes at a time to permit habituation to the feared body sensations to occur.

The therapist providing therapist-assisted exposure needs to be flexible about his or her role during treatment sessions. In some situations, the therapist needs to be very actively involved. For example, Ost, Salkovskis, and Hellstrom (1991) view therapist's modeling of target behaviors (e.g., touching animals in the case of an animal phobic) as an integral part of the treatment of simple phobias. Therapist modeling is also helpful for work with obsessive-compulsives who have contamination fears and who may be encouraged to touch a particularly distressing object by the therapist's example. Otherwise, the therapist should concentrate on encouraging the client to undertake the exposure, finding ways to break the exposure down into smaller steps if necessary, and reinforcing the client for following through. In some cases, however, the therapist will need to initiate the exposure session for the client, then fade him or herself out of the picture at a key point, and return at a set time. Examples are work with agoraphobics who fear going places alone and obsessive-compulsive checkers who are relatively calm about not checking if another responsible adult is present.

Conducting Imaginal Exposure

Setting the Stage

Before embarking on imaginal exposure, the therapist must consider the physical setting where exposure will take place, scene construction, and the client's ability to imagine phobic stimuli with the attendant affect.

The basic setting for imaginal exposure is a quiet room, prior arrangements to prevent interruptions, and a soft recliner or sofa for the client. A session or two should be scheduled for the purpose of obtaining information regarding the hierarchy of fears, the specific fear stimuli, and the sensory cues that the client associates with the feared situations. For example, in planning imaginal exposure for a checker with the obsession that he or she is killing pedestrians when driving, the therapist will want to know how the interior of the car feels and looks to the client and if there are any odors associated with it. The therapist will also need detailed information about the routes the client typically drives. Do these paths involve city driving with brick buildings and pedestrian crosswalks? Or does the route consist of interstate highways with construction workers walking along the shoulders?

Sample Imaginal Exposure Scene

"You are now in your car driving on a country road. Notice the blue vinyl of the car seats. You hear the vinyl squeak as you shift the way you are sitting. You have your hands around the blue plastic steering wheel. It feels cool in

your hand. You feel the pressure of your foot against the gas pedal. You are on the road, surrounded by nothing but wide open blue skies and the colorful trees lining the road.

"Oh no! As you look up, you see an orange sign on your right. As you get closer, you can make the black letters out against the orange sign, 'Caution. Road work ahead.' Your heart is beating faster. Now you see the big orange and white striped barrels. Beyond them are piles and piles of brown earth, rusty orange bulldozers, and several men. You want to turn back, to be as far away as possible from them. You are fighting the impulse to flee the scene because you are trying so hard to follow your therapist's instructions to face your fears.

"You are forcing yourself to drive by the road workers. You are looking at them now. You see them in their yellow hard hats. They are all wearing blue denim pants, work boots, and flannel shirts. Some are holding shovels in their hands. There seems to be a ditch just beyond where they are standing. You feel sick. Why do they have to stand so close to the highway?

"The dread is washing over you. You feel *sure* that you hit the one with the black hair sticking out of the hard hat. You are almost certain that you heard the crash of the metal of your car hitting his shovel. You felt the thud of the car hitting his body. You are thinking, 'No, it didn't happen. I've gone

through this image a thousand times. It has never happened.' You force yourself to drive on. You want desperately to look back, to make sure everything is all right. But your therapist has instructed you to totally give up checking. But this seems so real.

"You pull onto the shoulder of the highway. Did it happen or not? The wish to know is overpowering. You push aside your therapist's instructions. You are now looking in your rear view mirror. You see a swarm of yellow hard hats gathered together looking down into the ditch. You feel sicker. This really could be real. You step out onto the road shoulder and walk to the gathering of men. Their angry faces are turned toward you.

"As you get closer, you can see into the ditch. You see the limp body in the ditch. Your stomach flip flops. Your legs feel like lead. You want with all your being for him to be alive. You *have* to know. You jump in the ditch and grab his wrist. No, no pulse. You see the trickle of red blood coming from his mouth. You put your palm under his nose. No breath. His chest is not rising. His brown eyes are open, with a fixed, blank stare. Now, the doubt is gone. You know for sure that you have killed a man. Your negligence caused this. You were out of control. Your worst fear finally happened."

This session should continue with variants of the last part of this scene being repeated until habituation occurs. Imaginal exposure sessions are

usually lengthy, often 90 minutes to 2 hours, in order to permit habituation. For homework exposure, the client is given a tape of the scene to be listened to daily.

RESPONSE PREVENTION

Response prevention is an important component of treatment for OCD. It consists of blocking the performance of the compulsive rituals. While exposure is the treatment of choice for OCD, it must be used in tandem with response prevention for maximum efficacy (Foa, Steketee, & Milby, 1980). The performance of rituals has a powerful reinforcement value in OCD. If the purpose of rituals is conceptualized as reducing anxiety aroused by obsessive material, it is clear that their continued performance would interfere with the natural habituation that usually occurs with exposure therapy.

Behavior therapists have implemented response prevention both in extremely strict and in more graduated ways. In the early days of behavior treatment for OCD, the rituals were immediately and completely blocked. For example, a person with a washing compulsion would be limited to one 10-minute shower per week and absolutely no handwashing. A checker would similarly be prohibited from carrying out checking of any sort. Treatment was often conducted in a psychiatric hospital where staff closely monitored compliance with response prevention.

Exposure and response prevention are now frequently conducted on an outpatient basis, and response prevention instructions parallel the level of exposure the client is undergoing. For example, the exposure hierarchy for someone who washes due to AIDS fears might consist of doorknobs, shopping cart handles, and handrails at the low end; public restrooms, physician and dental offices at the moderate level; and AIDS clinics and blood at the high end. The response prevention protocol for such a client would typically consist of limiting showering to once every two days and eliminating handwashing. However, allowances for handwashing might be made if the client came in contact with a contaminant at a level on the exposure hierarchy that had not yet been reached. For example, a client who was dealing with low level contaminants in the hierarchy but then visited a public restroom, would be allowed a 5-second handwash, provided he or she immediately touched public handrails or doorknobs to recontaminate with low level stimuli.

Not all clients with OCD are capable of adhering to response prevention guidelines on their own. This treatment is extremely stressful and requires a great deal of motivation. If treatment is being conducted on an outpatient basis, it is often helpful if the client has a relative or friend who can supervise compliance with response prevention. However, clients for whom the rituals are ego-syntonic, who are under an inordinate amount of stress from other sources, or whose OCD is exceptionally severe, may need to have their intervention take place in a hospital where response prevention can be more

closely supervised.

PROGRESSIVE RELAXATION

In the 1920s, Edmund Jacobson, a physiologist, published his observations that deep muscle relaxation was an effective treatment for various anxiety disorders (Jacobson, 1974). Since then, behaviorally oriented clinicians have adopted variations of progressive muscle relaxation into their repertoires. Although relaxation alone has been found beneficial in the treatment of some anxiety disorders, it seems to be even more helpful when incorporated into a multicomponent intervention, such as systematic desensitization, applied relaxation, or anxiety management training. Procedures for progressive relaxation will be discussed in this section, followed by presentations of these multicomponent treatments.

One commonly used method of relaxation training was developed by Bernstein and Borkovec (1973). It consists of training the client to attend to, tense, and relax, what are initially treated as 16 separate muscle groups of the body. Once the client has mastered this step, the muscle groups are reorganized, at first into 7 groups, then into 4 groups. The client ultimately learns to quickly identify and release any sign of muscular tension throughout his or her body, as a whole.

Preparations

As was the case with imaginal exposure, an appropriate setting is important for effective relaxation training to occur. The therapist should use a quiet room with dim lights. A soft recliner, designed to completely support one's body, should be provided for the client. He or she should be advised beforehand to wear comfortable, loose-fitting clothing. Glasses, watches, and shoes should be removed before the training begins.

First Phase: 16 Muscle Groups

Relaxation training begins with the therapist and client agreeing upon a signal the therapist may use to indicate when tensing and relaxing should take place. The therapist then instructs the client to close his or her eyes and to tense the dominant hand and forearm by making a fist at the signal. The therapist waits for 5 to 7 seconds to pass before signaling for the tension to be released. During this interim, the therapist calls attention to the feeling of tension. Bernstein and Borkovec (1973) suggest that the therapist make a brief comment such as, "Feel the muscles pull, notice what it is like to feel tension in these muscles as they pull and remain hard and tight" (p. 26). Upon giving the signal to relax, the therapist similarly directs the client's attention to the sensation of releasing the tension, to the contrast between tension and relaxation. The process of tensing and relaxing the dominant hand and forearm is then repeated.

Each muscle group receives at least two cycles of tensing and relaxing. The therapist proceeds to the next muscle group once he or she is confident that complete relaxation of the previous one has taken place. Each of the following 16 muscle groups are attended to in this way:

1. Dominant hand and forearm
2. Dominant biceps
3. Nondominant hand and forearm
4. Nondominant biceps
5. Forehead
6. Upper cheek and nose
7. Lower cheek and jaws
8. Neck and throat
9. Chest, shoulders and upper back
10. Abdomen or stomach
11. Dominant thigh
12. Dominant calf
13. Dominant foot

14. Nondominant thigh

15. Nondominant calf

16. Nondominant foot

After this entire network of muscle groups has been relaxed, the therapist conducts a review to ensure that the client has been able to relax the entire system. The client is asked to signal if there is even a little tension anywhere, and problem areas receive additional tensing and relaxing. The client leaves each session with the homework assignment to repeat this process twice per day.

Second Phase: 7 Muscle Groups

Once the client has mastered deep relaxation by focusing on each of the above 16 muscle groups, the therapist initiates relaxation training with the following 7 muscle groups:

1. Dominant arm and hand

2. Nondominant arm and hand

3. Facial group

4. Neck and throat

5. Chest, shoulders, upper back, and abdomen

6. Dominant leg and foot

7. Nondominant leg and foot

Third Phase: 4 Muscle Groups

When the client can reliably accomplish deep relaxation using 7 muscle groups, training with just these 4 muscle groups is begun:

1. Both arms and hands

2. Face and neck

3. Chest, shoulders, back, and abdomen

4. Both legs and feet

Final Touches

Once the client has mastered progressive relaxation, the next step is graduation to relaxation through recall. The client is instructed to notice any existing feelings of tension, to remember how those areas felt when relaxed, and to relax them.

After relaxation through recall has been practiced several times, the client is trained in differential relaxation. The client is instructed to go about his or her day noticing which muscles are unnecessarily tense, given the tasks

being performed. For example, sitting at a desk requires a certain amount of muscle tension in the neck, back, and abdomen. However the facial muscles, arms, hands, legs, and feet could be completely relaxed. The client is advised to practice releasing the unnecessary tension from these muscle groups. Homework is assigned to practice differential relaxation while engaged in differing activities, some requiring more muscle tension and movement than others.

Relaxation Induced Anxiety

Some chronically anxious clients are not initially amenable to treatment via relaxation training. These are people for whom the process of relaxing induces heightened anxiety or even panic attacks (Heide & Brokovec, 1984). It is speculated that, for them, the process of releasing muscular tension is associated with a frightening loss of control. An appropriate intervention for such clients is graduated exposure to relaxation, with emphasis on their control over how fully and when they relax.

SYSTEMATIC DESENSITIZATION

Systematic desensitization, a combination of relaxation and mild, graduated exposure, has long been used as an intervention for phobias (Wolpe, 1973) and more recently has become one of the treatments for PTSD

(Bowen & Lambert, 1985).

Systematic desensitization was once thought to be based on the principle of reciprocal inhibition. That is, the experience of anxiety was thought to be inhibited by the experience of a competing response, such as relaxation. However, it is probably more likely that systematic desensitization works by (a) enhancing imagery, enabling the client to process anxious stimuli more completely, and (b) reducing arousal to allow more rapid habituation.

As with other forms of exposure treatment, desensitization may be conducted imaginally or *in vivo*. However, if imaginal treatment is provided, the client usually receives homework instructions to conduct *in vivo* desensitization to stimuli that have been dealt with imaginally in the office sessions.

Procedures

In implementing systematic desensitization therapy, the first several sessions are devoted to training the client in progressive relaxation and to constructing the hierarchy of anxiety-inducing material to be used for desensitization. Once the client is able to relax quickly and deeply, sessions are used for desensitization.

Desensitization conducted imaginally begins with the client in a relaxed state. Starting with material very low on the hierarchy, the therapist introduces anxiety-arousing material. The therapist briefly describes a scene intended to generate slight anxiety and instructs the client to really be in the situation. The therapist lets the client stay with the image for 5 to 7 seconds, then gives instructions to turn off the scene and asks for the level of SUDS generated by the image. The client is instructed to resume relaxation, and, after allowing 20 to 30 seconds for him or her to do so, the therapist either returns to the first scene or introduces the next one. The therapist moves on to the next scene in the hierarchy, only after the previous scene elicits 0 SUDS. Some scenes will, therefore, be presented only once, whereas others may need 10 repetitions paired with relaxation.

Case Example

This hypothetical case example involves systematic desensitization of a young woman presenting with social phobia, specifically fear of public speaking. As is typical with many speech phobics, this young woman expects her audience to be critical of her. It is especially difficult for her to write or otherwise perform a task in front of others because she fears that her hands will tremble and cause her to fumble.

Hierarchy

The following is an abbreviated version of a hierarchy for this speech phobic:

1. Making a 5-minute speech to a group of three people whom she knows; she is sitting; faces are friendly.

2. Making a 5-minute speech to a group of three people whom she knows; she is standing behind a podium; faces are friendly.

3. Making a 5-minute speech to a group of 10 people whom she knows; she is standing behind a podium; faces are friendly.

4. Making a 10-minute speech to a group of 10 people whom she knows; she is standing behind a podium; faces are friendly.

5. Making a 10-minute speech to a group of 10 people whom she knows; she is standing, no podium; faces are friendly.

6. Making a 10-minute speech to a group of 10 strangers; she is standing, no podium; faces are friendly.

7. Making a 10-minute speech to a group of 10 strangers; she is standing, no podium; faces are neutral.

8. Making a 10-minute speech to a group of 10 strangers; she is standing, no podium; faces are bored.

9. Making a 10-minute speech to a group of 10 strangers; she is standing, no podium, faces are critical.

10. In addition to 9, she must write a brief outline on the chalkboard in front of the audience.

11. In addition to 9, she must write an extensive outline on the chalkboard in front of the audience.

12. While she is writing the extensive outline in front of the critical audience, her hand trembles.

13. While she is writing the outline in front of the critical audience, her hand trembles, causing the chalk to break.

Desensitization

This client would first receive instruction in progressive relaxation until she was able to relax through recall. Information for hierarchy construction would be simultaneously gathered.

In the first desensitization session, the client would be given instructions regarding the finger signal to acknowledge scene induction and regarding the use of SUDS. She would then be allowed 5 minutes in which to completely relax.

The therapist would introduce the first image, "You are seated with your three acquaintances in front of you. You are speaking from your notes. As you look at your audience of three, you see them smiling. See them now." The client would raise her left index finger to indicate that she had the image.

After 7 seconds, the therapist would ask for a SUDS report, then advise the client to focus on relaxing. If the SUDS score were any higher than 0 the therapist would repeat the image, ask for a second SUDS report, and reintroduce relaxation. The therapist would present the second scene on the hierarchy only after a SUDS score of 0 was attained.

The same strategy would be used as therapist and client worked their way up the entire hierarchy. This intervention would probably require a course of ten 45-minute desensitization sessions. The client would also be instructed to engage in graded *in vivo* desensitization to the situations in her hierarchy. For example, she could make use of opportunities at her place of work to present reports to co-workers, gradually inviting an increasingly larger number of them to sit in on her presentations.

APPLIED RELAXATION AND ANXIETY MANAGEMENT TRAINING

Applied relaxation (AR) and anxiety management training (AMT) are different terms used to describe very similar treatment processes. Like systematic desensitization, AR and AMT involve a combination of exposure and relaxation training. Unlike systematic desensitization, they stress the use of relaxation as an active coping mechanism. Their purpose is not to extinguish anxiety directly, but to give the client a sense of empowerment in dealing with anxiety. Anxiety is thought to fade secondarily to the client's

increased confidence in his or her coping ability.

AR or AMT is the recommended treatment for generalized anxiety disorder (Butler, Cullington, Hibbert, Klimes, & Gelder, 1987; Suinn, 1990; Tarrier & Main, 1986). These procedures are also helpful in the treatment of some simple phobias (Ost, Lindahl, Sterner, & Jerremalm, 1984), panic (Ost, 1988), and social phobia (Jerremalm, Jansson, & Ost, 1986).

There are several variations in the way in which different professionals conduct what they call either AR or AMT. Ost (1987) recommends that the following be included in the AR treatment package:

1. Rationale that applied relaxation is a skill, requiring practice, the goals of which are to be able to relax quickly and to counteract anxiety in any situation.

2. Training in identifying early anxiety signals

3. Progressive relaxation

4. Relaxation through release-only: The client no longer alternates between tension and release, but relaxes the muscle groups directly.

5. Cue-controlled relaxation: Relaxation is conditioned to exhaling.

6. Differential relaxation

7. Rapid relaxation: Using neutral cues in nonstressful situations, the client learns to relax within 20 to 30 seconds.

8. Application training: This involves several sessions, each devoted to exposure to a variety of anxiety-inducing stimuli. The presentation of each stimulus is much briefer (10 to 15 minutes) than it would be if pure exposure therapy were being conducted and much longer than in the case of systematic desensitization. The client is encouraged to relax before approaching each stimulus, to identify the first physiological symptoms of anxiety experienced upon confronting the stimulus, and to control the anxiety through relaxation.

Treatment Variations

In addition to muscle relaxation, Suinn (1990) emphasizes the use of relaxing imagery as a coping strategy. In Suinn's (1990) version of AMT, clients first receive training in both muscle relaxation and the development of imagery. They are then guided in using muscle relaxation and relaxing imagery as ways of dealing with anxiety-inducing images ranked on a hierarchy of increasing difficulty. As therapy progresses, the length of exposure to the anxiety scenes and their intensity increase, enabling the client to build confidence that he or she can cope with situations high on the hierarchy. Once the client becomes proficient in coping with anxiety induced imaginally, he or she is assigned homework to practice anxiety management

strategies in anxiety-inducing *in vivo* situations.

Yet another variant of coping interventions involves the use of cognitive strategies. Although AR and AMT are usually considered purely behavioral techniques, some clinicians (e.g., Butler et al., 1987) instruct their clients to use self-talk strategies to cope with distressing thoughts.

Caveat

Workshops in anxiety or stress management have become popular offerings in public mental health clinics and college counseling centers. Typically, these workshops involve a 1 to 3 session format in which the participants are instructed in the basic coping strategies. Although such training may be helpful for the average person wishing to expand his or her repertoire of coping skills, these workshops do not constitute adequate treatment for anxiety-disordered clients. People dealing with anxiety of clinical proportions often need a great deal of guidance in mastering relaxation techniques and in learning to cope with anxiety-inducing stimuli. If they fail to benefit from participation in a brief workshop, they may unnecessarily lose faith in themselves, behavioral techniques, or both.

SOCIAL SKILLS TRAINING

Although exposure therapy and applied relaxation have been found

helpful in the treatment of social anxiety, behavioral therapists treating this disorder should also be aware of the utility of social skills training (SST). SST used alone has demonstrated efficacy in treating social phobia (Stravynski, Marks, & Yule, 1982), and clinicians may wish to combine it with another treatment approach, such as exposure.

When used in the treatment of social phobia, SST's purpose is to increase the client's sense of social competency, thereby decreasing the feelings of awkwardness and embarrassment that contribute to social anxiety. Additionally, the person who learns to put his or her best foot forward is more likely to experience positive results when interacting with others. Interactions then become less aversive and, thereby, less anxiety-inducing.

It is essential that, prior to initiating SST, the therapist carefully evaluate the nature of the client's social skill deficits. Information is best gathered not only through interviewing the client, but also by observing him or her in various social situations. If SST is provided in a group setting, a ready-made social microcosm is available in which to observe each client. For SST conducted individually, the therapist may need to engage some confederates to arrange social situations in which to observe the client.

Deficits commonly displayed by socially anxious people include failure

to maintain eye contact, failure to initiate conversation with others, an excessively soft voice, withdrawn body posture, and constricted affect. The therapist will need to observe the client for these and other socially inappropriate behaviors and to identify what type of situation is most likely to elicit them. Does the client interact smoothly when in a same-sex group, but clam up and look down when in the presence of the opposite sex? Does his or her voice fall and facial expression freeze only when in a public-speaking situation? The therapist needs such specific information to arrange suitable situations in which behavioral practice will take place.

Once the skill deficits are identified, the therapist acts as a coach, instructing the client in corrective behaviors, modeling them, setting up situations in which the client can practice appropriate behaviors, and giving specific feedback and reinforcement. The client may find it extremely informative if the practice sessions are videotaped and the tapes used for feedback purposes. Formal role-plays directed by the therapist are useful for beginning skill practice. A less structured situation, such as engaging in open-ended conversation with a confederate, is an intermediate step to be used before sending the client out to engage in totally unstructured real world practice. Ideally, the client will have met several real-life challenges before the conclusion of treatment. He or she then has the opportunity to refine the progress by consulting with the therapist about the outside interactions, what could have been done differently, and to practice those behaviors in the

therapeutic setting.

Case Example

A young man, currently in treatment at our program, reported severe anxiety when interaction with others was required of him. His behavior reflected the extreme discomfort he experienced in these situations. When first observed walking down the hall, his shoulders were hunched forward, and his eyes were downcast. He continued to avoid eye contact as he met the interviewer, and his affect was flat. His responses even to open-ended questions were brief, and he introduced little information on his own. His voice was barely audible. His demeanor was so striking that the interviewer's first diagnostic impression was schizotypal personality disorder. This proved to be false; this client was eager for the social relationships he was unable to form.

As the interview progressed, it became clear that social anxiety and social skill deficits were interfering with his functioning. He was unemployed and hunting for a job. He found it extremely difficult to deal with the people in personnel departments and employment agencies. He also wanted to return to college, but was discouraged at the prospect because when he last attended school he was lonely and did not know how to make friends, male or female. It was also evident to the interviewer that this young man's withdrawn

behavior would not enhance his chances of gaining employment or making friends.

Individually conducted SST is now underway for this client. Because gaining employment is so important to him, both for monetary and self-esteem reasons, SST began with role-plays in which he made job inquiries of the therapist who played a personnel officer. This young man quickly learned to display appropriate verbal behavior. He answered questions fully and posed his own well-developed questions to the therapist role-playing an employment interviewer. However, voice quality, affect, eye contact, and body posture were more resistant to change. SST is now focused on modifying these behaviors through the use of therapist feedback and modeling. He is also practicing his newly developing skills by making several real job inquiries each week and reviewing this process with the therapist.

It is expected that the focus of SST for this client will soon shift to peer relationships. Through the use of role-plays with confederates, the client will practice participating in conversations while maintaining appropriate voice quality, smiling, looking others in the eye, and keeping his posture upright. Because interacting with other men is easier for him, the confederates will initially be men, but will eventually be replaced by women. Although these peer role-plays will be highly structured by the therapist at first, the client will gradually be given responsibility for determining their scope and

direction.

CONCLUSION

We hope that this chapter will have familiarized its readers with the behavioral interventions used for anxiety disorders. However, it does not provide adequate preparation for using these techniques clinically. Anxiety-disordered clients can be quite fragile, and some of these interventions are powerful. Used inappropriately, behavioral therapy may be ineffective or even harmful. Treatment of PTSD provides a case in point. Although Foa et al. (1991) and Keane et al. (1989) indicate that imaginal exposure is helpful for PTSD, there have been clinical reports of Vietnam veterans with PTSD growing worse with this treatment. It is clear that behavioral therapy needs to be expertly conducted. Clinicians interested in using behavioral techniques should obtain specialized training and initially work under the supervision of an experienced behavioral therapist. The following resources are provided for those interested in learning more about behavioral therapy for anxiety disorders.

SUGGESTIONS FOR FURTHER READING

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TRAINING RESOURCES

Anxiety Disorders Association of America (ADAA), 6000 Executive Blvd., Suite 200, Rockville. MD 20852. ADAA sponsors an annual conference, usually in April. It includes workshops and seminars led by anxiety disorder specialists, some of whom work from a behavioral orientation.

Association for the Advancement of Behavior Therapy (AABT), 15 West 36th St., New York, NY 10018. AABT's annual conference is usually held in November. It also includes workshops and conferences, many of which focus on anxiety disorders, led by behavioral specialists.

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Notes

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