Even though cognitive-behavioral therapy for panic disorder and agoraphobia is efficacious and effective, there is room for improvement. One study estimated that 30% of clients continue to function poorly at follow-up and only 48% reached high end-state status (Brown & Barlow, 1995). In a landmark study (Barlow et al., 2000), only 32% of clients with panic disorder assigned to cognitive-behavioral therapy alone demonstrated strong treatment response 12 months after acute treatment. Finally, of those who do start treatment, the mean dropout rate is 19%, with a range of 0–54% (Haby et al., 2006).

**TREATMENT DESCRIPTION: PROTOCOL**

What follows is a description of a 12-session cognitive-behavioral therapy for panic disorder and agoraphobia tailored to Julie's presentation. Of course, the degree to which the various components of treatment are emphasized vary by the functional assessment conducted for each patient.

**Overview**

The basic aim of the treatment protocol is to influence directly the catastrophic misappraisals and avoidance of bodily sensations and agoraphobic situations. This is done first through the provision of accurate information as to the nature of the fight–flight response. By provision of such information, patients are taught that they experience sensations that are normal and harmless. Second, treatment aims to teach a set of skills for developing evidence-based appraisals regarding bodily sensations and agoraphobic situations. At the same time, specific information concerning the effects of hyperventilation and its role in panic attacks is provided, with practice of breathing retraining if deemed appropriate. Then, the crux of the treatment involves repeated exposure to feared internal cues and agoraphobic situations.

**Session 1**

The goals of Session 1 are to describe fear and anxiety; to help patients understand the cyclical influences among behavioral, physiological, and cognitive responses; to understand that panic attack symptoms are not harmful; and to begin self-monitoring, if it was not already begun with the initial assessment. Therapy begins with identifying anxiety patterns and the situations in which anxiety and panic attacks are likely to occur. Many patients have difficulty identifying specific antecedents, reporting that panic can occur at almost any time. Therapists help patients to identify internal triggers, specifically, negative verbal cognitions, catastrophic imagery, and physical sensations. The following interchange took place for Julie:

**THERAPIST:** In what situations are you most likely to panic?

**JULIE:** Crowded restaurants and when I'm driving on the freeway. But sometimes I am driving alone, feeling OK, when all of a sudden it hits. And other times I can be sitting at home feeling quite relaxed and it just hits. That's when I really get scared because I can't explain it.

**THERAPIST:** So, when you are driving on the freeway, what is the very first thing you notice that tells you you're about to panic?

**JULIE:** Well, the other cars on the road look as if they are moving really slowly... It's as if I am in a dream.

**THERAPIST:** And what is the first thing you notice when you're at home?

**JULIE:** An unreal feeling, like I'm floating.

**THERAPIST:** So, what does that tell you? What is the common factor that started these two panic attacks?

**JULIE:** The feeling as if things are unreal? Wow, I always thought the physical feelings were the panic attack, but maybe they start the panic attack.

Next, the three-response system model for describing and understanding anxiety and panic is introduced. This model contributes to an objective self-awareness—to becoming a personal scientist—and provides the groundwork for an alternative conceptual framework for explaining panic and anxiety that replaces the patient's own assumptions. Patients are asked to describe cognitive, physiological, and behavioral aspects to their responding; to identify the things that they feel, think, and do when they are anxious and panicky. As described earlier, differences between the response profiles of anxiety and panic are highlighted. After grasping the notion of three responses that are partially independent, interactions among the response systems are described. The patient is asked to describe the three-response system components in a recent panic attack and to identify ways in which they interacted to produce heightened distress. For example,
THERAPIST: How would you describe the three parts to the panic attack you had at home last week?

JULIE: Well, physically, my head felt really light, and my hands were clammy. I thought that I would either pass out or that I would somehow dissolve into nothingness. My behavior was to lie down and phone my husband.

THERAPIST: Ok that’s a great description of your thoughts, physical feelings, and behaviors. Now let’s look at the sequence of events. What was the very first thing you noticed?

JULIE: When I stood up, my head started to feel really weird, as if it was spinning inside.

THERAPIST: What was your very next reaction to that feeling?

JULIE: I held onto the chair. I thought something was wrong. I thought it could get worse and that I’d collapse.

THERAPIST: So it began with a physical sensation, and then you had some very specific thoughts about those sensations. What happened next?

JULIE: I felt very anxious.

THERAPIST: And what happened next?

JULIE: Well, the dizziness seemed to be getting worse and worse. I became really concerned that it was different from any other experience I had ever had. I was convinced that this was “it.”

THERAPIST: So, as you became more anxious, the physical feelings and the thoughts that something bad was going to happen intensified. What did you do next?

JULIE: I called my husband and lay on the bed until he came home. It was horrible.

THERAPIST: Can you see how one thing fed off another, creating a cycle? That it began with a sensation, then some anxious thoughts, then feeling anxious, then more sensations and more thoughts, and more fear, and so on?

Next, the reasons why panic attacks first began are addressed briefly. Patients are informed that it is not necessary to understand the reasons why they began to panic to benefit from the treatment because factors involved in onset are not necessarily the same as the factors involved in the maintenance of a problem. Nevertheless, the initial panic attack is described as a manifestation of anxiety/stress. The stressors surrounding the time of the first panic attack are explored with the patient, particularly in terms of how stressors may have increased levels of physical arousal and primed certain danger-laden cognitive schemas.

Also, the therapist briefly describes the physiology underlying anxiety and panic, and the myths about what the physical sensations might mean. The main concepts covered in this educational phase are (1) the survival value or protective function of anxiety and panic; (2) the physiological basis to the various sensations experienced during panic and anxiety, and the survival function of the underlying physiology; and (3) the role of selective learned and cognitively mediated fears of certain bodily sensations. The model of panic we described earlier in this chapter is explained. In particular, the concepts of misappraisal and interoceptive conditioning are explained as accounting for panic attacks that seem to occur from out of the blue—that are triggered by very subtle internal cues or physical sensations that may occur at any time. Not only does this information reduce anxiety by decreasing uncertainty about panic attacks but it also enhances the credibility of the subsequent treatment procedures. This information is detailed in a handout given to the patient to read over the next week (for the handout, see Barlow & Craske, 2006).

This information was very important for Julie because the inability to explain her panic attacks was a major source of distress. Here are some of the questions she asked in her attempt to understand more fully:

JULIE: So, if I understand you correctly, you’re saying that my panic attacks are the same as the fear I experienced the time we found a burglar in our house. It doesn’t feel the same at all.

THERAPIST: Yes, those two emotional states—an unexpected panic attack and fear when confronted with a burglar—are essentially the same. However, in the case of the burglar, where were you focusing your attention—on the burglar or on the way you were feeling?

JULIE: The burglar, of course, although I did notice my heart was going a mile a minute.

THERAPIST: And when you have a panic attack, where are you focusing your attention—on the people around you or on the way you are feeling?
JULIE: Well, mostly on the way I’m feeling, although it depends on where I am at the time.

THERAPIST: Being most concerned about what’s going on inside can lead to a very different type of experience than being concerned about the burglar, even though basically the same physiological response is occurring. For example, remember our description of the way fear of sensations can intensify the sensations.

JULIE: I get that. But what about the feelings of unreality? How can they be protective or how can feeling unreal help me deal with a dangerous situation?

THERAPIST: OK, remember that it’s the physiological events that are protective—not the sensations. The sensations are just the end result of those events. Now, feelings of unreality can be caused by changes in your blood flow to your brain (although not dangerously so), or from overbreathing, or from concentrating too intensely on what’s going on inside you. So the unreality sensation may not be protective, but the changes in blood flow and overbreathing are.

JULIE: I understand how I can create a panic attack by being afraid of my physical feelings, like my heart racing or feeling unreal. But sometimes it happens so quickly that I don’t have time to think.

THERAPIST: Yes, those reactions can occur very quickly, at times automatically. But remember, we are tuned to react instantaneously to things that we believe to be dangerous. Imagine yourself walking through a dark alley, and you have reason to believe that somewhere in the darkness lurks a killer. Under those conditions, you would be extremely attentive to any sign, any sound, or any sight of another person. If you were walking through the same alley and were sure there were no killers, you might not hear or detect the same signals you picked up on in the first case. Now let’s translate this to panic: the killer in the dark alley is the panic attack, and the signs, sounds, and smells are the physical sensations you think signal the possibility of a panic attack. Given the acute degree of sensitivity to physical symptoms that signal a panic attack, it is likely that you are noticing normal “noises” in your body that you would otherwise not notice, and on occasion, immediately become fearful because of those “noises.” In other words, the sensations are often noticeable because you attend to them.

Next, the method of self-monitoring was described and demonstrated with in-session practice of completing a Panic Attack Record. Julie was concerned that self-monitoring would only elevate her distress, by reminding of the very thing she was afraid of (panic and unreality). The therapist clarified the difference between objective and subjective self-monitoring, and explained that distress would subside as Julie persevered with self-monitoring.

The homework for this session was to self-monitor panic attacks, daily anxiety, and mood, and to read the handout. In fact, we encourage patients to reread the handout several times, and to actively engage in the material by circling or marking the most personally relevant sections or areas in need of clarification, because effort enhances long-term retention of the material learned. Of course, for some patients, reading the material draws their attention to things they fear (just as with self-monitoring). In this case, therapists can discuss the role of avoidance, and how, with repeated readings, distress levels will most likely subside.

At the end of the session, Julie suddenly became highly anxious. She felt unable to tolerate either the treatment procedures or her anticipation of them. She became very agitated in the office and reported feelings of unreality. She opened the door to find her husband, who was waiting outside. The therapist helped Julie understand how the cycle of panic had emerged just at that moment: (1) The trigger was the treatment description—having to face eventually feared sensations and situations; (2) this was anxiety producing because Julie believed that she could not cope with the treatment demands, that the treatment would cause her so much anxiety that she would “flip out” and lose touch with reality permanently, or that she would never improve because she could not tolerate the treatment; (3) the current anxiety in the office elicited sensations of unreality and a racing heart; (4) Julie began to worry that she might panic and lose touch with reality permanently within the next few minutes; (5) the more anxious Julie felt, and the stronger her attempts to escape and find safety, the stronger the physical sensations became; and (6) she felt some relief upon finding her husband because his presence reassured her that she would be safe. Julie was reassured that treatment would progress at a pace with which she was comfortable, but at the same time she was helped to understand that her acute distress about the feeling of unreality would be the precise target of this type of treatment, therefore
attesting to the relevance of this treatment for her. She was also calmed by preliminary cognitive restructuring of the probability of permanently losing touch with reality. After a lengthy discussion, Julie became more receptive to treatment. A team approach to treatment planning and progress was agreed upon, so that Julie did not feel that she would be forced to do things she did not think she could do.

Session 2

The goals of this session are to begin the development of a hierarchy of agoraphobic situations and coping skills of breathing retraining and cognitive restructuring. The individualized hierarchy comprises situations that range from mild to moderate anxiety, all the way up to extreme anxiety. These situations become the basis of graduated in vivo exposure. Although in vivo exposure exercises are not scheduled to take place until Session 4, the hierarchy is introduced now, so that cognitive restructuring skills can be practiced in relation to each situation on the hierarchy before in vivo exposure begins. Moreover, the hierarchy will be refined as a result of the cognitive restructuring practice because the latter highlights specific features of agoraphobic situations that are most anxiety provoking.

Julie was asked to develop a hierarchy over the following week. She expressed some doubt that she would ever be able to accomplish any, let alone all, of the items on her hierarchy. The therapist helped Julie by asking her to think of any situation in her lifetime that used to be difficult but became easier with practice. Julie remembered how anxious she used to be when she first started working with customers at her husband's office—and how that discomfort subsided over time. This was used to help Julie realize that the same might happen with the situations listed on her hierarchy. Julie's final hierarchy comprised the following situations:

- driving home from work alone;
- spending 2 hours alone at home during the day;
- being alone at home as day turned to night;
- driving on surface streets to her brother's house (10 miles) alone;
- driving two exits on Freeway 444, with her husband following in the car behind;
- driving two exits on Freeway 444, alone;
- driving four exits on Freeway 444; and driving on the freeway to her brother's house alone. Then, Julie was to repeat all of these tasks without taking Klonopin, and without knowing the location of her husband.

Breathing retraining also is begun in this session. Patients are asked to hyperventilate voluntarily by standing and breathing fast and deep, as if blowing up a balloon, for 1½ minutes. With prompting and encouragement from the therapist, patients can often complete the full 1½ minutes, after which they are asked to sit, close their eyes, and breathe very slowly, pausing at the end of each breath, until the symptoms have abated. The experience is then discussed in terms of the degree to which it produced symptoms similar to those that occur naturally during anxiety or panic. Approximately 50–60% of patients report that the symptoms of hyperventilation are very similar to their panic attack symptoms. Often, however, similarity of the symptoms is confused with similarity of the anxiety. Because the exercise is conducted in a safe environment and the symptoms have an obvious cause, most patients rate the experience as less anxiety provoking than if the same symptoms had occurred naturally. This distinction is important to make because it demonstrates the significance of perceived safety for the degree of anxiety experienced. Julie rated the hyperventilation exercise as very anxiety provoking (8 on a 0- to 10-point scale), and rated the symptoms as being quite similar to her panic symptoms (6 on a 0- to 10-point scale). She terminated the task after approximately 40 seconds, in anticipation of experiencing a full-blown panic attack. The therapist and Julie discussed this experience in terms of the three response systems, and the role of misappraisals and interoceptive conditioning described during the previous session.

Then, Julie was briefly educated about the physiological basis to hyperventilation (see Barlow & Craske, 2006). As before, the goal of the didactic presentation was to allay misinterpretations of the dangers of overbreathing, and to provide a factual information base on which to draw when actively challenging misinterpretations. The educational content is tailored to the patient's own educational level and covered only to the degree that it is relevant to the patient.

In the next step, the therapist teaches breathing retraining, which begins by teaching patients to rely more on the diaphragm (abdomen) than on chest muscles. In addition, patients are instructed to concentrate on their breathing by counting on their inhalations and thinking the word "relax" an exhalations. (Slow breathing is introduced in Session 3.) Therapists model the suggested breathing patterns, then provide corrective feedback to patients while they practice in the office setting.
(Note that CART uses a different method of breathing retraining that is based on raising levels of CO₂ in the blood through biofeedback.)

Initial reactions to the breathing exercise may be negative for patients who are afraid of respiratory sensations because the exercise directs their attention to breathing. It also can be difficult for patients who are chronic overbreathers, and patients for whom any interruption of habitual breathing patterns initially increases respiratory symptomatology. In both cases, continued practice is advisable, with reassurance that sensations such as shortness of breath are not harmful. The goal is to use breathing skills training to encourage continued approach toward anxiety and anxiety-producing situations. On occasion, patients mistakenly view breathing retraining as a way of relieving themselves of terrifying symptoms, thus falling into the trap of fearing dire consequences should they not succeed in correcting their breathing. This is what happened for Julie:

JULIE: So, all I have to do is to slow down my breathing, then everything will be OK?

THERAPIST: Certainly, slowing down your breathing will help to decrease the physical symptoms that you feel, but I am not sure what you mean when you ask whether everything will be OK.

JULIE: That proper breathing will prevent me from losing touch with reality—that I won't disappear.

THERAPIST: Breathing retraining will help you to regulate your breathing, which may lessen your physical symptoms, including the sense of unreality. Your question, though, is the reason for our next treatment skill of changing your thinking, so you can learn that the sense of unreality is not a sign of actual loss of touch with reality and disappearance.

The homework is to practice diaphragmatic breathing for at least 10 minutes, two times a day in relaxing environments.

Therapists introduce in this session cognitive restructuring, by explaining that everyone has errors in thinking when anxious, thus helping the patient to expect his or her thinking to be distorted. Patients are informed that these distortions have an adaptive function: Chances of survival are greater if we perceive danger as probable and worthy of attention rather than minimize it. Therefore, anxiety leads us to judge threatening events as being more likely and more threatening than they really are. However, the cognitive distortions are unnecessary because there is no real threat in the case of panic disorder.

Then, patients are taught to treat their thoughts as hypotheses or guesses rather than as facts. The notions of automatic thinking and discrete predictions are also explained, to emphasize the need to become an astute observer of one's own habitual self-statements in each situation. This leads to a "downward arrow technique" to identify specific predictions made at any given moment, as shown with Julie.

THERAPIST: What is it that scared you about feeling detached in the movie theater last night?

JULIE: It is just such a horrible feeling.

THERAPIST: What makes it so horrible?

JULIE: I can't tolerate it.

THERAPIST: What makes you think you cannot tolerate it? What is the feeling of detachment going to do to you that makes you think it is horrible and intolerable?

JULIE: It might become so intense that it overwhelms me.

THERAPIST: And if it overwhelms you, what would happen?

JULIE: I could become so distressed that I lose touch with reality.

THERAPIST: What would it mean if you lost touch with reality?

JULIE: That I would be in a different mind state forever—I would never come back to reality. That I would be so crazy that I would have to be carted out of the movie theater to a mental hospital and locked away forever.

Overly general self-statements, such as "I feel terrible—something bad could happen," are insufficient, nontherapeutic, and may serve to intensify anxiety by virtue of their global and nondirective nature. Instead, detail in thought content, such as "I am afraid that if I get too anxious while driving, then I'll lose control of the wheel and drive off the side of the road and die," permits subsequent cognitive restructuring.

Analysis of anxious thought content yields two broad factors that are labeled as "risk" and "valence." These two main types of cognitive errors are described to pa-
patients. Risk translates to overestimation, or jumping to conclusions by viewing negative events as being probable events, when in fact they are unlikely to occur. The patient is asked to identify overestimations from the anxiety and panic incidents over the past couple of weeks: “Can you think of events that you felt sure were going to happen when you panicked, only to find out in the end that they did not happen at all?” Usually, patients can identify such events easily, but with protestations. For example.

JULIE: Well, several times I thought that I really was going to lose it this time... that I would flip out and never return to reality. It never actually happened, but it could still happen.

THERAPIST: Why do you think “it” could still happen?

JULIE: Part of me feels like I’ve always managed to escape it just in time, by either removing myself from the situation or by having my husband help me, or by holding on long enough for the feeling to pass. But what if I can’t hold on the next time?

THERAPIST: Knowing what we know about your thoughts when we are anxious, can you classify any of the ideas you just expressed, of “just holding on” or “just escaping in time,” as overestimations?

JULIE: I suppose you’re saying that I can hold on or I can always escape in time.

THERAPIST: More than you feel the need to hold on and the need to escape because you are overestimating the likelihood of flipping out and never returning to reality.

JULIE: But it really feels like I will.

THERAPIST: The confusion between what you think will happen and what actually happens is the very problem that we are addressing in this session.

The reasons why overestimations persist despite repeated disconfirmation are explored. Typically, patients misattribute the absence of danger to external safety signals or safety behaviors (e.g., “I only made it because I managed to find help in time.” “If I had not taken Xanax last week when I panicked in the store, I’m sure I would have passed out,” or “I wouldn’t have made it if I hadn’t pulled off the road in time”), or to “luck,” instead of realizing the inaccuracy of the original prediction. Similarly, patients may assume that the only reason they are still alive, sane, and safe is because the “big one” has not happened. In this case, patients err by assuming that intensity of panic attacks increases the risk of catastrophic outcomes.

The method for countering overestimation errors is to question the evidence for probability judgments. The general format is to treat thoughts as hypotheses or guesses rather than as facts, and to examine the evidence and generate alternative, more realistic predictions. This is best done by the therapist using a Socratic style, so that patients learn the skill of examining the content of their statements and arrive at alternative statements or predictions after they have considered all of the evidence. Questioning of the logic (e.g., “How does a racing heart lead to heart attack?”), or the bases from which judgments are made (e.g., misinformation from others, unusual sensations) is useful in this regard. Continuing with the previous example from Julie, the questioning took the following course:

THERAPIST: One of the specific thoughts you have identified is that you will flip out and never return to reality. What specifically leads you to think that is likely to happen?

JULIE: Well, I guess it really feels like that.

THERAPIST: Describe the feelings?

JULIE: Well, I feel spacey and unreal, like things around me are different and that I’m not connected.

THERAPIST: And why do you think those feelings mean that you have actually lost touch with reality?

JULIE: I don’t know—it feels as if I have.

THERAPIST: So, let’s examine that assumption. What is your behavior like when you feel unreal? For example, do you respond if someone asks you a question during those episodes?

JULIE: Well, I respond to you even though I feel that way sometimes in here.

THERAPIST: OK, and can you walk or write or drive when you feel that way?

JULIE: Yes, but it feels different.

THERAPIST: But you do perform those functions despite feeling detached. So, what does that tell you?

JULIE: Well, maybe I haven’t lost complete touch with reality. But what if I do?

THERAPIST: How many times have you felt detached?

JULIE: Hundreds and hundreds of times.

THERAPIST: And how many times have you lost touch with reality permanently?
JULIE: Never. But what if the feelings don’t go away? Maybe I’ll lose it then?

THERAPIST: So what else tells you that this is a possibility?

JULIE: Well, what about my second cousin? He lost it when he was about 25, and now he’s just a mess. He can hardly function at all, and he is constantly in and out of psychiatric hospitals. They have him on a bunch of heavy-duty drugs. I’ll never forget the time I saw him totally out of it. He was talking to himself in jibberish.

THERAPIST: So, do you make a connection between him and yourself?

JULIE: Yes.

THERAPIST: What are the similarities between the two of you?

JULIE: There are none really. It’s just that he is what I think I will become.

THERAPIST: Did he ever feel the way you feel now?

JULIE: I don’t know.

THERAPIST: And if another one of your cousins had severe back problems, would you be concerned that you would end up with severe back problems?

JULIE: No.

THERAPIST: Why not?

JULIE: Because it never crosses my mind. It is not something that I worry about.

THERAPIST: So, it sounds like you think you will end up like your cousin because you are afraid of ending up like him.

JULIE: I suppose so.

THERAPIST: So, let’s look at all of the evidence and consider some alternatives. You have felt unreal hundreds of times, and you’ve never lost touch with reality because you’ve continued to function in the midst of those feelings, and they have never lasted. You are afraid of becoming like your cousin, but there are no data to show that you and he have the same problem. In fact, the data suggest otherwise because you function and he does not. So what is the realistic probability that you will lose touch with reality permanently? Use a scale of 0 to 100, where 0 = No chance at all and 100 = Definitely will happen.

JULIE: Well, maybe it is lower than I thought. Maybe 20%.

THERAPIST: So that would mean that you have actually lost touch with reality in a permanent way once every five times you have felt unreal.

JULIE: When it’s put like that, I guess not. Maybe it’s a very small possibility.

THERAPIST: Yes, so what is an alternative explanation?

JULIE: Perhaps the feelings of unreality are caused by feeling anxious or overbreathing, and having those feelings does not mean that I am actually losing touch with reality, and that I am not like my cousin at all.

For homework, in addition to continuation of self-monitoring and practice of diaphragmatic breathing, Julie was asked to identify her anxious thoughts in relation to every item on her agoraphobia hierarchy, and to use the in-session steps of examining the evidence and generating alternative evidence based interpretations for errors of overestimating the risk. She was to do the same for every panic attack that occurred over the next week.

Session 3

The goals of this session are to develop breathing retraining and to continue active cognitive restructuring.

The therapist reviews the patient’s week of diaphragmatic breathing practice. Julie was disappointed with her attempts to practice.

JULIE: I just didn’t seem to be able to do it the right way. Sometimes I would start off OK and then the more I tried, the more it felt like I was running out of air, and I’d have to take a big gulp between breaths. At other times, I felt dizzy and the unreal feelings would start at which point I would stop and do “busy work” to keep my mind occupied.

THERAPIST: It sounds like quite a few things were going on. First of all, remember that this is a skill, just like learning to ride a bike, and you cannot expect it to be easy from the get-go. Second, it sounds like you experienced some uncomfortable physical symptoms that worried you. You said it felt like you were running out of air. Based on what we talked about last week, what do you think might have caused that feeling?

JULIE: Well, maybe I wasn’t getting enough air into my
JULIE: I don’t know. I’ve had the feeling of suffocating before, especially when I’m trapped in a crowded room.

THERAPIST: So, how do you know you were suffocating?

JULIE: I don’t know. I just felt that way.

THERAPIST: So, let’s put the evidence together. You’ve had the feelings before and never suffocated. As we discussed last time, anxiety can sometimes create a sensation of shortness of breath even though you are getting plenty of air. Can you think of an alternative explanation?

JULIE: Well, maybe I wasn’t suffocating. Maybe it just felt like that.

Julie’s complaints represent typical concerns that should be addressed. The next step is to slow the rate of breathing until the patient can comfortably span a full inhalation and exhalation cycle of 6 seconds. Again, the therapist models slowed breathing, then provides corrective feedback on practice in the session. The patient is instructed to continue to practice slow breathing in “safe” or relaxing environments, and is discouraged from applying slow breathing when anxious or panicking, until fully skilled in its application.

Also, cognitive restructuring is continued by addressing the second cognitive error, which involves viewing an event as “dangerous,” “insufferable,” or “catastrophic.” Typical examples of catastrophic errors are “If I faint, people will think that I’m weak, and that would be unbearable” or “Panic attacks are the worst thing I can imagine,” and “The whole evening is ruined if I start to feel anxious.” “Decatastrophizing” means to face the worst, to realize that the occurrences are not as “catastrophic” as stated, and to think about actual ways to cope with negative events rather than how “bad” they are. A key principle underlying decatastrophizing is that events can be endured even though they are uncomfortable. Recognition of the time-limited nature of discomfort contributes to the development of a sense of being able to cope. The critical distinction here is that although patients might prefer that these events not occur, they can tolerate the discomfort, if necessary. Thus, for the person who states that negative judgments from others are unbearable, it is important to discuss what he or she would do to cope should someone else make a direct negative judgment. Similarly, for the person who states that the physical symptoms of panic are intolerably embarrassing, the following type of questioning is helpful:

JULIE: I am really worried that I might lose control and do something crazy, like yell and scream.

THERAPIST: Let’s face the worst and find out what is so bad about it. What would be so horrible about yelling and screaming?

JULIE: I could never live it down.

THERAPIST: Well, let’s think it through. What are the various things you could do in the situation? You have just yelled and screamed—now what?

JULIE: Well, I guess the yelling and screaming would eventually stop.

THERAPIST: That’s right—at the very least you would eventually exhaust yourself. What else?

JULIE: Well, maybe I would explain to the people around me that I was having a really bad day but that I would be OK. In other words, reassure them.

THERAPIST: Good. What else?

JULIE: Maybe I would just get away—find someplace to calm down and reassure myself that the worst is over.

THERAPIST: Good.

JULIE: But what if the police came and took me away, locked me up in a mental ward?

THERAPIST: Again, let’s face the worst. What if the police did come when you were yelling and screaming, and what if the police did take you away? As scary as that may sound to you, let’s consider what actually would happen.

JULIE: I have this image of myself not being able to tell them what is really going on—that I am so out of it I don’t have the ability to let them know I am just anxious.

THERAPIST: If you were so distraught that you could not clearly communicate, how long would that last?

JULIE: You’re right. I would eventually exhaust myself and then I could speak more clearly. But what if they didn’t believe me?
THERAPIST: What if they did not believe you at first? How long would it take before they would realize that you were not crazy?

JULIE: I guess that after a while they would see that I was OK, and maybe I could call a friend or my doctor to explain what was going on.

The homework for this session, in addition to continued self-monitoring, is to practice slow and diaphragmatic breathing in relaxing environments, and to identify errors of catastrophizing in relation to each item on the agoraphobia hierarchy, followed by practice of decatastrophizing and generation of ways to cope. In addition, Julie was to use the skill of decatastrophizing for panic attacks that occurred over the following week.

Session 4

The main goal of this session is to use breathing retraining skills as a coping tool, to review cognitive restructuring skills, and to begin in vivo exposure to the first item on the agoraphobia hierarchy.

Now that patients have practiced slow and diaphragmatic breathing sufficiently in relaxing environments, they are ready to use these methods in distracting environments and in anxious situations. Patients are encouraged to use breathing skills as a coping technique as they face fear, anxiety, and anxiety-provoking situations. Some patients use breathing skills as a safety signal or a safety behavior; in other words, they believe that they will be at risk for some mental, physical, or social calamity if they do not breathe correctly. This issue came up with Julie:

JULIE: When I panicked during the week, I tried to use the breathing. It didn’t work. It made me feel worse.

THERAPIST: It sounds as if you might have attempted to use the breathing exercise as a desperate attempt to control the feelings you were experiencing.

JULIE: Yes, that’s right.

THERAPIST: What did you think would have happened if you had not been able to control the feelings?

JULIE: I was really worried that I might not be able to handle the feelings.

THERAPIST: And if you weren’t able to handle the feelings, what would happen?

JULIE: It just feels like I will lose it, permanently.

THERAPIST: So this is one of those thoughts that we were talking about last time. What does your evidence tell you about the likelihood of losing touch with reality permanently?

JULIE: So you mean even if I don’t control my breathing, then I will be OK?

THERAPIST: Well, you had not lost touch with reality permanently before you learned the breathing exercise, so what does that tell you?

JULIE: OK, I get it.

THERAPIST: The breathing exercise is best thought of as a tool to help you face whatever is provoking anxiety. So, as you face situations and your anxiety increases, use the breathing exercise to help you face rather than run away from anxiety.

Patients who consistently use the breathing skills as a safety behavior might be discouraged from using the breathing skills because they learn that what they are most worried about either does not happen or it can be managed without using the breathing skills.

In terms of the cognitive restructuring, therapists give corrective feedback to patients on the methods of questioning the evidence to generate realistic probabilities, facing the worst, and generating ways to cope with each item on the agoraphobia hierarchy and any panic attacks that occurred over the past week. Particular “corrective” feedback is given when patients lack specificity in their cognitive restructuring (e.g., patients who record that they are most worried about panicking should be encouraged to detail what it is about panicking that worries them) or rely on blanket reassurance (e.g., patients who record that “everything will be OK” as their evidence and/or ways of coping should be encouraged to list the evidence and/or generate actual coping steps).

Next, attention is given to how to practice the first item on the agoraphobia hierarchy. If appropriate, reasons why previous attempts at in vivo exposure may have failed are reviewed. Typical reasons for patients’ past failures at in vivo exposure include attempts that are too haphazard and/or brief, or spaced too far apart, and attempts conducted without a sense of mastery, or while maintaining beliefs that catastrophe is very possible. Julie had tried to face agoraphobic situations in the past, but each time she had escaped, feeling overwhelmed by panic and terrified of losing touch with reality permanently. The therapist helped Julie realize
how to approach the agoraphobic situations differently to benefit from the exposure. Julie’s typical safety signals were the presence of her husband, or at least knowing his whereabouts, and Klonopin (which she carried but rarely used). The therapist discussed the importance of eventual weaning from those safety signals.

As mentioned earlier, the goal of exposure therapy is not immediate reduction in fear and anxiety; rather, the goal is for the patient to learn something new as a result of exposure. Clarification of what patients are most worried about as they face their feared situations and the conditions that best help them to learn that what worries them most never or rarely happens, and/or that they can cope with the situation and tolerate anxiety, is essential for effective exposure. If a patient is most worried that fear and anxiety will remain elevated for the duration of the practice, then corrective learning involves toleration of sustained anxiety. For Julie, the first situation on her hierarchy was to drive home from work, alone. She stated that what most worried her in that situation was that she would panic and lose touch with reality, and as a result, lose control of the car and die in an accident. She also stated that to drive at dusk was the condition under which she was most concerned of these eventualities. Thus, the task that the therapist considered most effective in teaching Julie that she could cope with the sensations of unreality and panic, was to drive home from work at dusk.

Delineate the exposure task as concretely as possible, so that patients clearly understand exactly what the practice entails (e.g., “Walk around inside of mall for 10 minutes by myself”). Importantly, the practice should not be ended because of anxiety (e.g., “Continue driving on the freeway until I feel anxious”) because the exposure practice would then reinforce avoidance of anxiety.

Julie was reminded to use her coping skills should she panic as she practiced the task; that is, in moments of fear, patients are encouraged to use their breathing and thinking skills to complete the assigned task; the coping skills are not intended as means to reduce fear and anxiety, but to tolerate it. Acceptance and nonjudgmental observation of physical sensations and thoughts can be another strategy to use in the midst of exposure therapy.

Patients are encouraged to maintain a regular schedule of repeated in vivo exposure practices at least three times per week, and to conduct these practices regardless of internal (e.g., having a “bad day,” feeling ill) or external (e.g., inclement weather, busy schedules) factors that may prompt postponement of practices. Julie expressed some concerns about being able to practice at least three times over the following week:

JULIE: I don’t know if I can practice three times because more days than not I feel pretty worn down; maybe I can practice on just Monday and Tuesday because they are the days I typically feel better.

THERAPIST: What is it you are worried about happening if you practice on a day when you already feel worn down?

JULIE: I feel more fragile on those days.

THERAPIST: And if you feel more fragile, what might happen?

JULIE: I just don’t think I could do it. It would be too hard. I might really freak out and lose touch with reality for ever.

THERAPIST: OK, so let’s think about that thought. What does your experience tell you? How many times have you permanently lost touch with reality, including days when you were worn down?

JULIE: Well, never.

THERAPIST: So, what does that tell you?

JULIE: OK, but it still feels difficult to drive on those days.

THERAPIST: How about you start with Monday or Tuesday, but quickly move to the other days of the week when you are feeling worn down, so that you get a really good opportunity to learn whether you permanently lose touch with reality or not?

Julie’s homework for this session involves continued self-monitoring, continued use of cognitive restructuring and breathing remaining in the event of elevated anxiety or panic, and practicing the first item on the agoraphobia hierarchy at least three times, with at least one of those times being without her husband Larry.

Session 5

The goals of this session are to review the practice of in vivo exposure, to design another exposure task to be practiced over the next week, and to begin interoceptive exposure. Note that in vivo and interoceptive exposure can be done simultaneously or sequentially. For Julie, in vivo exposure was begun in Session 4, whereas in-
terceptive exposure was begun in this session, but they
could easily have been done in the opposite order.

It is essential to review the week’s practice of in viva
exposure. An objective evaluation of performance is
considered necessary to offset subjective and damag-
ing self-evaluations. As demonstrated in experimental
literature on learning and conditioning, appraisals of
aversive events after they have occurred can influence
anxiety about future encounters with the same type of
aversive events. Any practice that is terminated
prematurely is to be reviewed carefully for contribut-
ing factors that can then be incorporated into subse-
cquent trials of in viva exposure. Recognition of the precip-
itant to escape is very important because the urge to es-
cape is usually based on the prediction that continued
endurance would result in some kind of danger. For
example, patients may predict that the sensations will
become intense and lead to an out-of-control reaction.

This prediction can be discussed in terms of jumping
to conclusions and blowing things out of proportion.
At the same time, escape itself need not be viewed
catastrophically (i.e., as embarrassing, or as a sign of
failure). In addition, therapists reinforce the use of
breathing and cognitive skills (or acceptance skills) to
help patients remain in the situation until the specified
duration or task has been completed, despite uncom-
fortable sensations.

Again, it is important for patients to recognize that
the goal is repeatedly to face situations despite anxiety,
not to achieve a total absence of anxiety. Toleration of
fear rather than immediate fear reduction is the goal
for each exposure practice; this approach leads to an
eventual fear reduction over time. Anxiety that does
not decline over repeated days of in viva exposure may
result from too much emphasis on immediate fear and
anxiety reduction; that is, trying too hard or wishing
too much for anxiety to decline typically maintains
anxiety.

Julie had success with her first in viva exposure prac-
tice; she managed to drive home from work at dusk,
alone, four different times. She noted that the first time
was easier than she had expected; the second was hard-
er, and the one time she pulled off to the side of the
corner. The therapist helped Julie identify the thoughts
and sensations that led her to “escape” from the sit-
uation: the sensations of unreality and fears of losing
touch with reality. Julie had waited for a few minutes,
then continued driving home—an action that was
highly reinforced by the therapist. The third and fourth
times were easier.

Julie’s husband, Larry, attended Session 5, so that he
could learn how to help Julie overcome her panic and
agoraphobia. He was supportive and eager to help in
any way possible, expressing frustration at having had
no idea how to help in the past.

There are general principles for involvement of sig-
nificant others in treatment. First, a treatment concep-
tualization is provided to the significant other to reduce
his or her frustration and/or negative attributions about
the patient’s emotional functioning (e.g., “Oh, she’s just
making it up. There’s nothing really wrong with her”
or “He has been like this since before we were mar-
rried, and he’ll never change”). The way in which the
agoraphobic problem has disrupted daily routines and
distribution of home responsibilities is explored and
discussed also. Examples might include social activi-
ties, leisure activities, and household chores. The ther-
pist explains that family activities may be structured
around the agoraphobic fear and avoidance to help the
patient function without intense anxiety. At the same
time, reassessment of the patient’s tasks to the signif-
ificant other may actually reinforce the agoraphobic pat-
tern of behavior. Consequently, the importance of com-
plying with in viva exposure homework instructions,
even though the patient may experience some distress
initially, is emphasized.

The significant other is encouraged to become an ac-
tive participant by providing his or her perception of
the patient’s behavior and fearfulness, and the impact
on the home environment. Sometimes the significant
other provides information of which the patient is not
fully aware, or did not report, particularly in relation to
how the patient’s behavior affects his or her own daily
functioning. Larry, for example, described how he felt
restricted at home in the evenings; whereas, before, he
occasionally played basketball with his friends at the
local gym, he now stays at home because he feels guilty
if he leaves Julie alone.

The next step is to describe the role of the significant
other regarding in viva exposure tasks. The signif-
nificant other is viewed as a coach, and the couple is
encouraged to approach the tasks as a problem-solving
team. This includes deciding exactly where and when
to practice in viva exposure. In preparation for prac-
tices, the patient identifies his or her misappraisals
about the task and generates cognitive alternatives. The
significant other is encouraged to help the patient ques-
tion his or her own “anxious” thoughts. Role plays of
this type of questioning of the patient by the signif-
nificant other may be conducted in the session, so that the

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therapist can provide corrective feedback to each partner. Throughout in vivo exposure, the significant other reminds the patient to apply coping skills, whether it be cognitive challenges, breathing skills, or acceptance skills. Because the significant other is usually a safety signal, tasks are less anxiety provoking. However, the patient must be weaned from the safety signal eventually. Therefore, initial attempts at facing agoraphobic situations are conducted with the significant other, and later trials are conducted alone. Weaning from the significant other may be graduated, as in the case of Julie: (1) driving first with Larry in the car, (2) with him in a car behind, (3) meeting him at a destination point, and (4) driving alone.

Very important to the success of this collaboration is style of communication. On the one hand, the significant other is discouraged from magnifying the experience of panic and encouraged to help the patient apply coping statements when anxious. On the other hand, the significant other is encouraged to be patient given the fact that progress for the patient may be erratic. The patient and the significant other are instructed to use a 0- to 10-point rating scale to communicate with each other about the patient's current level of anxiety or distress, as a way of diminishing the awkwardness associated with discussion of anxiety, especially in public situations. The patient is warned about the potential motivation to avoid discussing his or her feelings with the significant other, due to embarrassment or an attempt to avoid the anxiety for fear that such discussion and concentration on anxiety may intensify his or her distress level. Avoidance of feelings is discouraged because distraction is viewed as less beneficial in the long term than objectively facing whatever is distressing and learning that predicted catastrophes do not occur. The patient is reassured that the initial discomfort and embarrassment will most likely diminish as the partners become more familiar with discussing anxiety levels and their management. Furthermore, the patient's concerns about the significant other being insensitive or too pushy are addressed. For example, a significant other may presume to know the patient's level of anxiety and anxious thoughts without confirmation from the patient, or the significant other may become angry at the patient for avoiding or escaping from situations, or being fearful. All of these issues are described as relatively common and understandable patterns of communication that are nevertheless in need of correction. In-session role playing of more adaptive communication styles during episodes of heightened anxiety is a useful learning technique. On occasion, more specific communications training may be beneficial, especially if the partners frequently argue in their attempts to generate items or methods for conducting in vivo exposure.

The next in vivo exposure task for Julie was to sit in a crowded movie theater, gradually moving away from the aisle, toward the middle of the row, because that was the condition in which she was most concerned that she would lose control and draw attention to herself. Julie and Larry rehearsed their approach to the in vivo exposure task in session, while the therapist provided corrective feedback using the principles of communication and coping described earlier. They were instructed to practice this task at least three times over the next week. On at least one occasion, Julie was to practice the task alone.

Next, interoceptive exposure was introduced. As with in vivo exposure, through repeated exposures to feared sensations, patients learn that they are not harmed by the sensations and that they achieve increased confidence in their ability to tolerate symptoms of anxiety. The procedure begins with assessment of the patient's response to a series of standardized exercises. The therapist models each exercise first. Then, after the patient has completed the exercise, the therapist records the sensations, anxiety level (0 to 10), sensation intensity (0 to 10), and similarity to naturally occurring panic sensations (0 to 10). The exercises include shaking the head from side to side for 30 seconds; placing the head between the legs for 30 seconds and lifting the head to an upright position quickly; running in place or using steps for 1 minute; holding one's breath for as long as possible; complete body muscle tension for 1 minute or holding a push-up position for as long as possible; spinning in a swivel chair for 1 minute; hyperventilating for 1 minute; breathing through a narrow straw (with closed nasal passages) or breathing as slowly as possible for 2 minutes; and staring at a spot on the wall or at one's mirror image for 90 seconds. If none of these exercises produce sensations at least moderately similar to those that occur naturally, other, individually tailored exercises are generated. For example, tightness around the chest may be induced by a deep breath before hyperventilating; heat may be induced by wearing heavy clothing in a heated room; choking sensations may be induced by a tongue depressor, a high-collared sweater, or a necktie; and startle may be induced by an abrupt, loud noise in the midst of relaxation. For Julie, the sensations produced by hyperventilating, spinning, and staring at a spot on the wall were most anxiety provoking.
Patients who report little or no fear because they feel safe in the presence of the therapist are asked to attempt each exercise alone, either at home or with the therapist out of the office. At the same time, discussing the influence of perceived safety as a moderating factor in the amount of fear experienced reinforces the value of cognitive restructuring. For a minority of patients, the known cause and course of the sensations override the fear response; that is, because the sensations are predictably related to a clear cause (the interoceptive exercise), and because the sensations can be relatively easily controlled by simply terminating the interoceptive exercise, fear is minimal. Under these conditions, discussion can productively center on the misattribution that renders naturally occurring sensations more frightening than the ones produced by the interoceptive exercises. Typically, these misattributions are that naturally occurring sensations are unpredictable; that unpredictable sensations are more harmful; and that if naturally occurring sensations are not controlled, they pose a potential threat. The majority of patients fear at least several of the interoceptive exercises despite knowing the cause of the sensations and their controllability.

Interoceptive exercises rated as producing at least somewhat similar sensations to naturally occurring panic (at least 3 on the 0- to 10-point scale) are selected for repeated exposure. A graduated approach is used for interoceptive exposure, beginning with the lowest item on the hierarchy established in Session 4. For each trial of exposure, the patient is asked to begin the induction, to indicate when the sensations are first experienced (e.g., by raising a hand), and to continue the induction for at least 30 seconds longer to permit corrective learning. After terminating the induction, anxiety is rated, and the patient is given time to apply cognitive and breathing coping skills. Finally, the therapist reviews the induction experience and the application of management strategies with the patient. During this review, the therapist emphasizes the importance of experiencing the sensations fully during the induction of concentrating objectively on the sensations versus distracting from them, and the importance of identifying specific cognitions and challenging them by considering all of the evidence. In addition, the therapist asks key questions to help the patient realize his or her safety (e.g., "What would have happened if you had continued spinning for another 60 seconds?"). and to generalize to naturally occurring experiences (e.g., "How is this different from when you feel dizzy at work?"). In other words, cognitive restructuring extends the cognitive reprocessing already taking place implicitly as a result of repeated interoceptive exposure.

Specific, previously unrecognized cognitions sometimes become apparent during repeated exposure. For example, when Julie began to conduct repeated exposures to hyperventilation and spinning, she became more aware of her implicit assumption that sensations of spaciness or lightheadedness would lead her to lose control of her limbs. This related to her concern about causing an accident when driving. During repeated hyperventilation exercises, and with prompting of "what if's" from the therapist, Julie discovered her fear of not being able to move her arms or legs. The therapist then behaviorally challenged this assumption by having Julie overbreath for longer periods of time, followed immediately by walking, picking up objects, and so on.

Homework practice is very important because safety signals present in the clinic setting or that derive from the therapist per se may, again, prevent generalizability to the natural setting. Patients are instructed to practice the interoceptive items conducted in session on a daily basis, three times each day. Julie was to practice hyperventilation over the following week. She expressed some concern at doing the exercises alone, so the therapist helped Julie to use her cognitive restructuring skills in relation to being alone. In addition, more gradualization of homework was suggested, so that Julie would practice hyperventilation when her husband was at home the first couple of days, then when he was not at home the rest of the time.

Sessions 6 and 7

The primary goal of these sessions is to review the past week of in vivo exposure practices, design new exposures, review between-session practices of interoceptive exposure, conduct repeated interoceptive exposure in session, and assign those as homework for the next week.

The in vivo exposure is reviewed as in the previous session. In this case, Julie and Larry had done well with the movie theater practice. Julie even practiced going to the movies on her own. On that occasion, she reported higher anxiety than when she was with Larry for fear of having to get up and leave the theater and worries about bothering others in the audience. The therapist helped Julie to identify what worry led her to think about leaving in the first place. In other words, what did she think might happen if she could not leave? When
Julie indicated that she had thoughts of losing control and causing a scene, she was then prompted to apply her cognitive restructuring skills of evidence-based analyses and decatastrophizing. She was ready to move to the next items on her hierarchy: to spend 2 hours alone at home during the day and to stay alone at home as day turned to night. With every item exposure task, Julie identified what she most feared happening in those situations, and the best practice conditions under which to learn that either those events would not happen and/or she could cope with the worst.

The past week of interoceptive exposure practice is reviewed in session with a mind toward avoidance: either overt failure to practice or covert avoidance by minimizing the intensity or duration of sensations induced, or by limiting practice to the presence of a safety signal (e.g., a significant other) or times when background anxiety is minimal. Reasons for avoidance may include continued misinterpretation of the dangers of bodily sensations (i.e., "I don't want to hyperventilate because I'm afraid that I won't be able to stop overbreathing and no one will be there to help me") or the belief that anxiety will not reduce with repetition of the task.

For the first week, Julie practiced interoceptive exposure exercises about half of the days between sessions. The therapist used a "downward arrow" method to explore Julie's reasons for not practicing every day.

JULIE: I tried hyperventilating on my own. However, I wasn't very successful because I felt too scared and I stopped it as soon as I noticed the strange feelings.

THERAPIST: What did you think would happen if the sensations became more intense?

JULIE: I thought the feelings would get worse and worse and worse, and just overwhelm me. I didn't want to have that feeling of panic again.

THERAPIST: If you did become overwhelmed, then what would happen to you?

JULIE: Then I'd feel really terrible.

THERAPIST: And if you felt really terrible?

JULIE: Well, nothing. I'd just feel terrible.

THERAPIST: The word "terrible" carries a lot of meaning. Let's see if we can pin down your anxious thoughts that make the feelings so terrible.

JULIE: I just can't tolerate the feeling.

THERAPIST: What tells you that you cannot tolerate it? How do you know you can't tolerate it?

And the discussion continued, so that Julie realized what was most important for her to learn by the repeated hyperventilation: She could tolerate the sensations and anxiety. However, after the subsequent week of repeated practice, Julie remained cautious for fear that the exercises would cause her to revert to her state of several weeks earlier; that is, she was concerned that the inductions would leave her in a persistently symptomatic state. Furthermore, she was particularly reluctant to practice interoceptive exposure at the end of the day, when she was more likely to feel unreal, or on a day when an important social event was scheduled. Again, these avoidance patterns were related to fears that the symptoms would become too intense or result in some type of mental or social catastrophe. These types of avoidance patterns are addressed in the following vignette:

THERAPIST: When did you practice deliberately spinning and hyperventilating?

JULIE: Usually in the mornings. One day I left it until the end of the day, and that turned out to be a bad idea. I felt terrible.

THERAPIST: Let's think about that a bit more. What made it terrible when you practiced at the end of the day?

JULIE: Well, I was already feeling pretty unreal—usually do around that time of the day. So I was much more anxious about the symptoms.

THERAPIST: Being more anxious implies that you thought the symptoms were more harmful. Is that what happened on the day that you practiced interoceptive exposure when you were already feeling unreal?

JULIE: Yes, I felt that because I was already feeling unreal, I was on the edge, and that I might push myself over the edge if I tried to increase the feelings of unreality.

THERAPIST: What do you mean by "push myself over the edge"?

JULIE: That I would make the feelings so intense that I really would lose it—go crazy.

THERAPIST: So there is one of those hypotheses: to feel more intense unreality means to be closer to going crazy. Let's examine the evidence. Is it necessarily the case that more intense unreality means you are closer to craziness?
In sessions, the therapist continued practice of interoceptive exposure with the next item on Julie’s hierarchy, which was to stare at a spot on the wall and to spin around.

The homework from this session is to continue self-monitoring, in vivo exposure to an item from the agoraphobia hierarchy at least three times, and daily practice of interoceptive exposure.

Sessions 8 and 9

The primary goals of these sessions are to continue in vivo exposure, as described in the prior sessions, and to extend interoceptive exposure to natural activities. Julie had practiced staying at home for 2 hours alone during the day and as daylight turned to dusk, with good results. In particular, despite experiencing a couple of panic attacks during these in vivo exposure practices, she continued with the assigned practice. This was critical for Julie because it allowed her to learn that she could survive the feeling of panic; it was the first time she had remained in a situation despite panicking.

In reviewing the week’s practice of interoceptive exposure, it became apparent that Julie was separating the practices from real-life experiences of bodily sensations in a way that would limit generalization. This was addressed as follows:

**JULIE:** After spinning and hyperventilating several times, I really do feel much less anxious. I was terrified at the start, but now I am only mildly anxious, if at all. But this is different than what happens to me when I’m on the freeway or at home.

**THERAPIST:** How is it different?

**JULIE:** I don’t know when the feelings of dizziness and unreality are going to hit.

**THERAPIST:** From our previous discussions, let’s think of potential reasons why you might feel dizzy or unreal at a particular time?

**JULIE:** I know. I have to keep remembering that it could be my breathing, or just feeling anxious, or tired, or a bunch of different things.

**THERAPIST:** OK. And why is it so important to know when those feelings will occur?

**JULIE:** Because I don’t want them to be there at all.

**THERAPIST:** And why not... what are you afraid of?

**JULIE:** I guess it’s the same old thing... that I’ll lose it somehow?

**THERAPIST:** So let’s go back to the cognitive restructuring that you have been doing. What specifically are you afraid of? How likely is it to happen? What are the alternatives?

**JULIE:** I understand.

**THERAPIST:** So, now you see that whether the sensations of dizziness or unreality are produced by anxiety, overbreathing, diet, or the exercises we do here, they’re all the same—they are just uncomfortable physical sensations. The only reason they perturb you more when you are driving or at home is because of the meaning you still give to them in those situations.

“Naturalistic” interoceptive exposure refers to exposure to daily tasks or activities that have been avoided or endured with dread because of the associated sensations. Typical examples include aerobic exercise or vigorous physical activity, running up flights of stairs, eating foods that create a sensation of fullness or are associated with sensations of choking, scents or steamy showers, driving with the windows rolled up and the heater on, caffeine consumption, and so on. (Of course, these exercises may be modified in the event of actual medical complications, such as asthma or high blood pressure.) From a list of typically feared activities and generation of items specific to the individual’s own experience, a hierarchy is established. Each item is ranked in terms of anxiety ratings (0–10). Julie’s hierarchy was as follows: looking out through venetian blinds (anxiety = 3); watching One Flew over the Cuckoo’s Nest (anxiety = 4); playing tennis (anxiety = 4); scanning labels on a supermarket shelf (anxiety = 5); concentrating on needlework for an hour (anxiety = 6); driving with windows closed and heater on (anxiety = 7); a nightclub with strobe lights (anxiety = 8); and rides at Disneyland (anxiety = 10).

Like the symptom exercises, the activity exercises are designed to be systematically graduated and repetitive. Patients may apply the breathing and cognitive skills while the activity is ongoing. This is in contrast to the symptom induction exercises, in which coping skills are used only after completion of the symptom exercise, because the activities often are considerably longer than the symptom induction exercises. Nevertheless, patients are encouraged to focus on the sensations and experience them fully throughout the activity, and not use the coping skills to prevent or remove the sensations.
patients are instructed to identify maladaptive cognitions and rehearse cognitive restructuring before beginning each activity. In-session rehearsal of the cognitive preparation allows therapists to provide corrective feedback. Julie did this with her therapist for her first two naturalistic activities, which were to look at venetian blinds and to watch One Flew over the Cuckoo’s Nest. Julie realized that she was most worried about sensations of unreality and fears of going crazy, although, as a result of her various exposure exercises up to this point, she quickly was able to recognize that such sensations were harmless and that she could tolerate them, and that such fears were unrealistic based on the evidence.

As with all exposures, it is important to identify and remove (gradually, if necessary) safety signals or protective behaviors, such as portable phones, lucky charms, walking slowly, standing slowly, and staying in close proximity to medical facilities. These safety signals and behaviors reinforce catastrophic misappraisals about bodily sensations. Julie’s safety behaviors were identified as checking the time on the clock (as a reassurance that she was in touch with reality) and pinching herself again, to feel reality. She was asked to practice the two naturalistic interoceptive exposures at least three times each before the next treatment session, without the safety behaviors.

Sessions 10 and 11

The primary goals of these sessions are to review the in vivo and naturalistic exposure exercises over the past week, and to combine exposure to feared and avoided agoraphobic situations with deliberate induction of feared sensations into those situations. As with earlier interoceptive exposure homework assignments, it is important to evaluate and correct tendencies to avoid naturalistic interoceptive exposure tasks, mainly by considering the underlying misappraisals that lead to avoidance. Remember also that a form of avoidance is to rely on safety signals or safety behaviors, so careful questioning of the way in which the naturalistic exposure was conducted, and under what conditions, may help to identify inadvertent reliance on these unnecessary precautions. Julie reported that she was successful in looking at the venetian blinds, even though she experienced sensations of unreality. She had more difficulty watching One Flew over the Cuckoo’s Nest because it tapped directly into her worst fears of losing touch with reality permanently; she tried but terminated the film early. The second time, she watched it with Larry, who prompted Julie to remember her cognitive and breathing skills, and she was able to watch the entire film. She watched the film one more time on her own. Two new naturalistic exposure items were selected for the coming week, with special attention to wearing or removing safety signals and safety behaviors, and rehearsal of cognitive restructuring in session. For Julie, these were playing tennis (something she had avoided for years) and scanning items on supermarket shelves.

The notion of deliberately inducing feared bodily symptoms within the context of feared agoraphobic situations derives from the evidence that compound relationships between external and internal cues can be the most potent anxiogenic agent (i.e., deepened extinction, as reviewed in earlier sections); that is, whether the situation is just the bodily sensation triggers distress. It is the combination of the bodily sensation and the situation that is most distressing. Thus, effective exposure targets both types of cues. Otherwise, patients run the risk of false return of fear. For example, repeated practice walking through a shopping mall without feeling dizzy does not adequately prepare patients for occasions on which they feel dizzy walking through a shopping mall, and without such preparation, patients may be likely to panic and escape should they feel dizzy in this or similar situations in the future. Wearing heavy clothing in a restaurant helps patients to learn to be less afraid of not only the restaurant but also of feeling hot in a restaurant. Other examples include drinking coffee before any of the agoraphobic tasks, turning off the air-conditioning or turning on the heater while driving, breathing very slowly in a crowded area, and so on.

Patients choose an item from their hierarchy of agoraphobic situations, either one already completed or a new item, and also choose which symptom to induce and ways of inducing that symptom in that situation. Julie’s task was to drink coffee as she went to a movie. She expressed the following concerns:

JULIE: Do you really think I am ready to drink coffee and go to the movie?

THERAPIST: What worries you about the combination of coffee and the movie theater?

JULIE: Well, I’ve practiced in the movie theaters a lot, so that feels pretty good, but the coffee is going to make me feel very anxious.

THERAPIST: And if you feel very anxious in the movie theater, then what?
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JULIE: Then, I don't know what. Maybe I will get those old feelings again, like I have to get out.

THERAPIST: Based on everything you have learned, how can you manage those feelings?

JULIE: Well, I guess my number one rule is never to leave a situation because I am feeling anxious. I will stick it out, no matter what.

THERAPIST: That sounds great. It means you are accepting the anxiety and taking the opportunity to learn that you can tolerate it. What else?

JULIE: I can ask myself what is the worst that can happen. I know I am not going to die or go crazy. I will probably feel my heart rate going pretty fast because of the coffee.

THERAPIST: And if your heart rate goes fast, what does that mean?

JULIE: I guess it just means that my heart rate will go fast.

THERAPIST: This will be a really good way for you to learn that you can tolerate the anxiety and the symptoms of a racing heart.

The homework for this session is to continue self-monitoring, to practice in vivo exposure combined with interoceptive exposure, and to continue naturalistic interoceptive exposure.

Session 12

The last treatment session reviews the principles and skills learned and provides the patient with a template of coping techniques for potentially high-risk situations in the future. Julie finished the program after 12 sessions, by which time she had not panicked in 8 weeks, rarely experienced dizziness or feelings of unreality, and was driving further distances. There were some situations still in need of exposure practices (e.g., driving very long distances away from home and on the freeway at dusk). However, Julie and Larry agreed to continue in vivo exposure practices over the next few months to consolidate her learning and to continue her improvement.

CONCLUSION

As noted earlier in this chapter, cognitive-behavioral treatments for panic disorder and agoraphobia are highly effective and represent one of the success stories of psychotherapy. Between 80 and 100% of patients undergoing these treatments will be panic free at the end of treatment and maintain these gains for up to 2 years. These results reflect substantially more durability than medication treatments. Furthermore, between 50 and 80% of these patients reach a point of “high end state,” which means their symptoms and functioning are within normative realms, and many of the remainder have only residual symptomatology. Nevertheless, major difficulties remain.

First, these treatments are not foolproof. As many as 50% of patients retain substantial symptomatology despite improvement from baseline, and this is particularly likely for those with more severe agoraphobia. Further research must determine how treatments can be improved or better individualized to alleviate continued suffering. For example, one of us (D. H. B.) saw a patient several years ago who had completed an initial course of treatment but required continued periodic visits for over 4 years. This patient was essentially improved for approximately 9 months but found himself relapsing during a particularly stressful time at work. A few booster sessions restored his functioning, but he was back in the office 6 months later with reemerging symptomatology. This pattern essentially continued for 4 years and was characterized by symptom-free periods followed by (seemingly) stress-related relapses. Furthermore, the reemerging panic disorder would sometimes last from 3 to 6 months before disappearing again, perhaps with the help of a booster session.

Although this case was somewhat unusual in our experience, there was no easy explanation for this pattern of relapses and remissions. The patient who had a graduate degree, understood and accepted the treatment model and fully implemented the treatment program. There was also no question that he fully comprehended the nature of anxiety and panic, and the intricacies of the therapeutic strategies. While in the office, he could recite chapter and verse on the nature of these emotional states, as well as the detailed process of his own reaction while in these states. Nevertheless, away from the office, the patient found himself repeatedly hoping that he would not “go over the brink” during a panic attack, despite verbalizing very clearly the irrationality of this concept while in the office. In addition, he continued to attempt to reduce minor physiological symptoms associated with anxiety and panic, despite a full rational understanding of the nature of these symptoms (including the fact that they are the same symptoms he experi-
enced during a state of excitement, which he enjoyed. His limited tolerance of these physical sensations was also puzzling in view of his tremendous capacity to endure pain.

Any number of factors might account for what seemed to be “overvalued ideation” or very strongly held irrational ideas during periods of anxiety, including the fact that the patient has several relatives who have repeatedly been hospitalized for emotional disorders (seemingly mood disorders or schizoaffective disorder). Nevertheless, the fact remains that we do not know why this patient did not respond as quickly as most people. Eventually he made a full recovery, received several promotions at work, and considered treatment to be the turning point in his life. But it took 5 years.

Other patients, as noted earlier, seem uninterested in engaging in treatment, preferring to conceptualize their problems as chemical imbalances. Still others have difficulty grasping some of the cognitive strategies, and further attempts are necessary to make these treatments more “user-friendly.”

It also may seem that this structured, protocol-driven treatment is applied in a very standard fashion across individuals. Nothing could be further from the truth. The clinical art involved in this, and in all treatments described in this book, requires a careful adaptation of these treatment strategies to the individual case. Many of Julie’s symptoms revolved around feelings of unreality (derealization and depersonalization). Emphasizing rational explanations for the production of such feelings, as well as developing cognitive and exposure exercises to maximize these sensations, is an important part of this treatment program. Although standard interoceptive provocation exercises seemed sufficient to produce relevant symptomatology in Julie’s case, we have had to develop new procedures to deal with people with more idiosyncratic symptoms and fears, particularly those involving feelings of unreality or dissociation. Other innovations in both cognitive and behavioral procedures will be required by individual therapists as they apply these procedures.

Although these new treatments seem highly successful when applied by trained therapists, treatment is not readily available to individuals with these disorders. In fact, these treatments, although brief and structured, are far more difficult to deliver than, for example, pharmacological treatments (which are also often misapplied). Furthermore, few people are currently skilled in the application of these treatments. What seems to be needed for these and other successful psychosocial treatments is a new method of disseminating them, so that they reach the maximum number of patients. Modification of these treatment protocols into more user-friendly formats, as well as brief periods of training for qualified therapists to a point of certification, would be important steps in successfully delivering these treatments. This may be difficult to accomplish.

NOTE

1. Specific phobias were not assessed, but by being most circumscribed, they would be hypothesized to load the least on negative affectivity.

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