CHAPTER 2

Panic Disorder with Agoraphobia

Dennis Holt was 31 years old, divorced, and a successful insurance salesman. He had experienced panic attacks on several occasions during the past 10 years, but he did not seek psychological treatment until shortly after the last incident. It happened while Dennis and his fiancée, Elaine, were doing their Christmas shopping at a local mall. Their first stop was a large department store where Elaine hoped to find a present for her mother. Dennis was in a good mood when they arrived at the store. Although he was usually uneasy in large crowds of people, he was also caught up in the holiday spirit and was looking forward to spending the bonus that he had recently received from his company. Ten minutes after they began shopping, Dennis suddenly felt very sick. His hands began to tremble uncontrollably, his vision became blurred, and his body felt weak all over. He experienced a tremendous pressure on his chest and began to gasp for breath, sensing that he was about to smother. These dramatic physical symptoms were accompanied by an overwhelming sensation of apprehension. He was terrified but did not know why. Without saying anything to Elaine, he whirled and dashed from the store, seeking refuge in their car, which was parked outside. Once there, he rolled down the windows to let in more air, lay down on the back seat, and closed his eyes. He continued to feel dizzy and short of breath for about 10 minutes more.

Elaine did not find him for more than an hour because she had been browsing in an adjacent aisle and had not seen him flee from the store. When she noticed that he was gone, she looked for him in other stores before she realized that something was wrong and finally decided to check the car. This was the first panic attack that Dennis had experienced since he and Elaine had begun dating several months previously. After they returned to his apartment, he explained what had happened and his past history of attacks in somewhat greater detail; she persuaded him to seek professional help.

When Dennis arrived at the psychological clinic for his first appointment, he was neatly dressed in an expensive suit. He was five minutes early, so the receptionist asked him if he would like to take a seat in the large, comfortably furnished waiting room where several other clients were sitting. Politely indicating that he would prefer to stand, Dennis leaned casually against the corridor wall. Everything about his physical appearance—his posture, his neatly trimmed hair, his friendly smile—conveyed a sense of confidence and success. Nothing betrayed the real sense of dread with which he had struggled since he had promised Elaine that he would consult a psychologist. Was he, in fact, crazy? He wanted help, but he did not want anyone to think that he was emotionally unstable.

The first interview was not very productive. Dennis cracked jokes with the psychologist and attempted to engage in an endless sequence of witty small talk. In response to the psychologist's persistent queries, Dennis explained that he had promised his fiancée that he would seek some advice about his intermittent panic attacks. Nevertheless, he was reluctant to admit that he had any really serious problems, and he evaded many questions pertaining to his current adjustment. Dennis seemed intent on convincing the psychologist that he did not have a serious psychological problem. He continued to chat on a superficial level and, at one point, even began asking the psychologist whether she had adequate life insurance coverage.

In subsequent sessions it became clear that the panic attacks, which never occurred more than two or three times per year, were simply the most dramatic of Dennis's problems. He was also an extremely tense and anxious person between attacks. He frequently experienced severe headaches that sometimes lasted for several hours. These generally took the form of a steady, diffuse pain across his forehead. Dennis also complained that he could not relax, noting that he suffered from chronic muscle tension and occasional insomnia. His job often required that he work late in the evening, visiting people in their homes after dinner. When he returned to his apartment, he was always "wound up" and on edge, unable to sleep. He had tried various distractions and popular remedies, but nothing worked.

Dennis was very self-conscious. Although he was an attractive man and one of the most successful salespersons in his firm, he worried constantly about what others thought of him. This concern was obvious in his behavior both before and after sessions at the clinic. At the end of every session, he seemed to make a point of joking loudly so that anyone outside the psychologist's office would hear the laughter. He would then open the door, as he continued to chuckle, and say something like, "Well, Alicia [the therapist's first name], that was a lot of fun. Let's get together again soon!" as he left her office. The most peculiar incident of this sort occurred prior to the fourth treatment session. Dennis had avoided the clinic waiting room on past visits, but this time it happened that he and his therapist met at a location that required them to walk through the waiting room together in order to reach her office. Thinking nothing of it, the therapist set off across the room in which several other clients were waiting, and Dennis quickly followed. When they reached the middle of the long room, Dennis suddenly clasped his right arm around her shoulders, smiled, and in a voice that was slightly too loud said, "Well, Alicia, what's up? How can I help you today?" The therapist was taken completely by surprise but said nothing until they reached her office. Dennis quickly closed the door and leaned against the wall, holding his hand over his heart as he gulped for air. He was visibly shaken. Once he had caught his breath, he apologized profusely and explained that he did not know what had come over him. He said that he had always been afraid that the other people in the clinic, particularly the other clients, would realize that he was a client and therefore think that he was crazy. He had become extremely uncomfortable as they walked across the waiting room and had been unable to resist the urge to divert attention from himself by seeming to be a therapist.

This preoccupation with social evaluation was also evident in Dennis's work. He became extremely tense whenever he was about to call on a prospective client. Between the point at which an appointment was arranged and his arrival at the per-

son's home, Dennis worried constantly. Would he or she like him? Could he make the sale? His anxiety became most exaggerated as he drove his car to the person's home. In an effort to cope with this anxiety, Dennis had constructed a 45-minute recording that he played for himself on the cassette deck in his car. The tape contained a long pep talk, recorded in his own voice, in which he continually reassured and encouraged himself: "Go out there and charm 'em, Dennis. You're the best damn salesman this company's ever had! They're gonna be putty in your hands. Flash that smile, and they'll love you!" and on and on. Unfortunately, the net effect of the recording was probably to increase his tension. Despite this anxiety, he managed to perform effectively in the selling role, just as he was able to project an air of confidence in the clinic. But, on the inside, he was miserable. Every two or three months he would become convinced that he could no longer stand the tension and decide to quit his job. Then he would make a big sale or receive a bonus for exceeding his quota for that period and change his mind.

Social History

Dennis was an only child. His father was an accountant, and his mother was an elementary-school teacher. No one else in his family had been treated for adjustment problems.

Dennis and his mother got along well, but his relationship with his father had always been difficult. His father was a demanding perfectionist who held very high, probably unrealistic, expectations for Dennis. When Dennis was in elementary school, his father always wanted him to be the best athlete and the best student in his class. Although Dennis was adequate in both of these areas, he did not excel in either. His father frequently expressed the hope that Dennis would become an aeronautical engineer when he grew up. Now that Dennis was working as an insurance salesman, his father never missed an opportunity to express his disapproval and disappointment. He was also unhappy about Dennis's previous divorce. When his parents came to visit, Dennis and his father usually ended up in an argument.

Dennis remembered being shy as a child. Nevertheless, he enjoyed the company of other children and always had a number of friends. When he reached adolescence, he was particularly timid around girls. In an effort to overcome his shyness, he joined the high school drama club and played bit parts in several of its productions. This experience provided an easy avenue for meeting other students with whom he became friends. He also learned that he could speak in front of a group of people without making a fool of himself, but he continued to feel uncomfortable in public speaking and social situations.

After graduating from high school, Dennis attended a private liberal arts college for two years. Although he had been a reasonably good student in high school, he began to experience academic problems in college. He attributed his sporadic performance to test anxiety. In his own words, he "choked" on examinations. Shortly after he entered the classroom, the palms of his hands would begin to perspire profusely. Then his breathing would become more rapid and shallow and his mouth would become very dry. On the worst occasions, his mind would go blank.

Some of his instructors were sympathetic to the problem and allowed him to take extra time to finish examinations; others permitted him to turn in supplementary papers that were written out of class. Nevertheless, his grades began to suffer, and by the end of his first year he was placed on academic probation.

During his second year in college, Dennis began to experience gastrointestinal problems. He had always seemed to have a sensitive stomach and avoided rich or fried foods that often led to excessive flatulence or nausea. Now the symptoms were getting worse. He suffered intermittently from constipation, cramping, and diarrhea. He would frequently go for three or four days without having a bowel movement. During these periods, he experienced considerable discomfort and occasional severe cramps in his lower abdominal tract. These problems persisted for several months until, at the urging of his roommate, Dennis finally made an appointment for a complete gastrointestinal examination at the local hospital. The physicians were unable to find any evidence of structural pathology and diagnosed Dennis's problems as "irritable bowel syndrome." They prescribed some medication, but Dennis continued to suffer from intermittent bowel problems.

Dennis had several girlfriends and dated regularly throughout high school and college. During his sophomore year in college, he developed a serious relationship with Mary, who was a freshman at the same school. She and Dennis shared some interests and enjoyed each other's company, so they spent a great deal of time together. At the end of the academic year, Dennis decided that he had had enough of college. He was bored with his classes and tired of the continual pressure from his parents to get better grades. An older friend of his had recently landed a well-paying job with an insurance firm, so Dennis decided that he would complete applications with a number of companies. He was offered a position in sales with a company in a nearby state. Mary decided that she would also drop out of school. She and Dennis began living together; they were married two years later.

Dennis and Mary were reasonably happy for the first three years. He was successful at his job, and she eventually became a licensed realtor. As they were both promoted by their respective firms, they found themselves spending more and more time working and less and less time with each other. Their interests also began to diverge. When Mary had some time off or an evening free, she liked to go out to restaurants and parties. Dennis liked to stay home and watch television.

Dennis's first real panic attack occurred when he was 24 years old. He and Mary were at a dinner theater with three other couples, including Mary's boss and his wife. The evening had been planned for several weeks, in spite of Dennis's repeated objections. He was self-conscious about eating in public and did not care for Mary's colleagues; he had finally agreed to accompany her because it seemed that it would be important for her advancement in the firm. He was also looking forward to seeing the play, which would be performed after the meal was served. As the meal progressed, Dennis began to feel increasingly uncomfortable. He was particularly concerned that he might experience one of his gastrointestinal attacks during dinner and be forced to spend the rest of the evening in the men's restroom. He did not want to have to explain the problem to all of Mary's friends. In an attempt to prevent such an attack, he had taken antispasmodic medication for his stomach and was eating sparingly. Just as everyone else had finished eating dessert, Dennis be-

gan to experience a choking sensation in his throat and chest. He could not get his breath, and it seemed certain to him that he was going to faint on the spot. Unable to speak or move, he remained frozen in his seat in utter terror. The others quickly realized that something was wrong, and, assuming that he had choked on some food, Mary began to pound on his back between the shoulder blades. There was now a sharp pain in his chest, and he began to experience heart palpitations. Dennis was finally able to wheeze that he thought he was having a heart attack. Two of the other men helped him up, and a waiter directed them to a lounge in the building where he was able to lie down. In less than 30 minutes, all of the symptoms had passed; Dennis and Mary were able to excuse themselves from the others and drive home.

Dennis was frightened by this experience, but he did not seek medical advice. He was convinced that he was in good physical condition and attributed the attack to something he had eaten or perhaps to an interaction between the food and medication. He did, however, become even more reluctant to go to restaurants with Mary and her friends. Interestingly, he continued to eat business lunches with his own colleagues without apparent discomfort.

The second panic attack occurred about six months later, while Dennis was driving alone in rush-hour traffic. The symptoms were essentially the same: the sudden sensation of smothering, accompanied by an inexplicable, intense fear. Fortunately, Dennis was in the right lane of traffic when the sensation began. He was able to pull his car off the road and lie on the seat until the experience was over.

By this point, Dennis was convinced that he needed medical help. He made an appointment with a specialist in internal medicine who gave him a complete physical examination. There was no evidence of cardiovascular or gastrointestinal pathology. The physician told Dennis that the problem seemed to be with his nerves and gave him a prescription for alprazolam (Xanax®), a high-potency benzodiazepine often used in treating anxiety disorders and insomnia. Dennis took 2 milligrams of Xanax three times per day for four months. It did help him relax and, in combination with his other medication, seemed to improve his gastrointestinal distress. However, he did not like the side effects (such as drowsiness and lightheadedness) or the feeling of being dependent on medication to control his anxiety. He saw the latter as a sign of weakness and eventually discontinued taking the Xanax (decreasing his daily dosage gradually, as recommended by his physician).

Mary asked Dennis for a divorce three years after they were married (two years after his first panic attack). It came as no surprise to Dennis; their relationship had deteriorated considerably. He had become even more reluctant to go out with her in the evening and on weekends, insisting that he needed to stay home and rest his nerves. He was very apprehensive in crowded public places and also careful about where and when he drove his car. He tried to avoid rush-hour traffic. When he did drive in heavy traffic, he always stayed in the right lane, even if it was much slower, so that he could pull off the road if he had an attack. Long bridges made him extremely uncomfortable because they did not afford an opportunity to pull over; he dreaded the possibility of being trapped on a bridge during one of his "spells." These fears did not prevent him from doing his work. He continued to force himself to meet new people, and he drove long distances every day. The most

drastic impact was on his social life. These increased restrictions led to greater tension between Dennis and Mary. They had both become more and more irritable and seldom enjoyed being with each other. When she decided that she could no longer stand to live with him, he agreed to the divorce.

After Mary left, Dennis moved to an apartment in which he was still living when he entered treatment five years later. His chronic anxiety, occasional panic attacks, headaches, and gastrointestinal problems persisted relatively unchanged, although they varied in severity. He had a number of friends and managed to see them fairly frequently. He did, however, avoid situations that involved large crowds. He would not, for example, accompany his friends to a professional football game, but he did like to play golf, where he could be out in the fresh air with very few people and lots of open space around him. He met Elaine four years after the divorce. She was slightly older than he and much less active socially than Mary had been. They enjoyed spending quiet evenings watching television and occasionally got together with one or two other couples to play cards. Although they planned to get married, neither Dennis nor Elaine wanted to rush into anything.

Conceptualization and Treatment

When Dennis entered treatment, he expressed a desire to learn how to control his anxiety, particularly when it reached its most excessive proportions in the form of panic attacks. He did not feel comfortable taking medication because he considered it to be an artificial "crutch." He had read about cognitive-behavioral approaches to the treatment of anxiety and was looking for a psychologist with whom he could follow such an approach. He had, in fact, found such a person.

The difficulties that Dennis had experienced over the last several years included a complex blend of generalized anxiety and occasional panic attacks. His therapist viewed Dennis's problems as being the result of an interaction between vulnerability to stress and various cognitive and behavioral responses that exacerbate and maintain high levels of anxiety. Like many other patients with panic disorder, Dennis had experienced his first panic attack during an event that he perceived to be very stressful (the dinner with his wife's boss). After that traumatic experience, he became increasingly afraid of (and tried to avoid) situations in which he might have another attack. This avoidance was maintained, in part, by distorted and unrealistic things that he said to himself about future events and his interactions with other people. For example, Dennis believed that it would be a catastrophe if someone did not like him. He also insisted to himself that he had to be the *best* salesperson in this firm—and, if he was not, then he would be a failure. These maladaptive attitudes had most likely been instilled in Dennis by his father, who had continually emphasized his demand for perfection and whose affection seemed to hinge on its attainment. More useful self-statements would have to be substituted for these maladaptive demands before Dennis would feel more comfortable in social situations, particularly those that involved his work.

The therapist agreed to help Dennis reduce his generalized anxiety as well as to help him to eliminate panic attacks. In Dennis's case, this was particularly impor-

tant because his panic attacks were relatively infrequent. The reduction in generalized anxiety would be accomplished by teaching him more appropriate ways of coping with, and thinking about, his environment. Treatment would include applied relaxation training and cognitive restructuring. Once these skills were learned, therapy sessions would turn to situational exposure aimed at decreasing Dennis's avoidance of situations in which he feared having another panic attack. The process of discussing this conception of the problem and arriving at a treatment plan was accompanied by an obvious change in Dennis's behavior toward the therapist. He became much less defensive and dropped his annoying, superficial displays of bravado, when he realized that the psychologist intended to function as a teacher, not as a judge who would rule on his sanity.

The therapist decided to begin treatment with training in relaxation. Her purpose at the outset was not to eliminate the occurrence of any more panic attacks. They were, of course, the most dramatic and perhaps the most difficult of Dennis's problems. But their infrequency also meant that even if Dennis learned to control them, he would not be able to notice any improvement in his adjustment for a long time. Therefore, the therapist's first goal was to select a simpler problem and an area in which Dennis could see rapid improvement, thus enhancing his motivation for further change efforts. The most suitable place to begin, therefore, was his inability to relax when he returned to his apartment after work.

Relaxation training was introduced to Dennis as an active coping skill that he could use to control muscular tension. The therapist explained that she would begin by teaching Dennis how to use the procedure in the clinic setting. Dennis would be expected to practice relaxation at home on a daily basis for several weeks. He was cautioned against expecting a sudden change in his anxiety level and was told that, for most people, the development of relaxation skills takes considerable effort.

Relaxation training began during the sixth treatment session. The therapist asked Dennis to stretch out in a comfortable reclining chair and then demonstrated the procedure, which involved the alternate tensing and relaxing of a sequence of muscle groups. The therapist drew Dennis's attention to his pattern of breathing and asked him to take deep, slow breaths. When Dennis was comfortable, the therapist asked him to lift his forearms off the arms of the chair and tighten his hands into fists. He was instructed to hold that position for five seconds, noting the muscle tension, and then let go. This cycle was repeated through a sequence of several other groups of muscles. Throughout this process, the therapist reminded Dennis to breathe slowly and deeply.

Dennis responded positively to relaxation training. He felt awkward and self-conscious at the beginning of the procedure but quickly overcame his apprehension. Although he did not think that he had reached a state of complete relaxation, he did feel much more relaxed than he had when he arrived for the session; he indicated that he was looking forward to practicing the procedure during the coming week. The therapist explained a subjective rating scale that he could use to keep track of his progress. Using a 10-point scale, with 1 being complete relaxation ("similar to the quiet, drifting feeling that you have before you go to sleep") and 10 being maximum tension ("like you feel when you've already had a tough day and a poten-

tial client has just decided against buying a policy"), Dennis was asked to keep a record of his subjective level of tension before and after each practice session.

Dennis was faithful in completing his homework assignment. His average self-rating of tension was about 6 or 7 before practice and 3 or 4 at the end of each session. He enjoyed the exercise and was pleased finally to be learning a skill to help him cope with his tension. His outlook was clearly hopeful. The therapist expressed confidence in Dennis's ability to overcome his anxiety and also noted that Dennis's willingness to practice outside of their weekly sessions was a good prognostic sign.

The next three sessions were mostly spent discussing Dennis's progress with his relaxation training. By the end of the first month of training, Dennis was consistently able to reduce his subjective tension to a level of 1 or 2 at the end of each practice session. His only problem arose in trying to use the procedure during periods of very high tension. For example, during the second week of practice, he had tried unsuccessfully to use the exercise to eliminate a severe headache that had developed in the afternoon and persisted throughout the evening. The therapist pointed out that Dennis should not be discouraged because he had not reached a stage of proficiency that would allow him to deal with the most serious levels of stress. She also noted that the object of relaxation was primarily to teach Dennis to be aware of muscular tension before it had progressed to such an advanced level. Relaxation could therefore be seen as a kind of preventive procedure, not as a way of coping with problems like headaches after they became severe.

After Dennis was making satisfactory progress with relaxation, the therapist shifted the focus of their discussions to introduce a process known as *cognitive restructuring*. She began with the observation that emotions, or feelings, are influenced by what people say to themselves. In other words, it is not necessarily the objective situation with which we are confronted, but rather what we tell ourselves about the situation that determines our emotional response. For example, a woman who is fearful when speaking in front of a large group of people is not in physical danger. It is probably what that woman is telling herself about the audience ("They'll all think that I'm stupid," or "I'm sure none of them will like me") that leads to undue levels of anxiety. The therapist explained the general principles behind cognitive restructuring while carefully avoiding specific reference to Dennis's own experience.

Once Dennis understood the assumptions behind cognitive restructuring, the therapist outlined several cognitive distortions that are associated with severe anxiety. One example, called "probability overestimation," refers to the tendency to overestimate the probability that a negative event will occur. Another form of cognitive distortion, called "catastrophic thinking," refers to the tendency to exaggerate the consequences of negative events. People who engage in this type of thinking act as though an imagined event would be completely devastating when, in fact, it would be more accurate to say it would be unpleasant but tolerable.

Dennis was intrigued by these notions and, throughout the discussion, often thought of examples of situations in which other people (such as his former wife, Mary) seemed to be making themselves unhappy by engaging in cognitive distortion. As they talked further, the therapist asked Dennis if he could think of examples in which he engaged in this kind of thinking. Initially, this was difficult. The

therapist noted that we are often unaware of the distorted thoughts; they have been so deeply instilled and overlearned that they become automatic. Confronted with an audience, the person with public speaking anxiety does not actually whisper, "I have to be perfect in everything I do, including public speaking, and it is imperative that they all think that I am witty and clever. If they do not, I am a miserable failure." The only subjective experience may be an immediate sensation of overwhelming fear. Nevertheless, that emotional response may be mediated by these self-statements. Furthermore, if that person could learn to think in a less distorted fashion (e.g., "I hope that I will do well and that many of the people will enjoy my talk, but if they do not, it's not the end of the world"), anxiety could be controlled.

These discussions filled the next several sessions. Much of the time was spent taking specific experiences that had been anxiety provoking for Dennis and analyzing the self-statements that might have accompanied his response. Many centered around contacts with clients. The applicability of the cognitive restructuring approach to these situations was particularly evident given the tape recording that he had made to coach himself before appointments. The therapist pointed out that Dennis had been on the right track in this attempt to cope with his anxiety, but many of the statements in the tape created unrealistic expectations that probably exacerbated his problem. Instead of assuring himself that the client would like him because he was the best salesperson in the company, Dennis would have been better able to control his anxiety if he had reduced the demands that he placed on himself and recognized that the success or failure of his career did not depend on the outcome of a single client contact.

Dennis gradually became proficient in noticing the distorted thoughts that led to his anxiety in various situations. At first, he could only dissect these situations in discussions with his therapist. Together, they challenged his catastrophic thoughts and substituted more realistic, evidence-based reasoning. Dennis found it helpful to recognize that the impact of negative events (such as being turned down by a client) would be manageable and short-lived. The goal, of course, was to help him practice this skill until he could employ adaptive self-statements as a coping response before and during stressful experiences. In order to facilitate this process and provide for generalization of these new cognitive responses outside of the therapy sessions, the therapist asked Dennis to begin a diary. Each night, he was to take a few minutes to describe any situation in which he had become particularly anxious during the day. He was instructed to note distorted thoughts that might have been associated with his anxiety as well as complementary self-statements that would have been more appropriate. After keeping this record for four weeks, Dennis noted that he was beginning to feel less anxious in social situations and during sales visits.

The final step in treatment was concerned with Dennis's avoidance of situations that had been previously associated with panic attacks. He had not experienced an attack in the three months since his first visit to the psychologist, probably because he had refused to accompany Elaine to any movies, restaurants, or department stores. He was now able to achieve a state of relaxation quickly and without the aid of the formal tension-relaxation procedure. The therapist therefore decided to begin a program of exposure to feared and avoided situations. This would be accomplished *in vivo* (i.e., in the natural environment), by having Dennis purpose-

fully enter situations that had previously led to feelings of apprehension and dread and then remain there until he had successfully demonstrated to himself that he would not have a panic attack. At the beginning of treatment, this procedure would have been likely to fail because Dennis did not believe that he could handle such situations. The therapist noted that he had now acquired new skills with which he would be able to cope with whatever anxiety, if any, he might experience.

They intentionally began with a fairly easy situation and arranged for Elaine to accompany Dennis. He indicated that her presence would make him feel less vulnerable. His assignment for the week was to go to a specific department store, during the morning on a weekday when there would not be a large crowd present, and spend 15 minutes browsing in the men's department, which was located just inside the front entrance. When this task had been successfully accomplished, Dennis and the therapist designed a hierarchy of stressful situations to which he would expose himself in sequence and for increasing amounts of time. These began with more simple situations, such as the first one at the men's department, and continued on to those that had previously been most difficult for him. The latter included activities such as attending a play with Elaine and sitting in the middle of a center row (where he did not have easy access to an aisle or exit).

The treatment sessions were terminated after six months. Dennis had made considerable progress during that time. He had successfully mastered all of the situations in the exposure hierarchy and had not experienced a panic attack since the one that provoked his entry into treatment. His general anxiety level was also considerably reduced. He continued to experience occasional tension headaches, particularly after especially busy days, but they were less frequent (perhaps two or three each month) and less severe than they had been in the past. His insomnia had disappeared completely. Whenever he did have trouble sleeping, he would utilize the formal tension-relaxation procedure. In this way, he was able to eliminate muscular tension and simultaneously distract himself from whatever problems he was worrying about. Unfortunately, his gastrointestinal problems remained. He still suffered from intermittent constipation and diarrhea and continued to use medication to relieve these discomforts on an ad hoc basis.

Discussion

Disorders in which anxiety is the most prominent symptom are quite common. During any given year, 17 percent of the people in the United States may suffer from at least one form of anxiety disorder, although only one out of four of these people receives treatment for the problem (Narrow et al., 2002). *DSM-IV-TR* (APA, 2000) recognizes eight disorders that involve anxiety and avoidance:

1. Panic Disorder (with or without Agoraphobia)
2. Agoraphobia without History of Panic Disorder
3. Specific Phobia
4. Social Phobia
5. Obsessive Compulsive Disorder (OCD)
6. Posttraumatic Stress Disorder (PTSD)

7. Acute Stress Disorder
8. Generalized Anxiety Disorder (GAD)

Many people exhibit a mixture of symptoms and meet the criteria for more than one disorder (panic disorder and generalized anxiety disorder, in Dennis's case). Most patients who meet the diagnostic criteria for GAD also qualify for a diagnosis of at least one other type of anxiety disorder or major depression (Barlow, 2002).

The *DSM-IV-TR* (APA, 2000) description and organization of anxiety disorders pay special attention to the presence or absence of panic attacks. These extraordinarily frightening experiences, which seldom last more than a few minutes, are discrete periods of apprehension or fear, accompanied by sensations such as shortness of breath, palpitations, chest pains, choking or smothering sensations, dizziness, perspiring, and trembling or shaking. Some patients, like Dennis, experience only one or two attacks a year, whereas others may have them on a daily basis.

The *DSM-IV-TR* definition of a panic attack includes the following criteria: A discrete period of intense fear or discomfort, in which four (or more) of the following symptoms develop abruptly and reach a peak within 10 minutes:

1. Palpitations, pounding heart, or accelerated heart rate
2. Sweating
3. Trembling or shaking
4. Sensations of shortness of breath or smothering
5. Feeling of choking
6. Chest pain or discomfort
7. Nausea or abdominal distress
8. Feeling dizzy, unsteady, lightheaded, or faint
9. Derealization (feeling of unreality) or depersonalization (being detached from oneself)
10. Fear of losing control or going crazy
11. Fear of dying
12. Paresthesias (numbness or tingling sensations)
13. Chills or hot flushes

The *DSM-IV-TR* criteria for Panic Disorder require that the person experience recurrent unexpected panic attacks. At least one of these attacks must be followed by a period of at least one month in which the person has worried about having further attacks or else changes his or her behavior as a result of the attacks.

In phobic disorders, the most important element is a persistent, irrational fear of a specific object or situation that the person goes out of his or her way to avoid. *Agoraphobia* is defined as an exaggerated fear of being in situations or places from which escape might be difficult, or in which help, if needed, might be unavailable. It is among the most common and debilitating of the phobic disorders. In severe cases of agoraphobia, the person becomes entirely housebound—unable to venture outside for fear of experiencing intense anxiety. Agoraphobics frequently report fear of becoming physically ill, fainting, having a heart attack, or dying, particularly during a panic attack. These fears increase if the person's access to support (e.g., a companion) or an avenue of escape is blocked or impaired. Most cases of agoraphobia begin with the experience of panic attacks.

In contrast to the circumscribed fears seen in phobic disorders, Generalized Anxiety Disorder (GAD) is characterized by unrealistic and excessive worry and anxiety occurring more days than not for at least six months. The person must exhibit three or more of the following symptoms in association with these worries: restlessness or feeling keyed up or on edge, being easily fatigued, difficulty concentrating, irritability, muscle tension, and sleep disturbance (Ballenger et al., 2001).

Dennis met the criteria for both Panic Disorder with Agoraphobia and GAD. Although his panic attacks were not especially frequent, he was persistently afraid of having another. His behavior met the criteria for agoraphobia in that he was apprehensive about being in public places from which escape might be difficult. He had occasionally forced himself to enter such situations, but the constriction of his social activities had a very negative impact on his life. Dennis's fear was not so severe that he was entirely housebound, but he did avoid public places from which he was afraid he might not be able to escape.

Dennis also met *DSM-IV-TR* (APA, 2000) criteria for GAD. His muscle tension was clearly evidenced by his inability to relax, his frequent tension headaches, and the constant fatigue from which he suffered. His irregular bowel movements and diarrhea were further signs of autonomic difficulties. He experienced continual apprehension and frequently had difficulty sleeping.

Data regarding the frequency of specific anxiety disorders in the community have been reported by investigators involved in a large-scale epidemiological study, known as the ECA study, concerned with the distribution of mental disorders in five American cities (Robins & Regier, 1991). Approximately six out of every one hundred people interviewed in a 12-month period reported some form of phobic disorder; some people fit more than one subcategory. Specific phobias were the most common (about 5 percent), followed by agoraphobia (about 3 percent), and social phobias (about 2 percent). Specific phobias and agoraphobia were more common among women than men; gender differences are less pronounced for social phobias. GAD was also relatively common among people in this study, with a 12-month prevalence rate of 4 percent. Panic Disorder, on the other hand, was the least common form of anxiety disorder. Slightly more than 1 percent of the subjects in the ECA study qualified for a diagnosis of Panic Disorder during the 12-month period immediately prior to their interview.

Depression and drug abuse are often associated with anxiety disorders (Goodwin, 2002). At least half of all patients with an anxiety disorder have also experienced an episode of major depression at some point. Alcoholism and barbiturate abuse are common results of attempts to use drugs to cope with chronic tension and generalized anxiety. In fact, some patients become addicted to minor tranquilizers that have been prescribed by physicians. Fortunately, Dennis did not become dependent on the use of medication. Although Xanax did make him feel more relaxed, he resisted its use because it made him feel even less in control of his own emotions.

When people with panic disorder decide to seek treatment, most begin by going to a general medical clinic rather than a mental health facility (Zaubler & Katon, 1998). They are among the heaviest users of medical care. Dennis became convinced that he needed help after having a panic attack while driving in rush-hour

traffic. Rather than consulting a psychologist or a psychiatrist, he visited a specialist in internal medicine. This pattern is important for a number of reasons. In order to avoid the use of inappropriate and expensive medical tests and treatments, primary care physicians must be alert to the possibility that many of their patients are suffering from mental disorders, especially anxiety and depression. Identification and effective treatment of problems such as panic disorder can simultaneously minimize the distress experienced by patients and reduce the overall cost of medical services.

Unfortunately, it is sometimes difficult to make the distinction between anxiety disorders and other medical disorders. Patients with panic disorder experience a broad range of medical symptoms, including headaches, cardiovascular problems, and gastrointestinal difficulties (Eaton, et al., 1998). Again, Dennis's experience is consistent with the literature on these points, including his chronic gastrointestinal problems. There is a strong connection between panic disorder and irritable bowel syndrome, which is the most common type of functional gastrointestinal disorder (Mayer et al., 2001).

Etiological Considerations

Several twin studies have found that genetic factors are influential in the transmission of anxiety disorders, especially those that involve the experience of panic attacks (e.g., Hettema, Neale, & Kendler, 2001; van den Heuvel et al., 2000). A somewhat inconsistent picture has emerged with regard to the influence of genetic factors in the etiology of GAD. The data indicate that GAD is somewhat less heritable than other forms of anxiety disorder. Studies of the distribution of various psychological disorders in families also suggest that the etiology of some forms of anxiety and depression may be related. First-degree relatives of patients diagnosed as having both major depression and panic disorder show markedly increased rates of depression, anxiety disorders, and alcoholism in comparison to relatives of normals and those of depressed patients without anxiety disorder. Thus, biological factors appear to be important in the etiology of anxiety disorders, but environmental events are also influential.

Traditional psychological views of anxiety have been based on psychoanalytic and learning theories. Although there are obvious differences between these points of view, both theories treat anxiety as a signal of some expected negative event. Neither draws an important distinction between chronic anxiety and panic attacks. A psychoanalytically-oriented therapist would have viewed Dennis's chronic anxiety as a symptom of unconscious conflict between the ego and previously punished id impulses (Compton, 1992). These impulses are usually presumed to be sexual or aggressive in nature and traceable to early childhood experiences. It might have been argued, for example, that Dennis secretly harbored violent impulses toward his father, who criticized and belittled him. Since he was also afraid of his father (a classic assumption of psychoanalytic theory) and since he would be punished if he harmed his father, these impulses were anxiety provoking and therefore repressed. But when he entered situations in which he might be evaluated by other people, he was reminded of his father's criticism. The hostile impulses then became more in-

tense, and his anxiety would increase proportionately. There was, however, no clear evidence to support this notion. Dennis did not hide his resentment of his father. They argued openly and frequently about every imaginable topic.

The conditioning model would view Dennis's problem as a fear response that had been learned through the association of previously neutral stimuli (e.g., a crowded theater) with a painful or frightening stimulus. Once Dennis had learned to fear particular situations, his avoidance of them would presumably be reinforced by the reduction in anxiety that he experienced after he fled. There are a number of problems with this model (see Mineka & Zinbarg, 1995). One is that very few patients with anxiety disorders can remember having experienced a traumatic event. In Dennis's case, his first panic attack was certainly a terrifying experience, and the fear that he experienced may have become paired with the stimuli that were present when it occurred. This process might explain the maintenance of his desire to avoid crowded public places, but it does not explain the original onset of his intense fear.

Cognitive perspectives on anxiety disorders emphasize the way in which people interpret information from their environment (Roth, Wilhelm, & Pettit, 2005). Maladaptive emotions such as chronic, generalized anxiety are presumably products of self-defeating cognitive schemas. Some people make themselves unnecessarily anxious by interpreting events in a negative fashion. They view the world in a distorted manner that is biased against themselves. The negative thoughts and images that are triggered by environmental events lead to persistent feelings of threat and insecurity.

One cognitive theory of panic disorder was proposed by Clark (e.g., Clark et al., 1997), who argued that panic disorder is caused by catastrophic misinterpretation of bodily sensations. An anxious mood presumably leads to a variety of bodily sensations that accompany negative emotional reactions (changes in heart and respiration rates, dizziness, and so on). This process is accompanied by a narrowing of the person's attention focus and increased awareness of bodily sensations. Next, the person misinterprets the bodily sensation as a catastrophic event.

Consider how this approach might explain one of Dennis's panic attacks. After he had his first attack, Dennis became highly vigilant, watching for the slightest indication that he was having another one. If he became short of breath, for whatever reason, he would interpret the experience as being a sign that he was about to have another attack. This reaction ensured continued operation of the feedback loop, with the misinterpretation enhancing Dennis's sense of threat and so on until the process would spiral out of control. Thus, according to Clark's model, cognitive misinterpretation and biological reactions associated with the perception of threat are both necessary for a panic attack to occur.

Treatment

The therapist who treated Dennis combined the use of relaxation with a cognitive approach to his problems (e.g., Craske & Barlow, 2001). She hypothesized that Dennis's perceptions of social events and the things that he said to himself about these events played an important role in the maintenance of his anxiety. The thera-

pist helped Dennis recognize the general kinds of self-statements that were associated with his anxiety and then modeled more appropriate statements that he would be able to use to cope more effectively with stressful situations. The latter component of the process is particularly important. In addition to helping Dennis gain "insight" into his problem, the therapist taught him specific cognitive skills (adaptive self-statements) that had previously been absent from his repertoire of coping responses. If insight had been sufficient, Dennis would have experienced a decline in his anxiety level as soon as he recognized that he engaged in distorted thinking, but he did not. Positive change was evident only after a prolonged period of practice employing more realistic self-statements, both in and out of therapy sessions.

It should also be noted that the therapist did not rely solely on the cognitive form of intervention. In addition to talking with Dennis about his problem, the therapist helped him learn specific behavioral responses (e.g., applied relaxation) and insisted that he confront various situations in the natural environment. This approach was founded on the realization that although cognitive variables may play an important role in the change process, the most effective treatment programs are performance based. This was clear in Dennis's case. His apprehension in crowded public places was not significantly reduced until he had actually mastered a series of such situations following the exposure procedure.

One version of cognitive-behavioral treatment for panic disorder includes some additional procedures that were not employed in Dennis's case. "Panic control treatment" typically follows a 12-session sequence and incorporates three specific methods (Barlow, 1997). First, *cognitive restructuring* is used to correct the person's erroneous appraisals of physical sensations and to reduce the frequency of catastrophic thinking. Second, *breathing retraining* is used to help the person avoid hyperventilation (a common trigger for panic). Third, *structured exposure to bodily sensations* is employed to reduce the person's sensitivity to cues that have come to be associated with panic attacks (e.g., increased heart and respiration rates). This is accomplished by having the person participate in a series of exercises such as running in place or breathing through a narrow straw. If the person has also developed agoraphobic avoidance, in vivo exposure is also incorporated into the treatment program.

Panic disorder can also be treated with various forms of medication. Selective serotonin reuptake inhibitors (SSRIs), which are widely employed in the treatment of depression, are also used for the treatment of panic disorder (Simon & Pollack, 2000). These drugs include fluoxetine (Prozac®) and fluvoxamine (Luvox®). In comparison to high-potency benzodiazepines such as alprazolam (Xanax®), patients are less likely to become addicted to an SSRI, and they experience fewer problems when the medication is withdrawn. Tricyclic antidepressants, such as imipramine (Tofranil®), are also effective in the treatment of panic disorder. Patients often prefer the SSRIs because they produce fewer side effects than tricyclic antidepressants.

Anxiety disorders are also treated with minor tranquilizers from the class of drugs known as benzodiazepines, which includes alprazolam (Xanax®) and diazepam (Valium®). Dennis had taken Xanax for a few months after his second panic

attack. The benzodiazepines reduce many symptoms of anxiety, especially vigilance and subjective somatic sensations, such as increased muscle tension, palpitations, increased perspiration, and gastrointestinal distress. They have relatively less effect on the tendency to worry and ruminate. Some psychiatrists consider alprazolam to be the drug of choice for patients with panic disorder because it leads to more rapid clinical improvement than antidepressant medication and it has fewer side effects. Several placebo-controlled outcome studies indicate that alprazolam is an effective form of treatment for patients with panic disorders (Davidson, 1997).

There are, of course, some side effects associated with the use of benzodiazepines. These include sedation accompanied by mild psychomotor impairment as well as problems in attention and memory. Dennis discontinued taking Xanax because he was bothered by these side effects. The most serious adverse effect of benzodiazepines is their potential for addiction. Approximately 40 percent of people who use benzodiazepines for six months or more will exhibit symptoms of withdrawal if the medication is discontinued (Shaner, 2000).

Controlled outcome studies indicate that cognitive-behavioral procedures and medication are effective forms of treatment for the anxiety disorders. One report compared several forms of intervention for panic disorder patients (Barlow et al., 2000). More than 300 clients were randomly assigned to one of five forms of treatment: cognitive-behavior therapy (CBT); antidepressant medication (imipramine); CBT plus medication; placebo medication; or CBT plus placebo. Clients were treated weekly for three months. Those who improved during this period were then treated once a month for six more months and followed up six months after treatment had been terminated. Medication and CBT were both found to be superior to placebo by the end of treatment. Panic attacks were significantly reduced in both groups. There were no significant differences between CBT alone and medication alone, although more patients dropped out of the medication group because of unpleasant side effects. Overall, the results of this study suggest that cognitive-behavioral procedures and antidepressant medication are effective forms of intervention for patients with panic disorders.