CHAPTER 1

Anxiety Disorders and the Transdiagnostic Perspective

Anxiety disorders are the most common form of psychological or emotional dysfunction, with prevalence estimates exceeding those of major depressive disorder and substance use disorders (Kessler et al., 2005). In what is seen as the most comprehensive survey of the mental health needs of the United States, Kessler and colleagues (2005) estimated that roughly 18.1% of Americans have had an anxiety disorder in the past year, and more than 28.8% have had an anxiety disorder in their lifetimes. Similar estimates have been reported in surveys from Canada (Offord et al., 1996), Great Britain (Jenkins et al., 1997); continental Europe (Alonso et al., 2004), and Australia (Andrews, Henderson, & Hall, 2001).

Not only are anxiety disorders common, they can also be extremely disabling for the individuals experiencing them, their families, and society as a whole. Economic estimates suggest that anxiety disorders account for an annual $1,500 per person in medical costs and lost productivity, or $42 billion total, in the United States alone (Greenberg et al., 1999). Indeed, the societal burden of anxiety disorders is seen as greater than that of *serious mental illness* (including schizophrenia) and even many medical conditions (Andrews et al., 2000). As one might expect, given their prevalence and impact, anxiety disorders have been among the most heavily studied psychological disorders. Advances and insights are occurring every day, and highly effective and efficient therapies have been developed. This is particularly true with CBT. CBT is

widely acknowledged as the treatment of choice for anxiety disorders. Yet only a small percentage of individuals with an anxiety disorder ever receive CBT—or any effective treatment for that matter (Young et al., 2001). Although there are many reasons for this, including a lack of trained cognitive-behavioral therapists, many psychologists and psychological researchers have begun to question whether part of the problem stems from how we typically classify, diagnose, and understand anxiety disorders.

This book describes a cognitive-behavioral group-based[1] treatment program for anxiety disorders that is based on the *transdiagnostic* model of anxiety. Although the term *transdiagnostic* is frequently used to describe a number of phenomena, it is being used here to describe a treatment program that extends across the different anxiety disorder diagnoses. In other words, this CBT program was designed specifically to be helpful for clients with any anxiety disorder, whether panic disorder, agoraphobia, social anxiety disorder, generalized anxiety disorder, posttraumatic stress disorder, obsessive–compulsive disorder, or specific phobias. Mental health professionals are frequently taught to view the different anxiety disorders, as classified in the DSM, as distinct diagnoses warranting distinct treatment approaches. As this book shows, distinct treatment groups are not necessary.

The Nature of Anxiety and Fear

Central to understanding the nature of anxiety disorders is an understanding of the affective states known as *anxiety* and *fear*. Although many use these terms interchangeably, they actually describe two states that are distinct in their form and function, and possibly their neural substrates, although they are highly related (Blanchard & Blanchard, 1990). At their core, fear and anxiety are normal human affective states.

Fear

Fear, often described as one of the basic or pure emotions (Izard, 1992), is a *present-oriented* state that is designed to protect the individual from a perceived *immediate threat*. It is usually directed toward a concrete

[1]As discussed in Chapter 2, the treatment has been successfully implemented in an individual therapy format as well.

stimulus, activity, or situation. Presumably primarily under the control of a region of the brain known as the amygdala (Gray & McNaughton, 2000), fear is the emotional manifestation of the *fight-or-flight* response (Cannon, 1929). Although the emotional experience is often the most salient aspect of it, fear is a multifaceted phenomenon. Most notably, Lang (1968) identified three major ways in which fear is expressed—cognitive, physiological, and behavioral.

The cognitive component (previously labeled the verbal component; Lang, 1968) is characterized by increases in thoughts of danger, threat, or death (i.e., negative automatic thoughts; see Beck & Emery, 1985). These thoughts serve two functions: increasing attention directed to the threat and away from irrelevant distracters, and motivating action. Activation of fear may also trigger evaluations of one's ability to cope with the perceived threat (Lazarus & Folkman, 1984), and this appraisal will largely determine the degree of fear experienced and the response to it.

The physiological component of fear is characterized by activation of the sympathetic nervous system. This activation results in a variety of physiological changes designed to increase the likelihood of surviving the threat. The liver releases surplus sugars to provide increased energy for action. Respiration rate accelerates, increasing the amount of oxygen transported into the bloodstream, which is used by the muscles to convert the sugar into energy. Epinephrine and norepinephrine are released, increasing the heart rate to more quickly transport oxygen to the muscles. Circulatory changes occur, directing increased blood flow to the major musculature and away from the smaller muscles, dermis, cranium, and gastrointestinal tract. The major musculature shows a general increase in tension to better facilitate fighting or fleeing (see Hoehn-Saric & McLeod, 1993). In essence, then, arousal is increased and nonessential functions are decreased in order to maximize attempts to escape from or defend against the perceived threat (i.e., the fight-or-flight response).

Although Lang (1968) described the third component of fear as behavioral, it may be more appropriate to conceive of it as a motivational response that provides the impetus for engaging in *defensive behavior*. Defensive behaviors typically arise in direct response to the activation of fear and are designed to protect the individual from the perceived threat that prompted activation of the emotional state. Activation of the sympathetic nervous system seems to favor fight-or-flight behaviors, but other defensive behavior patterns commonly arise as well, particularly when the threat cannot be fought or escaped. Such alternate defensive behaviors include passive coping behaviors (e.g., freezing or immobility) and active coping behaviors (e.g., washing or neutralizing). For a variety

of reasons, such as situational demands or sex role expectations, people often do not engage in overt defensive behaviors but still experience fear and the motivation for defensive action. This suggests that the defensive actions are not likely part of the emotion per se but a response to it.

Anxiety

Anxiety, in contrast to fear, is a *future-oriented* cognitive–affective state that appears to arise from the septo-hippocampal system (Gray & McNaughton, 2000). It occurs in response to *anticipated* threats, which are often vague or uncertain in nature. Like fear, anxiety appears to comprise cognitive, physiological, and motivational (behavioral) components. However, unlike fear, anxiety typically has a greater cognitive component and a suppressed physiological element (Barlow, 2002). The physiological response, described by Barlow (2002) as a "preparatory set" or "overpreparedness," appears to place defensive physiological systems in a state of heightened alert. This state serves to facilitate and expedite a flight-or-flight response should the potential threat be encountered. Therefore, anxiety elicits physiological changes similar to those experienced during fear (e.g., increased heart rate, muscle tension, motility changes), but typically at a less intense level (see Kleinknecht, 1986).

Cognitively, anxiety provokes shifts to enhance threat detection and narrow attention to potential threat cues. For example, if you were walking through an unfamiliar forest after dark, attention would be heightened to unusual sounds such as sticks cracking or leaves rustling. Walking in the daytime through a forest you had hiked many times before, you would hardly notice these sounds. This attention shift increases the likelihood that a potential threat, if actually present, will be detected (Mathews & MacLeod, 1985). Interpretive biases and threat-relevant schema are also activated to ensure that any perceived evidence of threat is filtered so that incoming data are acted upon quickly on the basis of past experiences (memories) and beliefs about the threat (Beck & Emery, 1985).

There are also differences in motivational and behavioral responses between fear and anxiety. Whereas fear involves motivation to engage in defensive behaviors, anxiety typically involves motivation for engaging in preventative behaviors (Blanchard & Blanchard, 1990). This latter class of behaviors, which includes avoidance and other defensive behaviors, serves to protect the individual from an anticipated future threat. The mechanism by which the individual is protected from the perceived

threat can, however, vary significantly. Avoidance behavior, for example, serves to minimize the likelihood of encountering the anticipated threat, whereas use of safety cues or other compensatory behaviors serve to minimize the amount of risk or to mitigate the severity of the threat if it is actually encountered.

The Relationship between Anxiety and Fear

Fear motivates defensive behaviors such as escape. Anxiety motivates preventative behaviors such as avoidance. But how are the fear–escape and anxiety–avoidance dyads interrelated? It appears that each of these protective systems may trigger the other in a mutually reinforcing fashion. Anxiety, particularly with increased vigilance for evidence of threat, may increase the likelihood that a threat will be perceived and fear will be experienced. Fear, in turn, forces one to recognize something as a threat that may potentially recur. Moreover, stimuli that have been associated (directly or otherwise) with a fear-provoking threat can, in turn, become cues suggesting potential threat and thereby provoke anxiety.

The Nature of Anxiety Disorders

If anxiety and fear are normal affective states, what is an anxiety disorder? Unfortunately, there are at least as many different theories of anxiety disorders as there are ways of studying anxiety disorders. More pharmacologically minded observers typically emphasize balances and quantities of neurotransmitters (especially serotonin) in the brain, more neurologically oriented observers emphasize the function and density of specific receptors and pathways in the brain, and more psychologically focused observers emphasize the role of learning and perceptions. This latter framework forms the basis from which CBT operates.

The cognitive-behavioral model suggests that in an anxiety disorder, the anxiety and fear systems are not malfunctioning; rather, they are operating correctly but at the wrong time—that is, when there is little danger or threat. An analogy is a fire detection system in a building. Normally, a smoke detector requires a certain amount of smoke particles or a set amount of heat before it will set off the alarm. This threshold is set to maximally protect the occupants in case of an actual fire, but is not so sensitive that it will go off if someone lights birthday candles on a cake. However, some smoke detectors, including the one in my own kitchen, are more sensitive and will sound an alarm whenever I

try to make toast; that is, it assumes a fire when the actual level of threat is quite small.

The cognitive-behavioral model views anxiety disorders sort of like an oversensitive smoke detector. Nearly everybody would experience some degree of fear if he or she were standing on a tall cliff and leaning over (high level of actual danger). An individual with a phobia of heights would experience a similar level of fear if he or she were standing on a desk and leaning over the edge (lower danger); someone who does not have a height phobia would probably not experience any fear in that situation. The cognitive, motivational, and physiological responses during states of anxiety or fear are also functioning correctly in individuals with an anxiety disorder, but again are simply being evoked at a time when the actual or potential danger is low.

The difficulty comes in trying to decide at what point an individual has a "normal" sensitivity to threat or danger versus an anxiety disorder. Unfortunately, there are no obvious guidelines to say that, for example, being fearful when standing 3 feet off the ground is a disorder but being fearful when standing 4 feet off the ground is a normal fear. Typically, if a person is experiencing significant distress from his or her anxiety, or if the anxiety is causing some degree of impairment in his or her life, mental health professionals would consider such sensitivity a disorder.

The DSM Model of Anxiety Disorders

Prior to 1980 most systems of classifying psychological disorders utilized vague descriptions that often varied across hospitals and mental health practitioners. Early versions of the DSM described three variations of anxiety-related disorders: anxiety neurosis, phobic neurosis, and obsessive–compulsive neurosis. Each of these diagnoses was given only a vague one- or two-paragraph description of the general features of the disorder.

As a result of this vagueness, psychological scientists became concerned with the lack of uniformity in diagnosis—particularly the low levels of diagnostic reliability across practitioners. Put another way, one mental health provider might diagnose an individual with disorder A, whereas another would diagnose the same individual with disorder B. This became a significant concern for two reasons: First, if providers cannot make the same diagnosis, then we have no confidence that either is correct, and second, if we cannot trust that a diagnosis is correct, then we cannot expect that diagnosis to effectively inform treatment.

TABLE 1.1. Anxiety Disorder Diagnoses Recognized in DSM-III

Phobic disorders	Anxiety states	Posttraumatic disorders	Other
• Agoraphobia with panic attacks • Agoraphobia without panic attacks • Social phobia • Simple phobia	• Panic disorder • Generalized anxiety disorder • Obsessive–compulsive disorder	• Posttraumatic stress disorder	• Atypical anxiety disorder

To help improve diagnostic reliability, the American Psychiatric Association convened a series of work groups, meetings, and conferences that culminated in the publication of the DSM-III in 1980. The DSM-III presented highly detailed descriptions of different mental disorders, along with specific diagnostic criteria to be used in determining whether a patient had a specific mental disorder. Within the category of anxiety disorders, nine new diagnoses were described (see Table 1.1).

A series of field tests, based on this new structure, conducted across North America showed that diagnostic reliability had improved drastically, although certainly not completely. Subsequent revisions of the diagnostic manual (DSM-III-R, DSM-IV, DSM-IV-TR) have dispensed with the broader categorizations and further refined the classification of anxiety disorders into 12 diagnoses (see Table 1.2).

TABLE 1.2. Anxiety Disorder Diagnoses Recognized in the DSM-IV

- Panic disorder with agoraphobia
- Panic disorder without agoraphobia
- Agoraphobia without history of panic
- Social phobia
- Generalized anxiety disorder
- Obsessive–compulsive disorder
- Specific phobia
- Posttraumatic stress disorder
- Acute stress disorder
- Anxiety disorder due to a general medical condition
- Substance-induced anxiety disorder
- Anxiety disorder not otherwise specified

Panic Disorder and Agoraphobia

Panic disorder describes a cluster of symptoms in which a person experiences a sudden, unexpected feeling of fear accompanied by a host of intense symptoms of autonomic arousal. The attacks are time limited, but the individual experiences recurrent anticipatory anxiety between panic attacks about the possibility of future attacks or about the negative consequences of more attacks. According to cognitive-behavioral models of panic disorder, the anticipatory anxiety leads to hypervigilance for feared symptoms (i.e., carefully scanning for any signs of a panic attack). Bodily sensations, if perceived, can lead to a vicious cycle of increased fear, creating more symptoms of arousal that are catastrophically interpreted, thereby increasing the emotional response, and ultimately culminating in a panic attack. Often, potential emotion-arousing events or activities are avoided in the hope of reducing any feared bodily sensations.

Although this arousal–reactive cycle is characteristic of panic disorder, it is certainly not unique to the diagnosis. Similar cycles are not uncommonly seen in other anxiety disorders. A poignant example was a young woman seen at the University of Houston Anxiety Disorder Clinic. She had an intense fear of negative evaluation and rejection by others and was diagnosed with social anxiety disorder (see the following section). However, a specific belief that she held strongly was that when she became anxious her hands would start to tremble visibly. She feared that others would notice her trembling hands and think that there was something wrong with or weird about her. When she felt as though her hand was trembling, she became more anxious, which increased her muscle tension and feelings of trembling, which, in turn, made her more fearful that others would notice. Similarly, another client was nearly a prototype for DSM-IV obsessive–compulsive disorder: washing/cleaning subtype. This client, in addition to fearing contamination after touching objects in his environment, interpreted the feeling of having sweaty palms as a sign of contamination. His hypervigilance for sweaty palms, as well as his tendency to hold his hands in fists to avoid touching objects, led him to frequently feel his palms become sweaty and he then became fearful. Unfortunately, his galvanic skin response (i.e., the tendency to experience sweaty palms when aroused) exacerbated his fears and led to a further increase in arousal and continued sensations of sweaty (and therefore dirty) hands.

Agoraphobia describes situational activities that are feared and often avoided (or endured with distress) because of the fear that the situation may promote a panic attack or that escape will be difficult if an attack

were to occur. Commonly, fear situations include large crowded places such as grocery stores; theaters or arenas; public transportation; medical, dental, or hairdresser appointments; local or long-distance travel; or sometimes even just leaving the house alone. Agoraphobia without history of panic describes a similar situational avoidance, except that instead of fears related to the occurrence of a panic attack, the individual fears the occurrence of other bodily malfunctions at times when escape may be difficult. A common example is an individual who engages in situational avoidance because of the fear of experiencing uncontrollable diarrhea or loss of bladder control.

Social Anxiety Disorder

Social anxiety disorder (also known as social phobia) is an anxiety disorder characterized by an intense fear of social situations, such as speaking in public, standing in line, meeting new people, attending meetings, making small talk, or simply being observed. People with social phobia may also experience severe anxiety and feel threatened when they have to face performance situations. Those with social anxiety disorder tend to be highly concerned about negative evaluations by others, embarrassment, and humiliation. Moreover, people with social anxiety disorder are sensitive to criticism and rejection, and they fear that others may notice their anxiety, judge them, and think poorly of them. When in social situations, individuals with social anxiety disorder can experience severe anxiety and, in some cases, can have panic attacks. It is estimated that more than 7% of the U.S. population suffers from social anxiety disorder. Embarrassment and humiliation are also listed as common feared consequences of panic attacks in agoraphobia. Some people with social anxiety disorder fear many or most social situations, whereas others may fear only one or a few such situations.

Generalized Anxiety Disorder

Generalized anxiety disorder is a relatively common anxiety disorder characterized by excessive and uncontrollable worry, anxiety, and fear about a number of things, such as minor matters, finances, work or school, health and safety of oneself or loved ones, or community or world affairs. With generalized anxiety disorder, the worry interferes with daily functioning. Although worry is a normal process for most people, people with generalized anxiety disorder worry about things about which most people would say there is no reason to worry, such

as worrying frequently about finances despite having plenty of money in savings. Generalized anxiety disorder is often accompanied by bothersome physical symptoms such as muscle tension, sleep and concentration difficulties, and restlessness. This excessive worry, which is present almost daily for at least 6 months, is intense and frequent.

Obsessive–Compulsive Disorder

In the United States, roughly 2% of adults currently have obsessive–compulsive disorder, and twice that many have had it at some point in their lives (Karno, Golding, Sorenson, & Burnam, 1998). This disorder is characterized by uncontrollable obsessions and/or compulsions that are excessive, unreasonable, and distressing. *Obsessions* are intrusive or inappropriate recurring thoughts or impulses that cause anxiety. Common obsessive thoughts include thoughts that one is contaminated by germs, dirt, or other substances; doubts about whether tasks such as locking the door or turning off the stove were correctly completed; aggressive impulses that the individual would not want to act upon; thoughts that the person may have accidentally harmed someone; embarrassing or distressing thoughts of a sexual, religious/sacrilegious, or inappropriate nature; or a looming feeling that something "bad" is going to happen. *Compulsions*, however, are repetitive behaviors or rituals that are performed to reduce anxiety or neutralize an obsessive thought. Compulsions may involve behaviors such as excessive cleaning and washing, hoarding of useless items, checking and rechecking to ensure that activities were correctly completed, repetitive time-consuming routines, or saying or thinking certain things to get rid of or make amends for an obsessive thought. In most cases, obsessive–compulsive disorder usually involves having both obsessions and compulsions; however, a person with obsessive–compulsive disorder may have only one or the other.

Specific Phobias

Approximately 10% of the U.S. population will develop a specific phobia sometime in their lives. Phobias are characterized by the excessive fear of a specific object or situation that may lead to severe distress and, in some cases, panic attacks. Among the most common phobias are fears of animals such as dogs, snakes, or insects; situations such as flying, being in small enclosed spaces, or driving; blood, needles, injections, or minor injuries; things in nature, such as storms, water, or heights; or other matters of concern, including fears of vomiting, doctors, dentists,

or choking. Individuals with specific phobias recognize that their fear is unreasonable; however, they cannot overcome it. Although most people feel anxious or apprehensive about certain objects or situations, those with specific phobias have their daily routines, employment, or social lives disrupted by their fears.

Posttraumatic Stress Disorder and Acute Stress Disorder

Posttraumatic stress disorder is an anxiety disorder that can develop after a person's experiencing a traumatic or life-threatening event such as, but not limited to, combat, sexual assault or rape, physical attack, motor vehicle accident, robbery, other injury, or natural or man-made disaster. Posttraumatic stress disorder can involve (1) actually experiencing a traumatic event, (2) witnessing a traumatic event involving another person, or (3) learning of a traumatic event in the life of a family member or close associate. Individuals who develop posttraumatic stress disorder have symptoms including persistent reexperiencing of the event through memories or nightmares, avoidance of places or situations that remind them of the trauma, and general increased arousal such as sleeplessness, uncharacteristic irritability, or difficulty in concentrating. People with posttraumatic stress disorder may also find themselves withdrawing physically and emotionally from others around them. These symptoms can be extremely frightening and disabling in the individual's work and social life. Posttraumatic stress disorder is a surprisingly common disorder affecting approximately 8% of the adult population in the United States.

Anxiety Disorder Due to a General Medical Condition and Substance-Induced Anxiety Disorder

Anxiety Disorder due to a general medical condition and substance-induced anxiety disorder are categories reserved for clinical anxiety presentations that arise directly and solely as a consequence of medical conditions or of substance intoxication or withdrawal. Typically, these diagnoses involve intense anxiety, panic attacks, and/or obsessions and compulsions.

Anxiety Disorder Not Otherwise Specified

Finally, anxiety disorder not otherwise specified is a catchall category for diagnosing individuals whose problematic anxiety is not sufficiently

captured by the criteria for any of the previous categories. As in all anxiety disorder diagnoses, the anxiety, although not fitting into the criteria set up for any of the diagnoses, must be significantly distressing to the individual or causing significant impairment in his or her personal, social, or vocational life.

In addition to the aforementioned classifications, many of these diagnoses offered subtype classifications or specifiers, such that 25 distinct anxiety disorder diagnoses can currently be made. Along with each of these new diagnoses quickly came new therapies purported to target the core features of that diagnosis, including both pharmacological and cognitive-behavioral treatments. For the purposes of simplicity, these approaches are referred to here as "diagnosis-specific" treatments, as each was developed specifically to target a unique diagnosis.

The Transdiagnostic Perspective

Although DSM-III, DSM-III-R, and DSM-IV clearly helped to advance diagnostic reliability, and as a result improved the understanding and treatment of anxiety disorders, concerns quickly arose about the *validity* of the diagnoses. Tyrer and colleagues (1988) challenged the utility of the new specific diagnoses with a large clinical trial of pharmacological and cognitive-behavioral treatments for panic disorder, generalized anxiety disorder, and dysthymic disorder. Results showed no differential impact of the treatment types for certain diagnoses. Tyrer and colleagues concluded that the lack of differential response among the diagnostic groups removed "one of the main planks supporting the division of dysthymic disorder, panic disorder, and generalized anxiety disorder in DSM-III" (p. 239). Even so, the diagnostic system became widely accepted and codified.

The Transdiagnostic Model of Anxiety Disorder

Anxiety disorder diagnoses do show distinct morphological differences. For example, an individual with obsessive–compulsive disorder who is repeatedly switching the lights on and off because of a "not quite right feeling" appears drastically different from someone with a specific phobia of storms who stays in the basement when bad weather systems are reported in the area. For the most part, however, the differences across the anxiety diagnoses relate to differences in the specific stimuli that

evoke the emotional response (e.g., bodily sensations, traumatic memories, or worries over future uncertainties, becoming contaminated, or other people's judgment) and the strategies used in an attempt to control, escape from, or avoid those stimuli (e.g., avoiding physical arousal, attempts at distraction, repeated washing, or social avoidance). The initiating and maintaining factors, however, appear to be more common than different across diagnoses.

From a transdiagnostic cognitive-behavioral perspective, each of these diagnoses is driven by common processes that serve to instigate the fears and maintain the disorder. All of the anxiety disorders are characterized by excessive, catastrophic, or unreasonable beliefs about the likelihood of a negative event occurring and/or the negative consequences that would ensue if the event occurred. These beliefs lead to hypervigilance for signs of threat or danger, which, in turn, increases the likelihood that the stimuli will be perceived. Threat control or escape strategies are frequently used to reduce the likelihood of the expected threat occurring; however, because the individual is overestimating the likelihood of the outcome occurring, its nonoccurrence is attributed to the safety behaviors and the belief regarding threat is not challenged. Finally, to prevent possible future encounters with the threat, avoidance or preventative strategies are employed. Again, because of the exaggerated beliefs about the threat, its nonoccurrence is attributed to the avoidance or preventative behaviors and the exaggerated beliefs are not challenged.

In the early 2000s, several other teams of anxiety researchers also began to question the necessity of dividing the anxiety disorders into the specific DSM-IV diagnoses for the purposes of treatment. If, as Tyrer's research suggested, clients with different anxiety disorder diagnoses respond the same way to the same treatments, why do we continue to assign people with panic disorder to one group CBT program and those with generalized anxiety disorder to a different one? This question and others led several teams to begin to develop group CBT programs designed not for a specific anxiety diagnosis, but for anxiety disorders more globally. Some such programs (e.g., Erickson, 2003; Larkin, Waller, & Combs-Lane, 2003) grew out of clinical necessity: Caseloads became too large for providers to offer individual treatment, but inconsistent rates of referrals and new client presentations precluded their ability to offer group treatments for specific diagnoses. Others, including my own team (Norton & Hope, 2005) as well as colleagues at Boston University (Allen, Ehrenreich, & Barlow, 2005), started pursuing transdiagnostic models as an extension of considerable research suggesting that

the anxiety disorder diagnoses were more similar than different. Indeed, several lines of research seem to suggest that the anxiety disorders are different manifestations of a common pathology.

Genetics and Heritability

The first of these lines of research focused on the genetic and heritable aspect of anxiety disorders. A large body of evidence suggests that anxiety disorders are, in part, heritable. However, twin studies strongly indicate that genetic transmission does not involve specific anxiety disorders, but rather a common nonspecific diathesis toward anxiety and other emotional disorders. Jardin, Martin, and Henderson (1984) examined measures of neuroticism and checklists of anxiety and depressive symptoms from nearly 4,000 twin pairs. Their analyses suggested a strong genetic influence on anxiety and depressive symptoms, but nearly all of this genetic influence was shared with the genetic influence on the personality trait of neuroticism. Kendler, Heath, Martin, and Eaves (1987) also found evidence suggesting that genetic factors did not specifically influence symptoms of either depression or anxiety. Rather, their study found that a general distress factor influenced both anxiety and depression. In short, Kendler and colleagues (1987) concluded that genetics provide a general predisposition for affective disorders, but environmental factors are largely responsible for determining the specific disorder manifestation. Subsequent studies by Kendler, Neale, Kessler, Heath, and Eaves (1992) and Andrews and colleagues (Andrews, 1991; Andrews, Stewart, Allen, & Henderson, 1990; Andrews, Stewart, Morris-Yates, Holt, & Henderson, 1990) generally agree that at least a portion of what contributes to the development of anxiety disorders is a general predisposition toward anxiety and emotional disorders, such as panic disorder or obsessive–compulsive disorder.

Personality

Similarly, a large body of personality research also points to a common element across anxiety disorders, particularly the constructs of neuroticism (e.g., Eysenck, 1957), trait anxiety (Gray, 1982; Spielberger, 1985), and negative affectivity (Clark & Watson, 1991). For the sake of consistency, I refer to this common element as *negative affectivity*. Negative affectivity has been described generally as "a stable, heritable trait tendency to experience a broad range of negative feelings such as worry, anxiety, self-criticisms, and a negative self-view" (Keogh & Reidy, 2000, p. 108). Clark, Steer, and Beck (1994) further define negative affectivity

as a temperamental sensitivity to negative stimuli resulting in feelings of fear, anxiety, depression, guilt, and self-dissatisfaction. Craske (1999) and Barlow (1988, 2002) tie this construct of generalized vulnerability to Beck and Emery's (1985) models of danger schema and suggest that the vulnerability "is associated with a perceived inability to predict, control, or obtain desired results" (Barlow, 1988, p. 248). Indeed, Barlow (2002) argues that the sensitivity to negative stimuli arises owing to perceptions of uncontrollability or unpredictability. Seen as a common underlying factor contributing to both anxiety and mood disorders, negative affectivity may explain the high rates of comorbidity and similarity between mood and anxiety disorders (Clark et al., 1994).

Comorbidity

If negative affectivity acts as a diffuse vulnerability for the development of anxiety disorders, it may be expected that individuals with this vulnerability would be prone to developing multiple anxiety difficulties if they undergo multiple learning experiences. That is, a vulnerable individual may experience, for example, a near miss automobile accident as well as later internalize media messages about the dangers of certain viruses. Should this be the case, it could be anticipated that many vulnerable individuals can have multiple fears, such as motor vehicle accident-related posttraumatic stress disorder and cleaning/washing obsessive–compulsive disorder in the previous example. Within the DSM model, this would be expressed as comorbidity. As expected, there are high rates of comorbidity among anxiety disorders and between anxiety and mood disorders; indeed, comorbidity appears to be the norm. Among a clinical sample, Andrews, Stewart, Morris-Yates, et al. (1990) reported that patients' symptoms met DSM criteria for an average of 2.1 depressive and anxiety disorders. Indeed, treatment data (Brown & Barlow, 1992; Sanderson, Di Nardo, Rapee, & Barlow, 1990) also suggest that 50–60% of people with an anxiety disorder have a comorbid anxiety or mood disorder diagnosis.

Response to Treatment

Given the hypothesis that all anxiety disorders share the same core pathology, it should follow that treatments acting on the core pathology should be effective regardless of the specific feared stimuli. According to Barlow and Lehman (1996) and Craske (1999), encouraging efficacy data have been obtained across the range of cognitive-behavioral treatment protocols for anxiety-related disorders. There are many effective

pharmacological treatment options as well, including tricyclic and heterocyclic antidepressants, serotonin reuptake inhibitors, monoamine oxidase inhibitors, azapirones, beta-adrenergic blockers, and benzodiazepines (Craske, 1999; Taylor, 1998). Several recent meta-analyses of CBT outcome studies support the effectiveness of such treatments across the anxiety disorders and, generally, the superior efficacy of CBT approaches over non-CBT psychosocial treatments (e.g., Abramowitz, 1997; Fedoroff & Taylor, 2001; Gould, Otto, & Pollack, 1995; Gould, Otto, Pollack, & Yap, 1997; Norton & Price, 2007; van Etten & Taylor, 1998). Overall, these meta-analyses support the efficacy of CBT for anxiety disorders, and treatment effects are relatively similar across diagnoses (Norton & Price, 2007; Hofmann & Smits, 2008). Indeed, similar treatment effects are not unexpected, as the treatments typically incorporate similar therapeutic techniques: education and self-monitoring, cognitive restructuring, and exposure.

In addition to the fact that functionally or chemically similar treatments are effective across diagnoses, Borkovec, Abel, and Newman (1995) and Brown, Antony, and Barlow (1995) have reported that following treatment for a principal anxiety disorder, untargeted comorbid anxiety disorders often abate. Borkovec et al. (1995) noted that following treatment for generalized anxiety disorder, the incidence of comorbid anxiety disorders decreased significantly. Furthermore, the decline in nontargeted comorbid disorders varied by outcome, such that those demonstrating superior improvement for generalized anxiety disorder showed a greater decline in comorbid disorders. Brown et al. (1995) reported that following treatment for panic disorder, rates of comorbidity declined from 51% to 17% at posttreatment. Similar effects on secondary anxiety and depression were described by Blanchard et al. (2003) following treatment for motor vehicle accident posttraumatic stress disorder. Norton et al. (2004) reported that, following a transdiagnostic anxiety treatment, levels of depressiveness decreased significantly as compared with no change for controls. Furthermore, all but one client with a depressive diagnosis showed improvement to subclinical depressive severity following treatment.

Summary

Several distinct lines of investigation support the hypothesis that the DSM-IV anxiety disorders represent a single core pathology that may be elicited by different stimuli and manifested in distinct ways. First,

considerable research indicates that negative affectivity, a temperamental personality trait characterized by sensitivity to negative emotions owing to a low sense of control, underlies the manifestations of clinical anxiety. Second, observed rates of comorbidity within the DSM-IV anxiety disorders greatly exceed those that would be predicted if anxiety disorders were independent disorders. One explanation for the high comorbidity is that the comorbid disorders are not independent disorders, but rather multiple manifestations of the same pathology. It is also possible that the high rates of comorbidity could be the result of other mechanisms, such as a common risk factor for two or more independent disorders. However, this alternative explanation appears less tenable in light of the third line of evidence, treatment outcome data. Highly similar CBT and pharmacological treatments are efficacious across the anxiety disorders, suggesting that these treatments are affecting a core pathology underlying each of these diagnostic groups. This evidence is strengthened by findings that nontargeted comorbid anxiety diagnoses frequently remit after treatment for a principal anxiety disorder. Although there may be some utility in considering each of the anxiety disorders as a distinct entity, the evidence here suggests greater similarity than difference.

Guilford Publications
72 Spring Street
New York, NY 10012
212-431-9800
800-365-7006
www.guilford.com