Chapter 5: Anxiety and the Anxiety Disorders

Learning Objectives:
By the end of this chapter, students should be able to:

- Differentiate between "fear" and "anxiety," as well as make the distinction between "state" and "trait" anxiety.
- Identify the basic symptom criteria for generalized anxiety disorder, panic disorder, phobias (social phobia, agoraphobia, and specific phobia), obsessive-compulsive disorder, posttraumatic stress disorder, and acute stress disorder.
- Discuss the advantages and limitations of the DSM-IV-TR anxiety disorder diagnoses.
- Demonstrate familiarity with the demographic correlates of the various anxiety disorders.
- Identify and describe those "culture-bound syndromes" that resemble the DSM-IV-TR anxiety disorder diagnoses, and discuss cultural differences with respect to anxiety states.
- Using theories of classical conditioning, operant conditioning, and social learning theory, explain how various anxiety disorders develop and are maintained.
- Describe the treatment of anxiety disorders from a behavioral perspective, particularly the use of exposure therapies.
- Explain the causes and treatments of anxiety disorders from the cognitive perspective.
- Identify the various biological components that may contribute to anxiety disorders, including the role of the autonomic nervous system, neurotransmitter activity, genetics, and specific brain structures.
- Discuss the available biologically-based treatment options for anxiety disorders.
- Using Freud's structural model of personality, identify the main causes of anxiety and the various defense mechanisms employed during these anxiety states.
- Describe the psychodynamic approach to treating anxiety disorders, noting the strengths and weaknesses of this approach.
- Using the theme of "multiple causality," discuss how various approaches may be combined in the treatment of anxiety disorders.
- Discuss the relevance of the "mind-body connection" with respect to the anxiety disorders.

Lecture Outline:

I. Defining Anxiety and Anxiety Disorders
   a. Fear vs. anxiety – specific danger vs. general sense of danger
   b. The importance of context in defining anxiety disorders
      i. Most anxiety disorders involve minor threats, not clear and imminent danger.
   c. The continuum between normal and abnormal anxiety
      i. Trait anxiety
      ii. State anxiety

iii. High risk-takers – More likely to engage in dangerous activities, suffer injuries, engage in risky sexual practices, smoke, and use drugs; antisocial personality disorder (APD) linked to low levels of anxiety and high risk-taking.

II. Classifying Anxiety and Anxiety Disorders
   a. Generalized anxiety disorder
      i. Chronic and pervasive anxiety
   b. Panic disorder
      i. Involves the presence of panic attacks
      ii. Often accompanied by agoraphobia
   c. Phobias
      i. Social phobia
      ii. Agoraphobia
      iii. Specific phobia – fall into four categories:
         1. Animal type
         2. Natural environment type
         3. Blood-injection-injury type
         4. Situational type
   d. Obsessive-compulsive disorder
      i. Involves the presence of obsessions and compulsions
      ii. Obsessions often involve fears of contamination, disorganization, aggression, sex, or socially inappropriate behavior.
      iii. Compulsions may lack connection to the obsessions they are intended to counteract.
   e. Posttraumatic Stress Disorder and Acute Stress Disorder
      i. Posttraumatic stress disorder
         1. Person has experienced a highly traumatic event.
            a. Trauma – an emotionally overwhelming experience in which there is the possibility of death or serious injury
            b. Traumatic events – war, natural disaster, human-made disasters
         2. Symptoms involving re-experiencing the event
            a. flashbacks – feeling as if the person is reliving the trauma
         3. Symptoms involving numbing and avoidance
            a. often feel jumpy and hypervigilant
         4. Diagnosed if symptoms continue for more than one month or begin after a month has elapsed since the trauma.
      ii. Acute stress disorder
         1. Similar symptoms to PTSD, but occur shortly following the traumatic event and last more than two days but less than one month.
   f. The advantages and limitations of the DSM-IV-TR anxiety disorder diagnoses

i. Reliability and validity of these diagnoses are good
ii. Anxiety disorder diagnoses are highly co-morbid with other diagnoses.
iii. Some clinicians favor a dimensional rather than a categorical approach, since anxiety is present in almost all mental disorders.

g. Classification in demographic context
   i. Age
      1. Adults tend to describe anxiety in terms of emotions and/or physiology.
      2. Children show anxiety behaviorally – crying, tantruming, freezing up, clinging, physical complaints.
      3. Childhood phobias are common and rarely cause excessive distress.
      4. Children with PTSD re-experience traumatic events through their play.
      5. Panic disorder rarely occurs in children – usually begins between adolescence and mid-30s.
   ii. Gender
      1. Women 2-3 times more likely to be diagnosed with GAD, panic disorder, specific phobias, and PTSD.
         a. Lack of assertiveness and self-sufficiency may play a role.
         b. Genetic and hormonal differences – panic linked to mitral valve prolapse, hyperthyroidism, menstrual cycle.
         c. Men more likely to be exposed to trauma, but women more likely to develop PTSD symptoms.
      2. OCD occurs equally between men and women, but may manifest itself differently.
   iii. Class
      1. People living in poor urban environments at higher risk for PTSD.
         a. More likely to experience trauma
         b. More likely to experience additional risk factors

h. Cultural and historical relativism in defining and classifying anxiety disorders
   i. Nervios
   ii. Ataque de nervios
   iii. Shenjing shuairuo
   iv. Taijin kyofusho
   v. Many cultures experience anxiety physically rather than emotionally; emotional distress tends to be stigmatized in these cultures.
   vi. PTSD is a relatively recent addition to the DSM; prior to the Vietnam War, symptoms were thought to be due to cowardice and malingering.

vii. Should PTSD be classified as an anxiety disorder or a dissociative disorder?

III. Explaining and Treating Anxiety and Anxiety Disorders
- a. Behavioral components
  - i. Classical conditioning
    1. The case of "Little Albert" – illustrates the role of classical conditioning
    2. Temporal contiguity – the automatic association of two events that occur at the same time.
  - ii. Operant conditioning
    1. Avoidance behaviors are negatively reinforced
    2. Avoidance reduces the likelihood of extinction
  - iii. Social learning theory
    1. Vicarious conditioning – some may develop fears by watching others who have the fear.
  - iv. Prepared conditioning – modern-day humans may have a biological predisposition to fear once-dangerous objects.
  - v. Behavioral interventions
    1. Phobias
       - a. Systematic desensitization – uses principles of classical conditioning
         - i. Teach client relaxation strategies
         - ii. Develop a fear hierarchy
         - iii. Pair relaxation with each item on the hierarchy
         - iv. Can be done in vivo (actual exposure) or covertly (in imagination)
       - b. Flooding – directly confront client with feared situation or object, but without working through a hierarchy.
         - i. Few clients agree to this
         - ii. Ethical concerns – this might make some clients more anxious.
       - c. Modeling – therapist demonstrates that fears are unrealistic
       - d. Exposure therapies have been found to be generally effective in treating phobias.
    2. Panic disorder
       - a. Systematic desensitization
       - b. Interoceptive exposure
    3. Obsessive-compulsive disorder
       - a. Exposure and response prevention
       - b. Covert response prevention
    4. PTSD
       - a. Prolonged imaginal exposure

b. Cognitive components
    1. Correct maladaptive beliefs
        a. Fixation on perceived dangers/threats
        b. Overestimation of severity of danger/threat
        c. Underestimation of ability to cope
    2. Cognitive schemas – general thought patterns that include beliefs and assumptions. Dysfunctional cognitive schemas tend to be rigid, simplistic, and negative.
    3. Cognitive distortions – biased thought processes
    4. Anxious thoughts can lead to avoidance behaviors.
    5. Interventions:
        a. Identify negative automatic thoughts/cognitive schemas
        b. Evaluate evidence for/against thoughts and schemas
        c. Identify cognitive distortions
        d. Challenge and correct distortions
c. Biological components
    1. The autonomic nervous system
        a. Activity of the sympathetic and parasympathetic nervous systems produce the "fight-or-flight" response.
    2. The limbic system
        a. Amygdala – processes sensory information associated with fear
        b. Hypothalamus – plays a role in the expression of conditioned emotional responses
        c. Hippocampus – involved in memory of fears
    3. Neurotransmission
        a. GABA – appears to work ineffectively in people with high levels of anxiety. Benzodiazepines bind to GABA receptors and relieve anxiety.
        b. Norepinephrine – plays a role in the functioning of the locus coeruleus – associated with sympathetic nervous system. Hypersensitive norepinephrine pathways involved in panic attacks and PTSD.
        c. Serotonin – low levels linked to panic attacks, OCD
        d. Primitive brain structures may be overactive in people with OCD.
    4. Genetic factors
        a. High concordance rates among monozygotic twins
        b. Panic disorder, OCD, specific and social phobias appear to be highly heritable.
        c. No consistent genetic component has been found in GAD and PTSD.
    5. Biological interventions

a. Antidepressants (SSRIs and tricyclics) helpful for panic disorder; SSRIs useful for PTSD
b. Barbiturates used until the 1950s, but are highly addictive.
c. Benzodiazepines widely used, but are also addictive.
d. Beta-blockers increase norepinephrine activity – useful for social phobia.
e. Azaspirones regulates serotonin – useful for GAD.

d. Psychodynamic components
1. Freudian concepts
a. Repression causes anxiety
b. Anxiety signals the presence of danger to the ego; the ego responds by initiating defense mechanisms.
2. Phobias
a. Displacement and projection
b. In the case of Little Hans, the "horse phobia" developed out of his unresolved Oedipus complex.
3. Obsessive-compulsive disorder
a. Isolation of affect
b. Undoing
4. Other anxiety symptoms
a. Disruptions in early parent-child relationships
5. Psychodynamic interventions
a. Free association
b. Exploration of underlying emotional conflict
c. Use of resistance and transference

e. The multiple causality of anxiety disorders
i. Cognitive and behavioral strategies are often combined.
1. David Barlow – cognitive-behavioral technique:
a. Relaxation training
b. Planned exposure to anxiety-provoking situations
c. Cognitive interventions
ii. Psychodynamic approaches may be useful in understanding roots of anxiety.
iii. Medications may help reduce anxiety so a person can engage in psychotherapy.

f. The connection between mind and body in anxiety disorders
i. The role of the HPA (hypothalamic-pituitary-adrenal axis)
ii. Brain-related changes appear to occur in PTSD.
iii. Exposure-based therapies for OCD appear to lead to changes in the brain.

IV. Case Vignettes – Treatment
a. Arthur – Panic disorder
b. Greg – Obsessive-compulsive disorder

Lecture Extensions:

1. Alternative treatments for anxiety disorders. Many clinicians, in addition to using traditional psychological interventions such as medication and cognitive-behavioral therapy, have begun to incorporate various alternative therapies into their repertoire. Such therapies are grounded in our understanding of the mind-body connection, and can be used either to prevent anxiety states altogether or to reduce existing feelings of tension and anxiety. Some common alternative treatments include the following:

a. Progressive muscle relaxation (PMR). This approach, which involves systematically tensing and relaxing muscles throughout the body while engaging in deep breathing, is very effective for reducing and preventing physical symptoms of anxiety. It is particularly useful for treating bruxism (grinding of the teeth), Raynaud's syndrome (chronically cold hands and feet, due to blood circulating away from the extremities), tension headaches, neck and shoulder pain, and back pain. An excellent PMR script can be found in The Relaxation and Stress Reduction Workbook.

b. Meditation. There are many approaches to meditation, although the primary goal in all of these approaches is to develop focus. Most people meditate by choosing a quiet place and time of day, sitting on the floor or in a chair where upright posture can be maintained, and engaging in deep breathing techniques. Before meditating, one chooses a mantra, which can be a word, a phrase, or a mental image. This mantra is either chanted aloud or inwardly. Whenever other thoughts, worries, concerns, or images creep into one's consciousness, the focus is turned away from these intrusions and toward the mantra. Many people report that this is difficult to do at first, and thus they may begin by meditating for a short period of time (10 minutes). Gradually, as one becomes accustomed to focusing, the meditation period can be extended.

c. Guided imagery. This approach involves bringing oneself into a relaxed state by breathing deeply, then imagining various scenes that promote relaxation and empowerment. For example, individuals with fears of flying may use guided imagery during takeoff or landing. They may close their eyes and imagine themselves in a safe, relaxing environment

Interestingly, while all of these techniques utilize the mind-body connection by reducing autonomic nervous system activity, they also appear to create a mild state of dissociation. These techniques can be excellent examples of using dissociation for therapeutic purposes.

The following are useful self-help resources

Bourne, Edmund J. (2000). The anxiety and phobia workbook (3rd Edition). New Harbinger Publications.

Bourne, Edmund J. (2001). Beyond anxiety and phobia. New Harbinger Publications.

Davis, Martha, McKay, Matthew, and Eshelman, Elizabeth Robbins. (2000). The relaxation and stress reduction workbook (5th Edition). New Harbinger Publications.

2. PTSD or Traumatic Brain Injury? Women in battering relationships frequently report symptoms of PTSD. In fact, many abused women report a cluster of symptoms commonly referred to as battered women's syndrome (a phrase coined by Lenore Walker), which can include sleeping difficulties, headaches, dizziness, irritability/aggression, anxiety, depression, affective lability, changes in social/sexual behavior, memory problems, dissociation, isolation, and avoidance. Some researchers have noted the similarity between some symptoms of PTSD and symptoms of traumatic brain injury (TBI) and postconcussive syndrome (PCS). In one study of battered women, 49 out of 53 women (92%) had been hit in the head, and 21 (40% had lost consciousness). Seventy-seven percent showed signs of postconcussive syndrome, and researchers founds that the number of blows to the head correlated significantly with the severity of cognitive symptoms (Jackson, Philp, Nuttall, and Diller, 2002). These studies suggest that women in battering relationships should be assessed routinely for head injury and traumatic brain injuries. Additional readings on this subject include the following:

Jackson, Helene; Philp, Elizabeth; Nuttall, Ronald L., and Diller, Leonard. (2002). Traumatic brain injury: A hidden consequence for battered women. Professional Psychology: Research and Practice, 33(1), 39-45.

Kubany, Edward S., Hill, Elizabeth E., Owens, Julie A., Iannce-Spencer, Cindy, McCaig, Mari A., Tremayne, Ken J., and Williams, Paulette L. (2004). Cognitive trauma therapy for battered women with PTSD (CTT-BW). Journal of Consulting and Clinical Psychology, 72(1).

Valera, Eve M. and Berenbaum, Howard. (2003). Brain Injury in Battered Women. Journal of Consulting and Clinical Psychology, 71(4).

3. Anxiety Disorders Post-9/11. Many people were significantly affected, directly or indirectly, by the September 11 terrorist attacks. After the attacks, rates of PTSD, stress-related symptoms, substance abuse, and health-related concerns such as asthma increased. Members of vulnerable populations such as women, ethnic minorities, low-income groups, people with low education, and individuals suffering from prior physical or mental health concerns were, and continue to be, at increased risk. The American Psychological Association has published a briefing sheet entitled "The Psychological Impact of Terrorism on Vulnerable Populations" (June 2003), which can be found at http://www.apa.org/ppo/issues/terrorbrief603.html. It provides more details about the aftermath of September 11 and identifies specific recommendations.
Of course, increased mental distress often means increased utilization of mental health services, and this was certainly true post-9/11. Yet mental health practitioners are not immune to the symptoms of stress and trauma. The APA article, "Tapping Your Resilience in the Wake of Terrorism: Pointers for Practitioners" (October 2001) is an excellent resource on this topic. It can be found at http://www.apa.org/practice/practitionerhelp.html.

Additional resources include the following:
Eidelson, Roy J., D'Alessio, Gerard R., and Eidelson, Judy I. (2003). The impact of September 11 on psychologists. Professional Psychology: Research and Practice, 34(2), 144-150.

Speckhard, Anne. (2003). Acute stress disorder in diplomats, military, and civilian Americans living abroad following the September 11 terrorist attacks on America. Professional Psychology: Research and Practice, 34(2), 151-158.

Classroom Activities/Discussion Topics:

1. Overcoming Test Anxiety. Many students are unfortunately very familiar with the experience of test anxiety. Ask students to describe what happens when they have test anxiety. Explain to students the biological basis of test anxiety (a very helpful resource for understanding the biology of anxiety and stress is Why Zebras Don't Get Ulcers by Robert Sapolsky). Then, divide students into groups and ask them to develop a self-help plan for people with test anxiety.

2. Eye Movement Desensitization and Reprocessing (EMDR). This form of therapy, developed by Francine Shapiro, is used in the treatment of PTSD. It is an extremely controversial therapy, largely because there is no clear-cut explanation of why it works. You might choose to describe this form of therapy in a lecture extension (an excellent overview of the treatment can be found at www.emdr.com). After describing the therapy, divide students into groups and ask them the following questions:
   a. How do you think this therapy works?
   b. How would you go about designing a research study to test how this therapy works?

This exercise can give students experience with critical thinking, hypothesis formation, and the limitations of traditional clinical research methods. Students will likely generate multiple hypotheses, yet have difficulty identifying ways of testing or measuring these hypotheses.

3. Anxiety disorders in film. There are some excellent films, both classic and contemporary, that can be used to illustrate the symptoms of anxiety disorders. Some of those films include the following:

- *As Good As It Gets* – Jack Nicholson portrays a character that shows the classic symptoms of obsessive-compulsive disorder.
- *Copycat* – Sigourney Weaver gives an excellent portrayal of a forensic psychologist suffering from agoraphobia.
- *The English Patient* – Juliette Binoche's character suffers from signs of acute stress disorder.
- *Vertigo* – This film is useful for helping students understand the concept of derealization. Jimmy Stewart's character displays this symptom whenever he is in high places.
- *Ordinary People* – Timothy Hutton portrays an adolescent suffering from PTSD and depression

4. Self-medication of anxiety disorders. Many people who abuse substances suffer from an underlying anxiety disorder. This can be a good opportunity to introduce the concept of "self-medication" to your students. Ask your students what kinds of behaviors or substances (legal or illegal) can help to alleviate anxiety. What are the short-term and long-term advantages and disadvantages of these behaviors?

5. Anxiety Disorders in Literature. There are many literary examples of psychological disorders that provide rich material for the classroom. One particularly good example is a Dorothy Parker story entitled "A Telephone Call." In this story, the main character is a young woman who is awaiting a phone call from a man she had met at a social gathering, who had promised to call her. The entire content of the story involves this character obsessively and anxiously waiting for the phone to ring. Ask your students to read this story, and use the story to identify cognitive distortions and maladaptive thinking patterns. You could also ask students to reframe the situation and modify the character's cognitive distortions.
This story can be found in The Complete Stories of Dorothy Parker, edited by Colleen Breese and Mikki Breese. As of this writing, the story could also be found at the following website: http://mbhs.bergtraum.k12.ny.us/cybereng/shorts/teleycal.html