Stress Disorders

Chapter 6

Stress, Coping, and the Anxiety Response

• The state of stress has two components:
  – Stressor – event that creates demands
  – Stress response – person’s reactions to the demands
    • Influenced by how we judge both the event and our capacity to react to the event effectively
      – People who sense that they have the ability and resources to cope are more likely to take stressors in stride and respond well

• When we view a stressor as threatening, the natural reaction is arousal and fear
  – Fear is a “package” of responses that are physical, emotional, and cognitive

• Stress reactions, and the fear they produce, are often at play in psychological disorders
  – People who experience a large number of stressful events are particularly vulnerable to the onset of anxiety and other psychological disorders
Stress, Coping, and the Anxiety Response

• Stress also plays a more central role in certain psychological disorders, including:
  – Acute stress disorder
  – Posttraumatic stress disorder (PTSD)
  – Technically, DSM-IV-TR lists these patterns as anxiety disorders
• ...as well as certain physical disorders, called psychophysiological disorders
  – These disorders are listed in the DSM-IV-TR under "psychological factors affecting medical condition"

Stress and Arousal: The Fight-or-Flight Response

• The features of arousal and fear are set in motion by the hypothalamus
  – Two important systems are activated:
    • Autonomic nervous system (ANS)
      – An extensive network of nerve fibers that connect the central nervous system (the brain and spinal cord) to all other organs of the body
    • Endocrine system
      – A network of glands throughout the body that release hormones

Stress and Arousal: The Fight-or-Flight Response

• There are two pathways, or routes, by which the ANS and the endocrine system produce arousal and fear reactions:
  – Sympathetic nervous system pathway
  – Hypothalamic-pituitary-adrenal pathway
Stress and Arousal: The Fight-or-Flight Response

- When we face a dangerous situation, the hypothalamus first excites the sympathetic nervous system, which stimulates key organs either directly or indirectly.
- When the perceived danger passes, the parasympathetic nervous system helps return body processes to normal.

The Autonomic Nervous System

Stress and Arousal: The Fight-or-Flight Response

- The second pathway is the hypothalamic-pituitary-adrenal (HPA) pathway.
  - When we are faced by stressors, the hypothalamus signals the pituitary gland, which stimulates the adrenal cortex to release corticosteroids – stress hormones – into the bloodstream.
Stress and Arousal: The Fight-or-Flight Response

- The reactions on display in these two pathways are collectively referred to as the *fight-or-flight response*
- Each person has a particular pattern of autonomic and endocrine functioning and so a particular way of experiencing arousal and fear...

Stress and Arousal: The Fight-or-Flight Response

- People differ in:
  - Their general level of arousal and anxiety
    - Called “trait anxiety”
    - Some people are usually somewhat tense; others are usually relaxed
    - Differences appear soon after birth
  - Their sense of which situations are threatening
    - Called “state anxiety”
    - Situation-based (example: fear of flying)

The Psychological Stress Disorders

- During and immediately after trauma, we may temporarily experience levels of arousal, anxiety, and depression
  - For some, symptoms persist well after the trauma
    - These people may be suffering from:
      - Acute stress disorder
      - Posttraumatic stress disorder (PTSD)
  - The precipitating event usually involves actual or threatened serious injury to self or others
    - The situations that cause these disorders would be traumatic to anyone (unlike other anxiety disorders)
The Psychological Stress Disorders

• Acute stress disorder
  – Symptoms begin within four weeks of event and last for less than one month

• Posttraumatic stress disorder (PTSD)
  – Symptoms may begin either shortly after the event, or months or years afterward
    • As many as 80% of all cases of acute stress disorder develop into PTSD

Aside from the differences in onset and duration, the symptoms of acute stress disorders and PTSD are almost identical:

– Reexperiencing the traumatic event
– Avoidance
– Reduced responsiveness
– Increased arousal, anxiety, and guilt
Why Do People Develop a Psychological Stress Disorder?

- Clearly, extraordinary trauma can cause a stress disorder
  - However, the event alone may not be the entire explanation
- To understand the development of these disorders, researchers have looked to the:
  - Survivors’ biological processes
  - Personalities
  - Childhood experiences
  - Social support systems
  - Cultural backgrounds
  - Severity of the traumas

Why Do People Develop a Psychological Stress Disorder?

- Biological and genetic factors
  - Traumatic events trigger physical changes in the brain and body that may lead to severe stress reactions and, in some cases, to stress disorders
- Personality factors
  - Some studies suggest that people with certain personalities, attitudes, and coping styles are particularly likely to develop stress disorders
  - A set of positive attitudes (called resiliency or hardiness) is protective against developing stress disorders

Why Do People Develop a Psychological Stress Disorder?

- Childhood experiences
  - Researchers have found that certain childhood experiences increase risk for later stress disorders
  - Risk factors include:
    - An impoverished childhood
    - Psychological disorders in the family
    - The experience of assault, abuse, or catastrophe at an early age
    - Being younger than 10 years old when parents separated or divorced
Why Do People Develop a Psychological Stress Disorder?

- Social support
  - People whose social support systems are weak are more likely to develop a stress disorder after a traumatic event
- Multicultural factors
  - There is a growing suspicion among clinical researchers that the rates of PTSD may differ among ethnic groups in the US

Why Do People Develop a Psychological Stress Disorder?

- Severity of the trauma
  - Generally, the more severe the trauma and the more direct one’s exposure to it, the greater the likelihood of developing a stress disorder
    - Especially risky: Mutilation and severe injury; witnessing the injury or death of others

How Do Clinicians Treat the Psychological Stress Disorders?

- About half of all cases of PTSD improve within 6 months; the remainder may persist for years
- Treatment procedures vary depending on type of trauma
  - General goals:
    - End lingering stress reactions
    - Gain perspective on painful experiences
    - Return to constructive living
How Do Clinicians Treat the Psychological Stress Disorders?

• Treatment for combat veterans
  – Drug therapy
  – Behavioral exposure techniques
  – Insight therapy

• Psychological debriefing
  – A form of crisis intervention that has victims of trauma talk extensively about their feelings and reactions within days of the critical incident

The Physical Stress Disorders: Psychophysiological Disorders

• In addition to affecting psychological functioning, stress can also have great impact on physical functioning

• The idea that stress and related psychosocial factors may contribute to physical illnesses has ancient roots, yet it had few supporters before the 20th century

The Physical Stress Disorders: Psychophysiological Disorders

• About 80 years ago, clinicians first identified a group of physical illnesses that seemed to result from an interaction of biological, psychological, and sociocultural factors

• Early versions of the DSM labeled these illnesses psychophysiological, or psychosomatic, disorders
  – DSM-IV-TR labels them as psychological factors affecting medical condition
The Physical Stress Disorders: Psychophysiological Disorders

• It is important to recognize that these psychophysiological disorders bring about actual physical damage
  – They are different from “apparent” physical illnesses like factitious disorders or somatoform disorders, which will be discussed in Chapter 7

Traditional Psychophysiological Disorders

• Ulcers
• Asthma
• Insomnia
• Chronic headaches
• Hypertension
• Coronary heart disease
Traditional Psychophysiological Disorders

• A number of variables contribute to the development of psychophysiological disorders, including:
  – Biological factors
  – Psychological factors
  – Sociocultural factors

Traditional Psychophysiological Disorders

• Biological factors
  – Defects in the autonomic nervous system (ANS) are believed to contribute to the development of psychophysiological disorders
  – Other more specific biological problems may also contribute
    • For example, a weak gastrointestinal system may create a predisposition to developing ulcers

Traditional Psychophysiological Disorders

• Psychological factors
  – According to many theorists, certain needs, attitudes, emotions, or coping styles may cause people to overreact repeatedly to stressors – increasing their chances of developing psychophysiological disorders
    • Examples: a repressive coping style, a Type A personality style – particularly hostility and time urgency
Traditional Psychophysiologic Disorders

• Sociocultural factors
  – Adverse social conditions may set the stage for psychophysiologic disorders
    • One of society’s most adverse social conditions is poverty
    • Research also reveals that belonging to an ethnic or cultural minority group increases the risk of developing these disorders and other health problems

New Psychophysiologic Disorders

• Are physical illnesses related to stress?
  – One shortcoming of the Social Adjustment Rating Scale is that it does not take into consideration the particular stress reactions within specific populations
    • For example, members of minority groups may respond to stress differently and women and men have been shown to react differently to certain life changes measured by the scale
Psychoneuroimmunology

- Researchers have increasingly looked to the body’s immune system as the key to the relationship between stress and infection
- This area of study is called psychoneuroimmunology

Psychological Treatments for Physical Disorders

- The field of treatment that combines psychological and physical interventions to treat or prevent medical problems is known as behavioral medicine

Psychological Treatments for Physical Disorders

- Relaxation training
- Biofeedback
- Meditation
- Hypnosis
- Cognitive interventions
- Emotion expression and support groups
- Combination approaches