Chapter Three Outline: Stress and Its Effects

I. The nature of stress

A. Stress is an everyday event

   1. **Stress**: any circumstances that threaten or are perceived to threaten one's well-being and thereby tax one's coping abilities

   2. Routine hassles may produce significant negative effects
      a. Richard Lazarus and colleagues devised a scale to measure stress in the form of daily hassles
      b. Scores on scale were strongly related to mental health
      c. Stressful events probably have a cumulative impact

B. Stress lies in the eye of the beholder

   1. Appraisal of stress is subjective
      a. **Primary appraisal**: an initial evaluation of whether an event is (1) irrelevant to you, (2) relevant, but not threatening, or (3) stressful
      b. When event is viewed as stressful, you’re likely to make a **secondary appraisal**, which is an evaluation of your coping resources and options for dealing with the stress

   2. People who are anxious, unhappy, etc. are more likely to report stress

C. Stress may be embedded in the environment

   1. **Ambient stress consists of chronic environmental conditions** that, although not urgent, are negatively valued and place adaptive demands on people
      a. Includes factors such as excessive noise, heat, pollution
      b. **Crowding** also a source of environmental stress

   2. Experience of environmental stress is also subjective

D. Stress may be self-imposed by embracing unrealistic expectations in work, school, etc.
E. Stress is influenced by culture

1. Cultural change, such as increased modernization and the growth of cities is causing stress in cultures all over the world. Also, individual cultures may experience environmental (drought) or man-made (war) stressors.

   a. For ethnic groups living within a majority culture, ethnicity-related sources of stress, such as institutional racism and the effects of subtle discrimination present a constellation of chronic stressors.

   b. Awareness of negative racial stereotypes may cause stress for members of ethnic minorities and depress performance, as suggested by the research of Claude Steele.

II. Major types of stress

A. It is useful to make the distinction between **acute stressors**, threatening events that have a relatively short duration and **chronic stressors**, which are threatening events that have a relatively long duration and no readily apparent time limit.

B. Frustration occurs in any situation in which the pursuit of some goal is thwarted

   1. Failures and losses are two common kinds of frustration that can be very stressful

   2. Frustration often occurs as a result of environmental stress (e.g., excessive noise, heat)

C. **Conflict** occurs when two or more incompatible motivations or behavioral impulses compete for expression

   1. Conflict is unavoidable aspect of everyday life

   2. Three types of conflict

      a. occurs when a choice must be made between two attractive goals

      b. Avoidance-avoidance conflict occurs when a choice must be made between two unattractive goals

      c. Approach-avoidance conflict occurs when a choice
must be made about whether to pursue a single goal that has both attractive and unattractive aspects

1. These conflicts often produce vacillation

2. Research suggests we should focus more on decreasing avoidance motivation rather than on increasing approach motivation

D. Life changes are any noticeable alterations in one's living circumstances that require readjustment

1. Holmes and Rahe found that any changes, positive or negative, can be stressful
   a. They developed the Social Readjustment Rating Scale (SRRS) to measure life change as form of stress
   b. The SRRS and similar scales have been used in numerous studies
      1. Results generally show that people with high scores tend to be more vulnerable to illness and psychological problems
      2. Findings have led to the assumption that life change is inherently stressful
      c. Criticism of studies using SRRS
         1. Possible problems with methods used, interpretation of findings
         2. Critics have argued that SRRS does not measure change exclusively
         3. Critics have suggested that negative life changes are the ones resulting in stress

2. More research is needed to determine whether any life change is necessarily stressful

E. Pressure involves expectations or demands that one behave in a certain way

1. Two basic types of pressure
   a. Pressure to perform
b. Pressure to conform

2. Concept of pressure has received little attention from researchers

3. A scale has been developed to measure pressure as a form of life stress

III. Responding to stress

A. Emotional responses

1. Emotions are powerful, largely uncontrollable feelings, accompanied by physiological changes

2. Emotions commonly elicited by stressful events
   a. Annoyance, anger, and rage are particularly likely to be caused by frustration
   b. Apprehension, anxiety, and fear are probably evoked more often than other emotions
   c. Dejection, sadness, and grief may result from stress, particularly frustration

3. Positive emotions can occur during periods of stress and may have some adaptive significance by promoting creativity and flexibility and enhancing immune functioning, for example.

4. Effects of emotional arousal
   a. Can result in diminished performance (e.g., test anxiety)
   b. The inverted-U hypothesis
      1. Performance improves with increase arousal up to a point, at which greater arousal results in deterioration in performance
      2. Level of arousal at which performance peaks is called the optimal level of arousal
      3. Research support is inconsistent, subject to varied interpretations

B. Physiological responses
1. The **fight-or-flight response**: a physiological reaction to threat that mobilizes an organism for attacking (fight) or fleeing (flight) an enemy

   a. First described by Walter Cannon in 1932

   b. Occurs in the **autonomic nervous system (ANS)**, which is made up of the nerves that connect to the heart, blood vessels, smooth muscles, and glands

       1. Parasympathetic division of ANS helps body conserve resources

       2. Sympathetic division of ANS mediates the fight-or-flight response

   c. Response is more common in nonhuman animals, but elements are seen in humans

2. The **general adaptation syndrome**: a model of the body's stress response, consisting of three stages: alarm, resistance, and exhaustion

   a. Formulated by Hans Selye based on research beginning in 1930s

   b. Three stages of syndrome

       1. Alarm occurs when organism recognizes existence of threat

       2. Resistance occurs when, in cases of prolonged stress, physiological changes stabilize and coping efforts get under way

       3. Exhaustion occurs when body's resources are depleted as a result of dealing with chronic stress

   c. Selye's research demonstrated link between stress and physical illness

3. Brain-body pathways

   a. Endocrine system consists of glands that secrete chemicals called hormones into the bloodstream

   b. Brain sends signals to endocrine system along two major
pathways, both activated by hypothalamus

1. First pathway is routed through ANS and involves activation of adrenal glands

2. Second pathway is from brain directly to endocrine system and involves the pituitary gland, which stimulates adrenal glands

c. Mounting evidence indicates that stress can suppress functioning of immune system

C. Behavioral responses

1. Most behavioral responses to stress involve coping: active efforts to master, reduce, or tolerate the demands created by stress (Chapter 4 describes coping processes)

2. Coping responses can be either healthy or unhealthy

IV. The potential effects of stress

A. Impaired task performance

1. Studies indicate that pressure can impair performance

2. Research on professional athletes provides some support for "choking" under pressure, but reliability of phenomenon has been questioned in recent years

B. Disruption of cognitive functioning

1. Studies indicate that stress can disrupt aspects of attention

2. Stress may leave people disoriented

C. Burnout

1. Burnout involves physical, mental, and emotional exhaustion, cynicism and a lowered sense of self-efficacy that is attributable to work-related stress

2. Generally occurs as a reaction to heavy, chronic, job-related stress

3. A potential problem in variety of occupations

D. Posttraumatic stress disorders

1. Posttraumatic stress disorder (PTSD) involves enduring
psychological disturbance attributed to the experience of a major traumatic event

2. Disorders widely associated with experience of Vietnam War veterans

3. Also seen in other cases of traumatic stress (rape, serious automobile accident, major disasters)

4. Symptoms include nightmares, paranoia, emotional numbing, and elevated risk for substance abuse

5. Recent evidence indicates social support and hardiness as key factors promoting resistance to PTSD

E. Psychological problems and disorders

1. Common psychological problems include poor academic performance, insomnia, nightmares, and sexual difficulties

2. Studies indicate that stress may contribute to onset of psychological disorders (e.g., depression, schizophrenia, anxiety disorders)

F. Physical illness

1. Psychosomatic diseases: genuine physical ailments caused in part by psychological factors, especially emotional distress
   a. Common misconception is that these diseases are imagined physical ailments
   b. Common diseases include high blood pressure, ulcers, asthma, and skin disorders

2. There is a genetic predisposition to most psychosomatic diseases

3. Stress may influence onset and course of heart disease, stroke, tuberculosis, arthritis, others

G. Beneficial effects of stress

1. Stressful events can help satisfy need for stimulation and challenge

2. Stress can promote personal growth or self-improvement

3. Stress can inoculate people so that they are less affected by
future stress

V. Factors influencing stress tolerance

A. Social support

1. **Social support refers to various types of aid and succor provided by members of one’s social networks**

2. Social support is favorably related to physical health

3. But some social relationships can be a source of more stress than support

B. Hardiness

1. **Hardiness: a syndrome marked by commitment, challenge, and control. This trait is purportedly associated with strong stress resistance**

2. May reduce effects of stress by altering stress appraisals

3. Debate continues about relevance of syndrome to women, as well as key elements of hardiness

C. Optimism and conscientiousness

1. **Optimism: a general tendency to expect good outcomes**
   
   a. Studies suggest that optimists cope with stress in more adaptive ways than pessimists

   b. Pessimism may lead to passive coping strategies and poor health care practices

   v**Conscientiousness, the tendency to be diligent, punctual, and dependable**, may have an impact on stress reactions, physical health

VI. Application: Monitoring your stress

A. Problems with the Social Readjustment Rating Scale (SRRS)

1. Does not take into account desirability of change events

2. Does not take into account individual differences in subjective perception of stressful events

3. Many of events listed on scale are ambiguous
   
   a. People may give inconsistent responses
b. Test-retest reliability is diminished

4. List of items on scale is not exhaustive

5. Correlation between stress and illness may be a function of subjects' neuroticism as it influences response tendencies

B. The life experiences survey (LES)

1. Becoming a widely used measure of stress in research

2. Takes into account positive or negative impact of changes

3. Addresses individual differences in appraisal of stress

4. Includes larger domain of stressful events than SRRS

   a. Significant omissions from SRRS were added

   b. Allows respondents to write in events not included

   c. Sections added for specific populations (e.g., students)

5. Negative change scores are particularly good predictor of mental and physical health

C. A cautionary note

1. Strength of correlation between stress and adaptational problems is modest

2. Stress is only one of numerous variables that can affect your susceptibility to problems