Chapter 13

Stress, Coping and Health

Biology, Psychology, Social Context and Disease

- They way health professionals think about physical illness has changed considerably in the past 20-30 years.
- The traditional medical view of physical illness as a purely biological phenomenon has given way to a new model, the __1_model, which holds that physical illness is caused by a complex interaction of biological, psychological, and sociocultural factors.
- This model asserts that biological factors operate in a psychological and social context that is also <u>2</u>.

The Nature of Stress

- <u>3</u> is defined in the text as any circumstances that threaten or are perceived to threaten one's well being and that thereby tax one's <u>4</u> abilities.
- Researchers have discovered that cumulative nature of minor stresses (e.g, the "<u>5</u> hassles" scale measures this) like moving, experiencing changes in household responsibilities, etc. can add up to be as stressful as a major traumatic event like a divorce or disaster.
- The experience of feeling stressed depends largely on <u>cognitive</u> <u>processes</u>. This includes what events one tends to notice, and how one <u>6</u> (assesses the level of threat, for example) them.
- > For example, going on a new date is exciting for some, terrifying for others.
- Primary Appraisal is an initial evaluation of whether an event is irrelevant, threatening or stressful. Secondary Appraisal is an evaluation of our ability to cope or deal with the stress.
- We know that people's appraisals of events are <u>often not very</u> <u>objective</u> and therefore influence the effect of the event.

Types of Stress

- Psychologists have outlined <u>4 principle types of stress</u>:
- Frustration, which occurs in any situation in which the pursuit of some goal is thwarted. Ex. traffic jams
- <u>7</u> occurs when two or more incompatible motivations or behavioral impulses compete for expression.
- Some types of conflict that have been studied extensively are-Approach-Approach: when a person has a choice between 2 attractive goals;
- Avoidance-Avoidance: A choice between 2 unattractive goals.
- <u>8 (2 words)</u>: when a choice must be made about whether to pursue a single goal that has both attractive and unattractive aspects.
- In this type of conflict people are often beset by <u>9</u> or "going back and forth". (rats will actually run up and down a ramp when faced with this type conflict.)

Types of Stress: Change and Pressure

- <u>10 (2 words)</u> are any noticeable alterations in one's living circumstances that require readjustment. Holmes and Rahe (1967) developed the Social Readjustment Rating Scale to measure life change as a form of stress, giving higher points (life change units) for more stressful events. (For fun, quickly take the SRRS... what does your score mean?)
- Pressure involves expectations or <u>11</u> that one behave in a certain way...pressure to perform or to comply.
- Some research has found that pressure is <u>more strongly related to</u> <u>measures of mental and physical health than life change (SRRS).</u>
- While we tend to think of pressure as a product of outside demands, studies of hs and college students show <u>pressure is often self-imposed!</u>

Responding to Stress

- Human stress responses are <u>12</u> affecting emotional, psychological, and behavioral dimensions.
- Apparently there are strong links between cognitive reactions to stress (appraisals) and which set of emotions one experiences.
 For instance, 13 (2 words) leads to guilt then to helplessness to 14, etc.
- Contrary to common sense, positive emotions do not vanish during times of stress but often help people bounce back for the difficulties associated with the stress (Fredrickson's Broaden & Build Theory)
- The inverted-U hypothesis suggests that high emotional arousal/stress should improve task <u>15</u> up to a point, after which performance <u>16</u>. As tasks become more complex, the optimal level of arousal tends to decrease.
- Think about the influence of "high arousal" on a easy task like running the 40 yard dash. Now think about the influence of high arousal when trying to concentrate (harder task) when writing an important term paper. In one case, high arousal may be helpful in another case if might get in the way.

Responding to Stress Physiologically

- <u>17 (Full name)</u> began studying stress in the 1930's to determine the effects of these chronic stressors. He used animal models, exposing them to both physical and psychological stressors to determine effects of prolonged stress.
- Selye formulated a theory about how stress-related diseases and general reactions occur called the <u>18 (3 words)</u>.
- The 19 stage occurs when an organism recognizes a threat and mobilizes resources to meet the demands of the stressor.
- The <u>20</u> stage occurs when the stress is prolonged. This is a period when physiological arousal "stabilize" but are still above baseline, as the organism copes with the demands of the ongoing stressor.
- The <u>21</u> stage occurs when the body's resources are depleted leading to a variety of harmful physiological effects that Selye called, diseases of adaptation come in.

Brain-Body Pathways and Coping

There are **2 physiological stress pathways** that lead to bodily stress responses.

➤ Both pathways involve the release of hormones into blood circulation. The hormones (epinephrine and cortisol) mobilize the body for short or long term action, respectively.

However people deal (cope) with stressful stimuli in different ways.

- <u>22</u> refers to active efforts to master, reduce, or tolerate the demands created by stress. These may involve:
- Aggression: striking out at others aggressively (usually the result of frustration-- Dollard's frustration-aggression hypothesis);
- Self-Indulgence (eating, drinking, smoking, shopping);
- 23 coping- Erecting defense mechanisms against anxiety,
- <u>24</u> coping- healthful responses that may involve realistically appraising situations and confronting problems directly.

Stress and Physical Health

Psychosomatic diseases are physical ailments with a genuine organic basis that are influenced by psychological factors...for example, conditions like hypertension, ulcers, asthma, eczema, and migraine headaches.

Heart disease accounts for nearly 25 (#)% of the deaths in the U.S. each year.

Personality factors have been linked to risk for coronary heart disease. These personality characteristics have been collectively labeled the 26 personality and include 3 main elements The anger and hostility factor has been indicated as the most important health predictor in this cluster of behaviors.

Stress has also been shown to decrease the <u>27 (2 words)</u>, the body's defensive reaction to invasion by bacteria, viral agents, or other foreign substances.

➤ A study in the text by Cohen and Tyrell, found that those under higher stress were more likely to be inflected by the virus causing the common <u>28</u>. (Cohen et al, 1993)

Factors Moderating the Impact of Stress

Many factors moderate the effects of stress on illness, and individual differences in impact appear to be related to these moderating variables.

- <u>29</u> (2 words), or the various types of aid provided by members of one's social network appear to decrease the negative impact of stress.
- An <u>30</u> personality is more likely to engage in actionorientated and problem-focused coping, to seek social support, and emphasize the <u>31</u> in their appraisals of stressful events.
- <u>32</u> also appears to be related to increased longevity, possibly be cause being conscientious foster the use of better health habits.

Health-Impairing Behaviors

- <u>33</u> (2 words) behavior is surprisingly common. Take smoking, for example. The average smoker has an estimated life expectancy <u>34</u> (#) years shorter than that of a similar nonsmoker. Health risks decline quickly for those who give up smoking, but quitting is difficult and relapse rates are high.
- Smoking, poor nutritional habits and lack of exercise have been linked to heart disease, hypertension, and cancer, among other things.
- Long term success rates for quitting smoking is estimated to be approximately 35 (#) percent.
- AIDS is a disorder in which the immune system is gradually weakened and eventually disabled by the HIV virus. Being infected with HIV is <u>36 (2 words)</u> to having AIDS. AIDS is the final stage of HIV infection.
- Acquired Immune Deficiency Syndrome (AIDS) is clearly influenced by behavior. AIDS is transmitted through person-toperson contact involving the exchange of bodily fluids, primarily 37 and 38.