



ALL Stressed Out!



It is about this time of year when grade 12 suddenly becomes too much to handle... keeping high grades, trying to exercise, student council responsibilities and of course those blasted scholarship applications... and did I mention trying to keep a part-time job and volunteer on top of all this! Gees, it is hard to be a kid these days!

By recognizing the stressors in your life and knowing some strategies to help manage all the stress, life can get easier especially in maintaining a healthy body and mind.



Lesson I. Overview of Stress

I. The Concept of Stress

A. Stress—Stress is the physical and psychological response to events, called stressors, that challenge a person's normal functioning (homeostasis); everyone has stress—it is a normal part of life.

B. Stressor—A stressor is any physical or psychological challenge that threatens homeostasis;

stressors can be unique to an individual.

1. *Physical stressors*—Examples include injury, physical exertion, noise, overcrowding, or excessive heat or cold.

2. *Psychological stressors*—Examples include challenges such as interpersonal conflict, isolation, traumatic life events, time-pressured tasks, peer pressure, expectations of others, or high standards for achievement.

II. Appraisal of Stress

All events are processed within the corticolimbic system, which is responsible for the appraisal of threat and the processing of emotions.

A. Primary appraisal—This is determining whether an event is a threat, and the magnitude of that threat.

B. Secondary appraisal—This is evaluating ways in which to cope with the stressor.

III. The Stress Response

The stress response consists of both psychological and physiological components.

A. Behavioral response—A behavioral response is any action taken on the environment,

for example leaving a dangerous situation, fighting back, or using a coping skill; people react differently to stressors depending on both genetics and life experiences.

B. Physiological response—A physiological response is an alteration in physiological functioning to prepare for “flight or fight.”

C. Behavioral and physiological responses may also be accompanied by negative emotional

states, such as frustration, fear, anxiety, sense of pressure; “eustress” tends to be accompanied by a sense of happiness, joy, exuberance.

IV. Types of Stressors

A. Psychological conflict—This is when a choice is required between actions or goals that are perceived as incompatible. Types of conflict:

1. *Approach-approach*—This is when a person must choose between one of two attractive goals. Example: You can either go to a ball game or spend time with a friend who is usually busy, but you cannot do both.

2. *Avoidance-avoidance*—This is when a person must choose between two unattractive options, or the “lesser of two evils.” Example: You need to make a choice between cleaning your room and studying for your psychology exam.

3. *Approach-avoidance*—This is when a person must choose a goal that has both attractive and unattractive features. Examples: You want to purchase a stereo system that is great fun to have, but requires extra work hours to pay for; you want to go along with your friends to a particular movie, but you know that your parents disapprove.

4. *Double approach-avoidance*—This is when a person must choose between two alternatives, both of which have positive and negative features. Example: When you need to choose between two colleges that you like, but both have negative features as well.

B. Everyday hassles—These are minor everyday occurrences that can be distressing, frustrating, and irritating (e.g., traffic, disagreements, time demands).

C. Life changes—These are personal changes in a person’s life that require adaptation/adjustment (e.g., rejection by friend, vacation, death of a parent, retirement, new job, marriage).

D. Catastrophes—These are unpredictable, large-scale events, such as natural disasters or devastations (e.g., tsunami, tornado).

E. Poverty and inequality—This is a low economic status.

F. Discrimination—This is prejudice and perceived unfairness.

G. Adjustment to a new culture—This is when immigrants and sojourners are adjusting to life in a new culture.

V. Chronic Stress

Chronic stress results in prolonged activation of the stress response.

A. Chronic stress can lead to negative mood states, such as depression and anxiety, which in turn then can affect how a person appraises new events; the person often appraises the new events as more negative, and, thus, a vicious cycle begins.

B. Chronic stress affects the body through making the immune system less efficient and influencing the functioning of the cardiovascular system.

VI. Stress and Health

A. Post-traumatic stress disorder (PTSD)—PTSD is a psychiatric disorder in which people who have been subjected to trauma (either natural or manmade) experience

Lesson II. Physiological Reactions to Stressors

I. Basic Physiology of the Stress Response

A. Events are processed in the corticolimbic system. Sensory information related to the event is processed in this system, which includes multiple brain structures that conduct the appraisal process.

B. When a threat is perceived, a message is sent to the peripheral nervous system to get prepared for movement.

C. A message is also sent to the hypothalamus, which coordinates the nervous system and controls the autonomic nervous system. As part of the autonomic nervous system, the sympathetic nervous system increases activation of bodily systems that prepare the body to react either defensively or offensively (fight or flight).

D. The hypothalamus also communicates with the endocrine system, which, through a complex process, produces two main functions during stress, an adrenocortical response and an adrenomedullary response.

1. The adrenocortical response releases cortisol, a hormone always present, but whose levels vary because of time of day and current stressors. Cortisol increases sympathetic nervous system activity, releases stored fats for energy, and suppresses immune function.

2. The adrenomedullary response releases epinephrine (adrenaline), which stimulates heart muscles and increases heart rate and oxygen consumption so as to prepare the body to respond.

II. Models of Stress

A. Walter Cannon (physiologist) was responsible for the following:

1. He introduced the term *stress*.
2. He distinguished between short-term and long-term stressors.
3. He noted that the body is better prepared to handle episodic stressors rather than chronic stressors.

B. Hans Selye was responsible for the following:

1. He studied animal and human reactions to various stressors.
2. He identified the body's response to stress—*general adaptation syndrome*.
3. He described three phases of the general adaptation syndrome (**GAS**) as follows:

(a) **Alarm**—Sympathetic nervous system mobilizes resources (e.g., increased heart rate).

(b) **Resistance**—Body continues to expend hormones that keep system elevated.

(c) **Exhaustion**—Body becomes exhausted; resources depleted.

C. Theories of emotional and physiological responses to stress include:

1. **James-Lange theory**—Body responds to stress and feelings of fear follow.
2. **Cannon-Bard theory**—Physiological response and emotion occur simultaneously.

III. Chronic Stress

A. Hormones released during the stress response have negative effects when released continuously.

1. Cortisol suppresses immune function and can disrupt sleep, which if it occurs over a long time can result in susceptibility to illness.
2. Epinephrine can increase risk factors for cardiovascular disease, sleep problems.

B. During the appraisal process, emotions are generated that can influence mood. Chronic stress can lead to negative mood states that in turn can affect how events are appraised.

IV. Stress, Emotion, and Heart Disease

A. Heart disease is the leading cause of death in the United States today.

B. Early research found a relationship between stress and heart disease (Friedman & Rosenman, 1959).

1. Friedman and Rosenman (1959) monitored the cholesterol levels of tax accountants just before and up to the tax deadline (April 15).
2. They found cholesterol levels increased dramatically before April 15 and returned to normal by June. Research was limited because it only included White men.

C. Early research revealed the relationship between Type A personality and heart attacks (Friedman & Rosenman, 1974).

1. **Type A**—This is a hard driving, aggressive, impatient personality.
2. **Type B**—This is a laid back personality; usually easy going.

The research found that Type A men were more likely to have heart attacks.

The sympathetic nervous system of Type A individuals works overtime; the increased hormone secretion increases plaques or cholesterol deposits.

D. Newer research has identified *hostility* as the key factor in Type A personalities that contributes to heart disease.

E. Depression affects recovery from heart attacks, and is a risk factor for poor outcome independent of severity of heart disease.

V. Stress and the Immune System

A. **Psychoneuroimmunology**—This word was coined by psychologist Robert Ader, who began the study of the interaction of psychological and physiological processes that affect the body's ability to defend itself against disease.

B. **Immune System**—This is the body's first internal line of defense.

C. **Leukocytes**—These immune system cells, especially white blood cells, are formed in bone marrow and serve as the body's mobile defense units.

D. The perception of stress leads to the suppression of the immune system.

E. The relationship between stress and the immune system is especially important in persons who are HIV positive but do not yet have AIDS.

F. Stress is associated with susceptibility to the common cold.

G. Stress is associated with slower wound healing.



Lesson III. Psychological Responses to Stress

I. Emotional, Cognitive, and Behavioral Responses

Stress is associated with emotional, cognitive, and behavioral responses. Some responses do not affect functioning, while others can severely disrupt normal functioning.

A. Emotional symptoms of stress can include crying, nervousness, irritability, anger, sadness, anxiety, fear, feelings of dissatisfaction, feeling overwhelmed and powerless, apathetic, or empty.

B. Cognitive symptoms of stress can include memory problems, distractibility, obsessiveness, or problems in concentration.

C. Behavioral reactions to stress can include problems in relationships, alcohol and substance abuse, compulsive eating, teeth grinding, lowered sex drive, or uncommunicativeness.

II. Positive Aspects of Stress

Optimal arousal theory suggests that peak performance is related to amount of stress.

A. More stress can increase performance on simple tasks.

B. Too much stress tends to decrease performance on complex tasks.

III. Mediators of Stress

Responses to stress can be mediated by the following:

A. Adequacy of coping skills—Having more than one way of dealing with problems is useful.

B. Availability of social support—Friends can help buffer the effects of stress.

C. Intensity and duration of the stressor and history of previous stressors affect stress.

D. Individual beliefs and values affect stress.

Example: Locus of control

(a) *Internal*—A belief that a person has control over rewards and punishments in life

(b) *External*—A belief that luck, chance, and powerful people determine events

E. Gender (e.g., Bernstein, Penner, Clarke-Stewart, & Roy, 2003)—Males express anger and use avoidance; females use support networks.

F. Cultural differences affect stress.

IV. Cultural Differences

A. What might be perceived as stressful in one culture may be perceived as less stressful in another culture (e.g., failure in academic achievement, divorce), but many stressors are similar across cultures (threats to well-being, loss).

B. Cultural differences exist in the degree to which people of different cultures use different

coping strategies, but all peoples essentially use strategies to try to eliminate the stressor, avoid it, or cope with it.

C. Cultural context can influence what is perceived as stressful and the coping strategies used.

1. *Individualistic culture*—This culture values sense of competition, personal freedom, individual achievement, working alone, confrontation, and so on.

Priority is given to personal needs and individual success. This is typical of North American and Western Europe countries.

2. *Collectivist culture*—This culture values working in a group, group goals, and group achievement, kinship relationships, etc. Priority is given to group needs and group success. This is typical of Asian, African, and Central and South American countries.

D. It is important not to polarize the differences across cultures or to stereotype.

E. Cultural differences may appear in how people describe stressors (e.g., a person from an individualistic culture may explain a stressor in an individualistic way, while a person from a collectivist culture may explain a stressor in a collectivistic way).

F. Cultural differences in stress and coping with stress may be a factor in the relationship between culture and health that research has demonstrated, e.g., heart disease is highest in African Americans and lowest in Asians/Pacific Islanders.

Lesson IV. Strategies To Deal With Stress and To Promote Health

I. Cognitive Strategies

A. Appraisal/reappraisal

1. *Appraisal*—This is evaluating a situation.

2. *Reappraisal*—This is evaluating for a second time and assessing risks, costs, and benefits for different coping strategies; reappraisal may affect the response.

B. Ignore

C. Problem-Solve

1. This is defined as an attempt to develop constructive schemas.

2. A person should consider the threat, harm, or challenge to the individual or group.

3. Problem-solving involves the following steps:

(a) *Identify the problem.*

(b) *Explore possible strategies.*

(c) *Plan and take actions.*

D. Cognitive restructuring—Examine underlying assumptions and automatic thoughts associated with the problem, use techniques such as “reframing” to view the problem as more of a challenge than threat.



II. Emotional Strategies

A. Cope with difficult emotions and apply self-regulation.

B. Obtain emotional support and social support, and have close, loving relationships (Erikson).

C. Use imagery that generates pleasant emotions.

III. Behavioral Strategies

A. Time management—This is planning for effective and efficient use of time.

B. Behavior modification—This is the application of the principles of classical and operant conditioning to make behavioral changes that reduce stress and enhance health.

C. Relaxation training—This is progressive muscle and/or imagery relaxation coupled with deep breathing to directly modify the stress response.

D. Biofeedback—This is a person's using information about his or her biological state in order to learn how to control it. It often involves electronically recording information about changes in the person's physiological state (e.g., muscle tension), providing informational feedback to the person, and the person's using that information to learn ways to physically control that function (e.g., relax).

E. Meditation—Meditation techniques are designed to create an altered state of consciousness characterized by inner peace and tranquility.

F. Avoiding the stressor.

IV. Physical Strategies

A. Aerobic exercise—This is sustained exercise that can increase cardiovascular and lung capacity and can help alleviate depression and anxiety.

B. Diet and nutrition—This is eating balanced meals; making healthy choices.

In general, adaptive strategies include reappraising the threat, goal setting, prioritizing, and reality testing. Maladaptive strategies include denial, catastrophizing, and wishful thinking. But no one strategy is good for everything, and some can be good in some situations and bad in others (for example, denial, confrontation, avoidance).

V. Whole Person Approach to Health Promotion

A. The "whole person" approach views a person's health as interconnected biological, psychological, and social components. Viewing these components as integrally related to our total well-being and health, this approach emphasizes health awareness, health promotion, and disease prevention.

B. Lifestyle—The adoption of a healthy lifestyle such as controlling eating, smoking, exercise, and problem solving can have a direct impact on an individual's perceived stress and stress level.

Lesson V. Resilience and Well-Being

I. Resilience

Resilience is the ability to adapt well in the face of challenging life experiences, such as trauma, tragedy, or significant stress.

A. Resilience can be learned; successful resilience skills vary from person to person (what works for one person might not work for another).

B. Resilience skills include developing realistic goals, taking care of one's self both physically and mentally, keeping things in perspective, and staying flexible. Having supportive relationships is an important component to resilience.

C. Resilient individuals (Alvord & Grados, 2005) do the following:

1. *They possess a realistic, positive sense of self.*
2. *They have self-control.*
3. *They are proactive when faced with challenges.*
4. *They are realistic.*
5. *They use internal and external resources when challenged.*

D. Individual characteristics such as good problem-solving skills and a sense of optimism, a stable and supportive family environment, and other variables such as effective schools and other forms of social support all contribute to resilience (Tedeschi &

Kilmer, 2005).

E. Building resilience is more difficult for people with specific psychological disorders, such as depression (Newman, 2005). Resilience building should be integrated into the person's treatment (e.g., for depression).

F. Building resilience can reduce stress and promote health.

II. Realizing and Creating Well-Being in Life for Individuals, Communities, and Societies

A. Well-being—This is the pervasive sense that life has been and is good. It is an ongoing perception that this period in a person's life, or even life as a whole, is fulfilling, meaningful, and pleasant (Myers, 2005).

B. Awareness and support of multiple abilities of all people.

C. Encouraging individuals and groups to develop a deeper sense of purpose, meaning, and satisfaction in life.

D. Self efficacy—Personal beliefs regarding capability of exercising control over events in our lives (Bandura, 1997).

III. Concepts To Consider for Experiencing Well-Being and a Positive Lifestyle

A. Optimism—Optimism is a mood or attitude associated with an expectation about the future that is regarded as desirable. How a person explains bad events is referred to as explanatory style; it can be either positive or negative.

B. Flow—Flow is concentration and attention given to pursue or solve a consciously chosen meaningful personal goal.

C. Subjective well-being—This is a person's judgment of his or her life as a whole (pleasant vs. unpleasant).

D. Happiness—Happiness is a high ratio of positive to negative feelings or a sense of satisfaction with life.

E. Hope—This is a person's expectations that a goal could be achieved.

F. Cultural differences—Different concerns for people of different cultures are correlated with well-being and happiness.

Reflection Response

You personality plays a large role in determining how you will handle stress. Explain what type of personality (Type A or B) you think you are using and use specific evidence from your life.
