

What Is Stress?



KIN 69
Fall 2006

Introduction

- Name, major, year in school
- Your Top 10 stressors
- What do you experience when you are under stress? (physical, mental, emotional)
- Currently, how do you manage your stress?
- What do you hope to get out of this course?
- On a scale of 1-10 (low to high) rate your stress level over the last couple weeks:

What is Stress?

- Eastern philosophies - An absence of inner peace
- Western culture - Lost of control
- Lazarus
 - Psychological - a state of anxiety produced when events and responsibilities exceed one's coping abilities
 - Physiological - the rate of wear and tear on the body
- Selye - the nonspecific (physiological) response of the body to any demand placed upon it to adapt, whether that demand produces pleasure or pain (i.e. job promotion vs. layoff)

What is Stress? cont'd...

- Holistic medicine - the inability to cope with a *perceived* (real or imagined) threat to one's mental, physical, emotional, and spiritual well-being, which results in a series of physiological responses and adaptations.
 - e.g. Winning an all-expense-paid trip for two to a beach resort in Hawaii
- Bottom line, stress is a complex phenomenon affecting the whole person, not just the physical body; yet it is ultimately the body that remains "the battlefield for the war games of the mind"

What causes stress?

- Stressor - a stimulus with the potential of triggering the "fight-or-flight" response
 - Environmental - toxins, heat, cold
 - Psychological - poor body image, a blow to the ego
 - Sociological - unemployment, death of a loved one
 - Philosophical - meaning or purpose in life
- Selye - regardless of the stressor (physical or symbolic), the body's reaction will be the same (i.e. physiology altered for greater speed and strength)

Is stress always bad?

Selye - two types of stressors:

- ◆ Eustress - good stress; arises in any situation or circumstance that a person finds motivating or inspiring
 - ◆ E.g.: Training for a marathon, falling in love
- ◆ Distress - bad things that forces us to adapt
 - ◆ Acute - e.g. getting pulled over
 - ◆ Chronic - e.g. roommate from hell, abusive relationship

Is stress always bad? cont'd

Yerkes-Dodson's Curve



Source: <http://www.stresslessems.com/instructor/stress.html>

Stress Reactivity

- Also called the "fight-or-flight" response, it is the body's physiological reaction that prepares us for swift action when needed.
- When not used, stress products can build up
 ⇒ illness & disease
- Effect of stress is dependent on:
 - ◆ Duration - the amount of time our body's physiology varies from the baseline, and
 - ◆ Degree - the amount of physiological variance from the body's baseline.
- Of the two, duration is the most important.

The General Adaptation Syndrome (Selye)

- A process in which the body tries to accommodate stress by adapting to it
- Stage 1: Alarm reaction
 - Several body systems are activated (NS, ES, CV, PS, MS); like a smoke alarm detector buzzing, all senses are put on alert until danger is over
- Stage 2: Stage of resistance
 - Body tries to revert back to homeostasis by resisting the alarm; perception of threat still exists, homeostasis is never reached
 - Body stays aroused, but at a lesser intensity than the alarm stage; organs working overtime

The General Adaptation Syndrome (Selye)

- Stage 3: Stage of exhaustion
 - One (or more) organs can no longer meet the demands placed upon it
 - Organ malfunction or death (e.g. the heart)
 - Could lead to death of the organism as a whole

How do we know what we know about stress?

- Walter Cannon (1932) - first to identify the "fight-or-flight" response
- Hans Selye (1956) - identified the "non-specific" physiological responses to stress
- A.T.W. Simeons (1961) - relationship between symbolic stressors and psychosomatic diseases
- Richard Lazarus (1966) / Anita DeLongis (1982) - effect of everyday hassles on health
- Thomas Holmes/Richard Rahe (1967) - relationships between life change, stress & illness
- Meyer Friedman/Ray Rosenman (1974) - relationship between stress, Type-A personality & CHD
- See Greenberg, Table 1.1, p. 4

Relationship Between Stress and Diseases

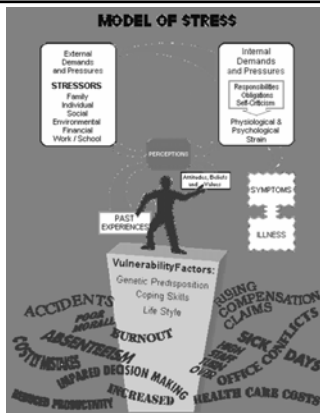
- George Engle (1955) - ulcerative colitis
- Stewart Wolf (1965) - digestive function
- Lawrence LeShan (1966) - cancer
- Meyer Friedman & Ray Rosenman (1974) - coronary heart disease

Relaxation techniques to combat stress ...

- Autogenics
 - ◆ Oskar Vogt (1900) - Hypnosis
 - ◆ Johannes Shultz (1953) - Autogenic Training
- Progressive Relaxation
 - ◆ Edmund Jacobson (1938)
- Meditation
 - ◆ Indian yogis & Zen monks over 2000 yrs back
 - ◆ Herbert Benson (1970's)

Relaxation techniques to treat illnesses ...

- Thomas Budzinski (1970) - used biofeedback for the relief of headaches.
- Carl Simonton (1975) - used visualization in the treatment of cancer.
- Herbert Benson (1975) - used meditation to help control hypertension.



A Model of Stress

- A life situation knocks you off balance (i.e. threat, a change in one's life)
- Cognitive appraisal / perception
- Emotional arousal (i.e. fear, anger ...)
- Physiological arousal (i.e. stress reactivity)
- Consequences = possible illness & disease

Roadblocks can change cognitive appraisal of the stress stimulus

Types of roadblocks / interventions ...

- Life situation - change of major, career, living environment...
- Cognitive appraisal/perception - cognitive restructuring, self-talk, selective awareness...
- Emotional arousal - taking control and responsibility for managing stress
- Physiological arousal - relaxation techniques, exercise, nutrition ...

To end...

If you are distressed by anything external, the pain is not due to the thing itself but to your own estimate of it; and this you have the power to revoke at any moment.

- Marcus Aurelius
