

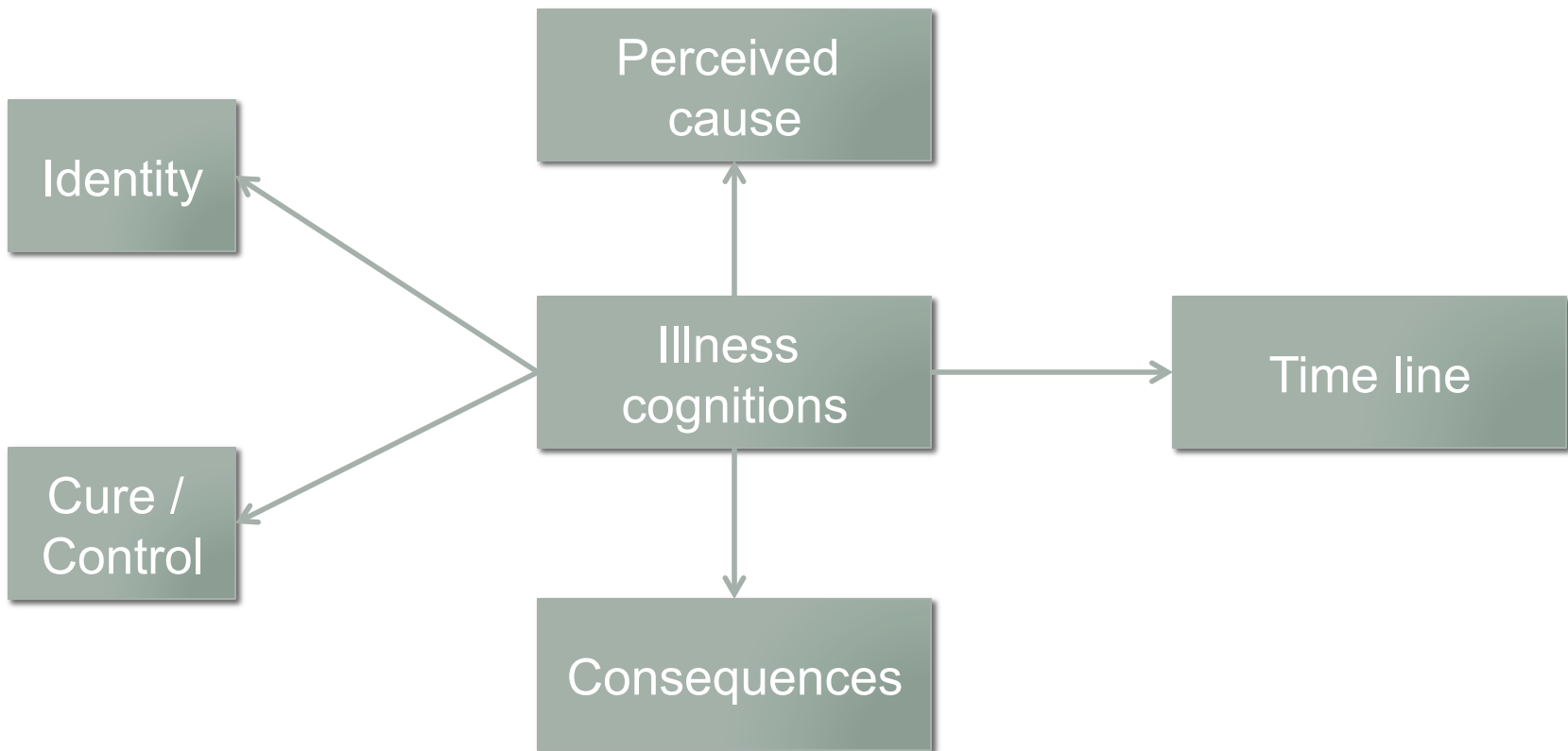
Today

- The process of illness and illness cognitions
 - Illness cognitions
 - Stress
 - Being ill – Pain

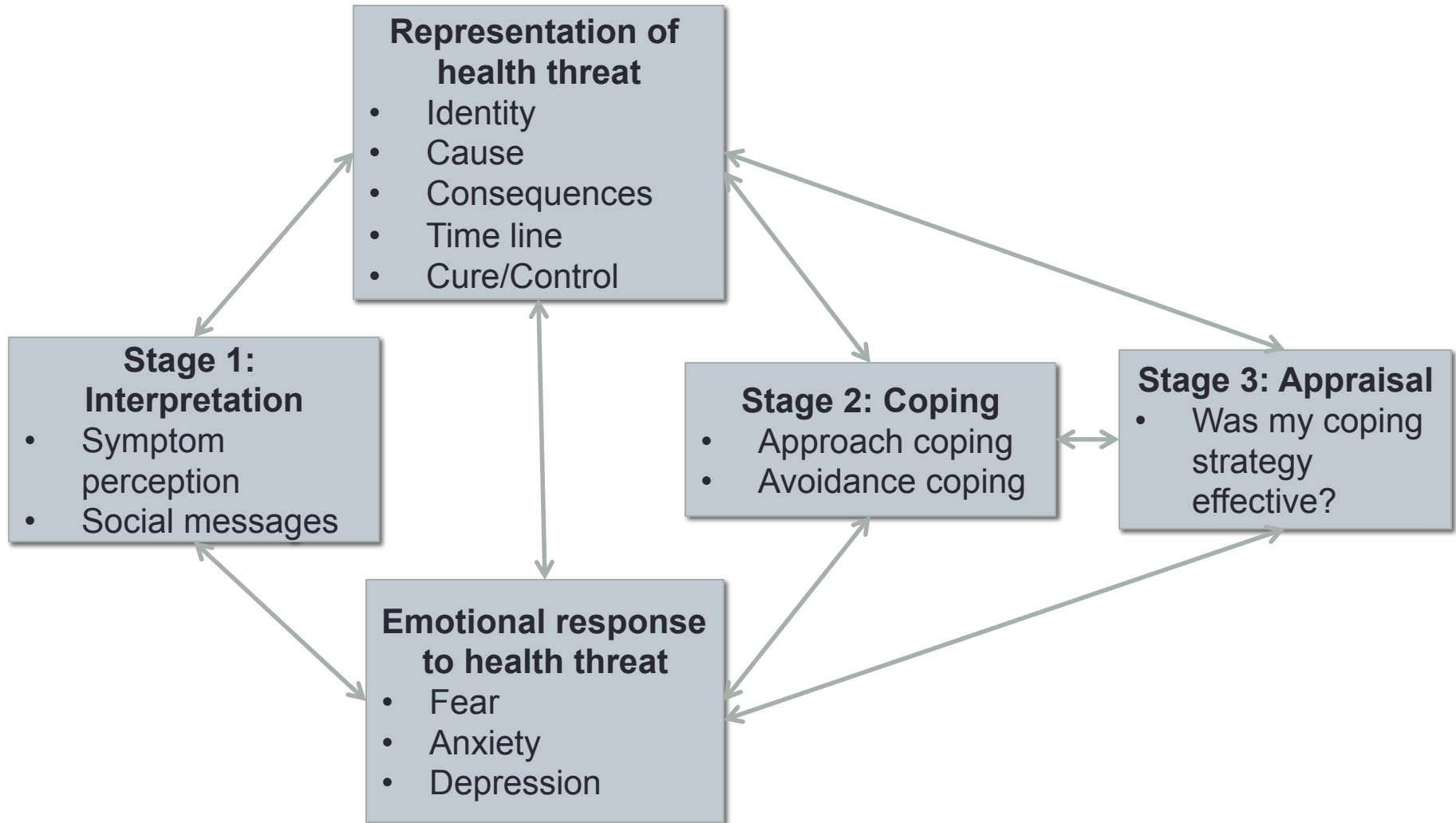
Illness Cognitions

- Leventhal et al. (1980)

- A patient's own implicit common sense beliefs about their illness
- Provide schema for coping with illness, understanding their illness, warning signs



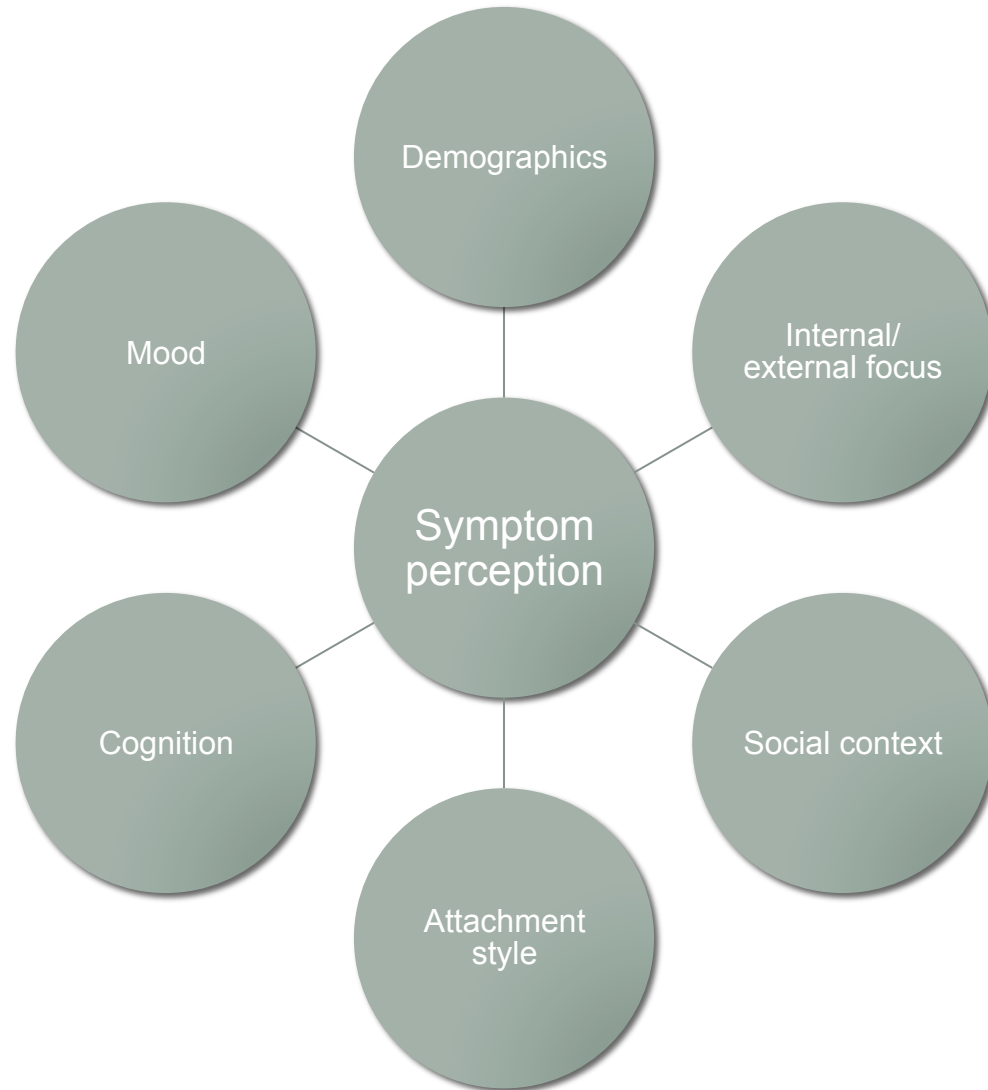
Self-Regulatory Model of Illness Behavior



Symptom Perception

- Discuss
 - Symptoms are more than just a sensation.
- What influences symptom perception?
 - Draw a model

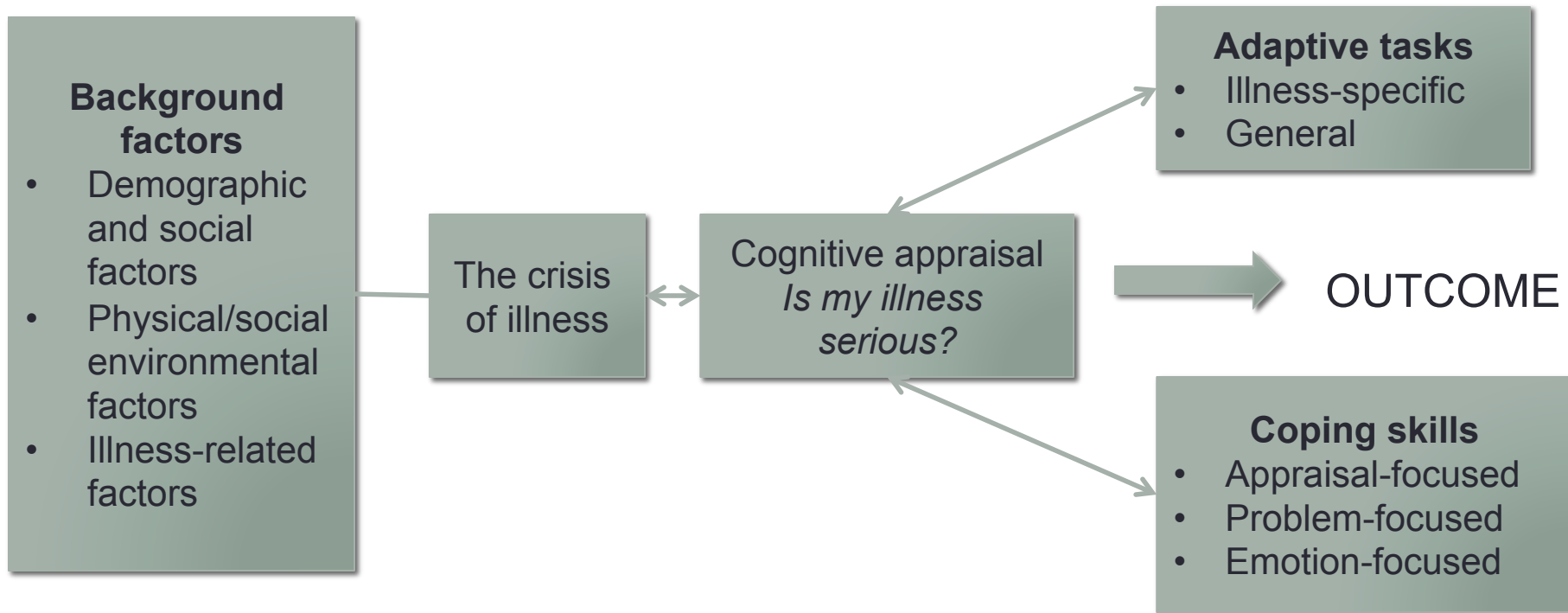
Symptom Perception



Coping

- Illness as a crisis (Moos & Schaefer, 1984)
 - Changes in identity
 - Changes in location
 - Changes in role
 - Changes in social support
 - Unpredicted event
 - Insufficient or unclear information about illness
 - Decision needed quickly
 - Ambiguous meaning
 - Limited prior experience
- Coping as a process (Moos & Schaefer, 1984)
 - (1) Cognitive appraisal (2) Adaptive tasks (3) Coping skills

Coping with the crisis of illness



Adjustment to illness

- Theory of Cognitive Adaptation
 - Search for meaning “*I know what caused my illness*”
 - Attribution Theory (Weiner, 1986)
 - Taylor et al. (1984)
 - 95% of women with breast cancer offer explanation for their cancer
 - 41% stress; 32% carcinogens such as birth control; 26% genetics; 17% diet; 10% injury to breast
 - Taylor (1983)
 - >50% women said that cancer led to reappraising their life
 - Increased self-knowledge; Self-change; Change in priorities
 - Search for mastery “*I can control my illness*”
 - Believing that illness is controllable
 - Process of self-enhancement “*I am better off than a lot of people*”
 - To improve self-esteem
 - Developing illusions
 - Positive interpretations of reality, benefit finding

Post-Traumatic Growth

- Experience of positive growth following illness involving transformation
- Tedeschi & Calhoun (2004, 2006)
 - Perceived changes in self
 - Closer family relationships
 - Changed philosophy in life
 - A better perspective in life
 - Strengthened belief system
- Hefferon et al. (2009)
 - Reappraisal of life and priorities
 - Trauma equals development of self
 - Existential re-evaluation
 - New awareness of the body

Videos

- https://www.youtube.com/watch?v=kVZLR_rxjE

Stress

- The response to events that are challenging or threatening
- Involves biochemical, physiological, behavioral, and psychological changes
- Acute stress versus Chronic stress
- Distress versus Eustress

Stress models

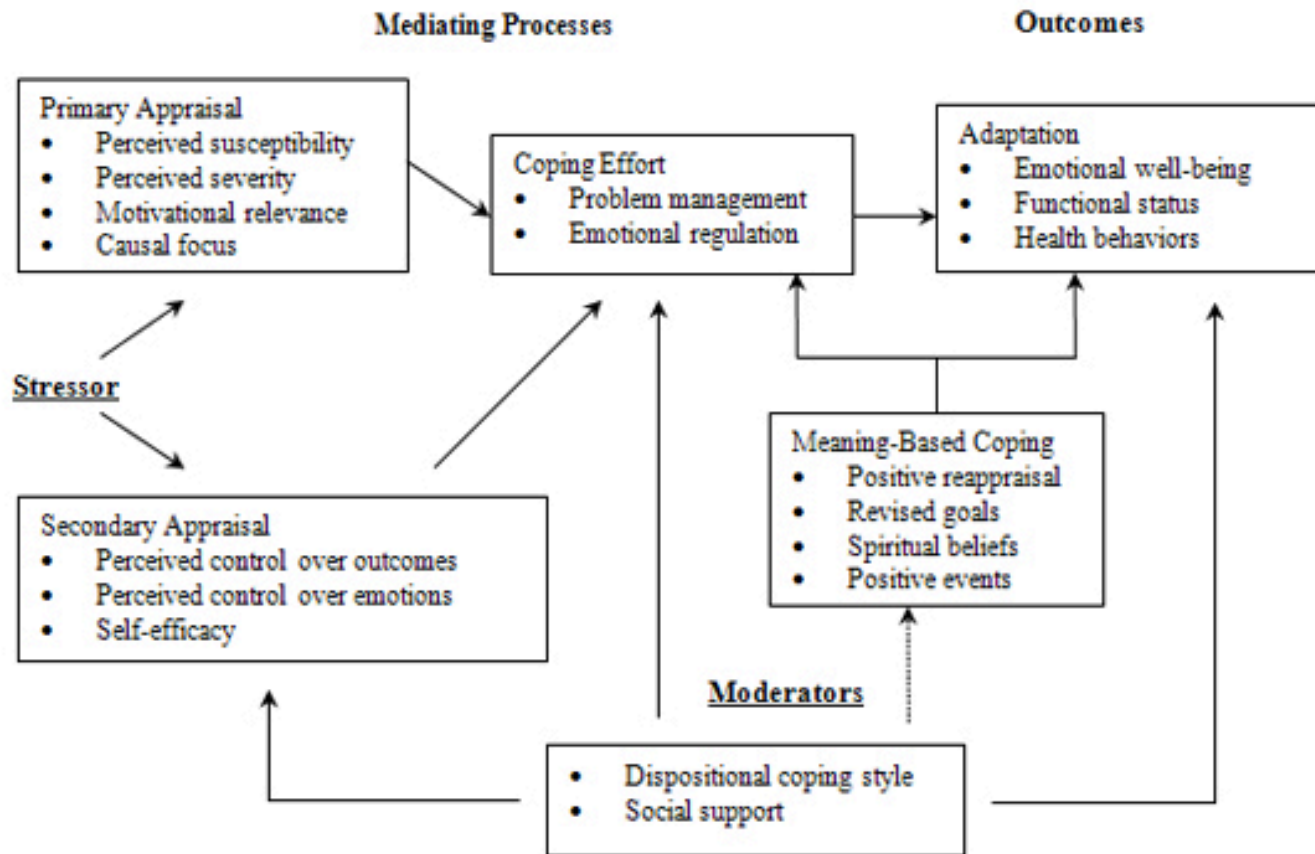
- Fight-or-flight model (Cannon, 1932)
 - Stress as response to external stressors, predominantly physiological (mostly adaptive but could result in medical problems)
- General adaptation syndrome (Selye, 1956)
 - Stress as process: (1) alarm (mobilization to meet or resist stressor); (2) resistance (coping, attempts to reverse the effects of alarm); (3) exhaustion (coping exhausted, resistance unsuccessful)
- Both models view individual as automatically responding to stressors (little consideration of individual variability)
- Assume consistent physiological response to stress
- Individuals seen as passive in responding to the external world

Stress models

- Life events theory (Holmes & Rahe, 1967)
 - Measuring life experiences (from severe like death of spouse to moderate like child leaving home for college to minor such as vacation)
 - Life experiences as predictors of health outcomes or death (e.g., Phillips et al., 2008)
- Does not take into account individual's rating of event
- Retrospective assessment
- Life experiences may interact
- Series of life experiences
- Short-term versus long-term stressors

Transactional model of stress (Lazarus, 1975)

FIGURE 10.1. DIAGRAM OF TRANSACTIONAL MODEL OF STRESS AND COPING.



Stress - Appraisal

- Appraised as more stressful
 - Salient events
 - Overload
 - Ambiguous events
 - Uncontrollable events
- Protective factors
 - Self-efficacy
 - Hardiness (self-control)
 - Mastery

Physiological basis of stress

- Sympathetic activation
 - Increased catecholamine production (adrenalin, nonadrenalin/epinephrine, norepinephrine)
 - Increased blood pressure, heart rate, sweating, pupil dilation = arousal....negatively impacts immune function
- Hypothalamic-pituitary-adrenocortical (HPA) activation
 - Increased production of corticosteroids (cortisol) – impacts management of carbohydrates store stores, leads to inflammation, and impacts immune function
- Stress reactivity, recovery, resistance
 - Varies between people (some due to differences in appraisal but also regardless of appraisal)
 - Gender differences (men more reactive)
 - Allostatic load (McEwan & Stellar, 1993)

Measuring stress

- Physiological measures
- Self-report measures
 - Life events
 - Perceived stress (Perceived Stress Scale; Cohen et al., 1983)
 - Daily hassles
- Each measure has pros and cons
- Choice depends on purpose of measurement and research questions asked

How does stress impact health?

- Chronic process
- Acute process
- Atherosclerosis, thrombogenesis
- Demand on CV system
- Immune system
- Changes in behavior (health behaviors, accidents)
- Effects depend on
 - Behavior (exercise)
 - Coping (avoidance vs. approach, problem-, emotion-focused)
 - Social support
 - Personality
 - Control

Stress and health

- <https://www.youtube.com/watch?v=RcGyVTAoXEU>

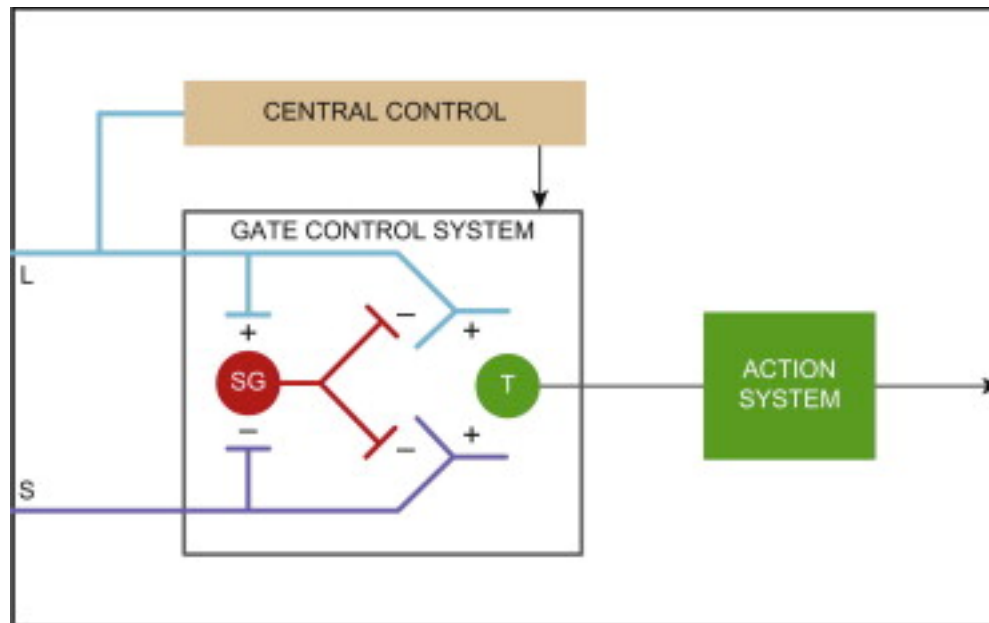
Being III - Pain

- Sensation versus perception
- Feedback about the body
- Warning sign
- Triggers help-seeking behavior
- Has psychological consequences (fear, anxiety)
- Acute vs. chronic (>6months)
- Early models of pain – little role of psychology
 - Biomedical model (psychogenic vs. organic pain)
 - Stimulus – response
 - Single cause

Gate Control Theory of Pain

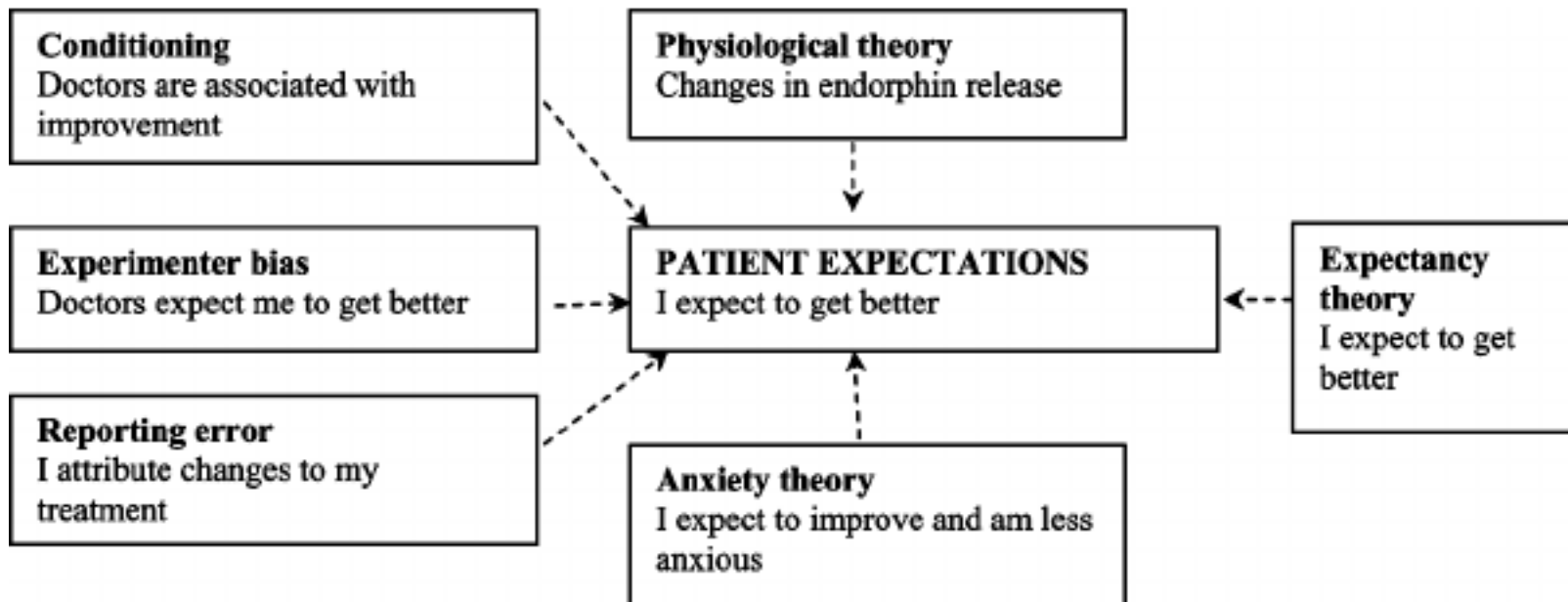
Melzack & Wall (1965)

- Input to the gate – at the spinal cord level input from
 - Peripheral nerve fibres
 - Descending central influences from the brain
 - Large and small fibres
- Output from the gate
 - Gate integrates all of the information and produces output from the gate to an action system resulting in perception of pain



Placebo

- Inert substances that cause symptom relief
- Any therapy that is deliberately used for its non-specific psychological or physiological effects
- Central role of patient expectations



Placebo

- Cognitive Dissonance Theory
 - Does not require expectations to explain placebo effect
 - Effect of investment (Totman, 1987)

