

Motivation and Emotion

Chapter: 8

Instinct Approaches

- ◆ **Motivation:** Factors that direct and energize the behavior of humans and other organisms
 - ◆ Includes behavioral, cognitive, and social aspects
- ◆ **Instincts:** Inborn patterns of behavior that are biologically determined rather than learned.
- ◆ Provides the energy that channels behavior in appropriate directions.

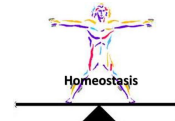
Drive-Reduction Approaches

- ◆ Suggests that a lack of some basic biological need produces a drive to push an organism to satisfy that need
- ◆ **Drive:** Motivational tension, or arousal, that energizes behavior to fulfill a need
- ◆ **Primary drives** – related to biological needs of the body or of the species as a whole
- ◆ **Secondary drives** – related to behavior that fulfills no obvious biological need.



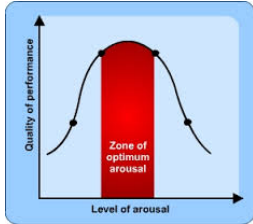
Drive-Reduction Approaches

- ◆ **Homeostasis:** Body's tendency to maintain a steady internal state
 - ◆ Underlies primary drives
 - ◆ Uses feedback loops
 - ◆ Operates the need for food, water, stable body temperature, and sleep



Arousal Approaches

- Belief that we try to maintain certain levels of stimulation and activity
- If stimulation and activity levels become too high → seek to reduce
- People vary in the optimal level of arousal they seek out
 - Daredevil sportsmen, high-stakes gamblers, and criminals



Yerkes-Dodson Curve – Optimal Arousal

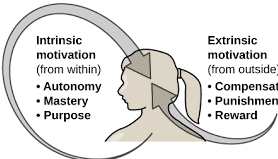
Incentive Approaches

- Suggest that motivation stems from the desire to attain **external rewards**, known as incentives
 - External incentives “push” and “pull” behavior



Cognitive Approaches

- Suggest that motivation is a result of people’s thoughts, beliefs, expectations, and goals
- Draws distinction between:
 - **Intrinsic motivation** - Causes individuals to participate in an activity for their own enjoyment
 - **Extrinsic motivation** - Causes individuals to do something for money, a grade, or some other actual, concrete reward



Intrinsic motivation
(from within)

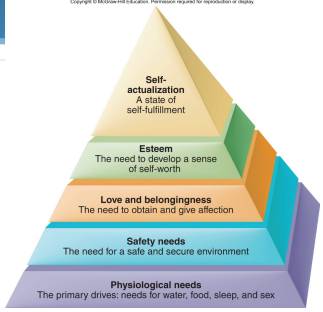
- Autonomy
- Mastery
- Purpose

Extrinsic motivation
(from outside)

- Compensation
- Punishment
- Reward

Maslow’s Hierarchy: Ordering Motivational Needs

- Places motivational needs in a hierarchy
- Suggests that before meeting higher-order needs certain primary needs must be satisfied
- **Self-actualization:** State of self-fulfillment in which people realize their highest potential in their own way



Other Approaches

- ◆ Suggested by Richard Ryan and Edward Deci (2011)
- ◆ Considered human needs in terms of psychological well-being
- ◆ Proposed **self-determination theory** - People have the basic needs of:
 - ◆ **Competence**
 - ◆ **Autonomy**
 - ◆ **Relatedness**

Self-Determination Theory

The diagram illustrates the three basic needs of Self-Determination Theory. At the top is a box labeled 'Humans' three basic needs'. Below it are three boxes: 'Competence' (need to be effective in dealing with environment), 'Autonomy' (need to control the course of their lives), and 'Relatedness' (need to have a close, affectionate relationships with others).

Major Approaches

- Instinct
- Drive reduction
- Arousal
- Incentive
- Cognitive
- Hierarchy of needs

Human Needs and Motivation: Eat, Drink, and Be Daring

- ◆ What biological and social factors underlie hunger?
- ◆ How are needs relating to achievement, affiliation, and power motivation exhibited?

Motivation Behind Hunger and Eating

- ◆ **Obesity:** Body weight is more than 20% above the average weight for a person of a certain height
 - ◆ **Body mass index (BMI)** - Based on a ratio of weight to height

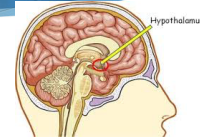
A grid of eight photographs showing a progression of body types from left to right and top to bottom. The individuals are labeled with BMI values: 16.5, 18.5, 20.5, 22.5, 24.5, 26.5, 28.5, and 30.5.

Biological Factors in Regulation of Hunger

- ◆ Changes in the chemical composition of the blood
 - ◆ Glucose levels
 - ◆ Insulin
 - ◆ Ghrelin

Biological Factors in Regulation of Hunger

- ◆ Hypothalamus
 - ◆ Monitors glucose levels
 - ◆ Regulates food intake
 - ◆ Injury affects the weight set point
 - ◆ **Weight set point:** Particular level of weight that the body strives to maintain
- ◆ **Metabolism:** Rate at which food is converted to energy and expended by the body



Social Factors in Eating

Societal rules

Cultural influences

Individual habits

Operant conditioning

Roots of Obesity

- ◆ Oversensitivity to external eating cues
- ◆ Insensitivity to internal hunger cues
- ◆ Higher weight set points
- ◆ Higher level of the hormone leptin
- ◆ Fat cells in the body
 - ◆ Rate of weight gain during the first four months of life is related to being overweight during later childhood
- ◆ Settling points

Eating Disorders

- ◆ **Anorexia nervosa:** Refusal to eat while denying that their behavior and appearance are unusual
- ◆ Bulimia
 - ◆ Binging on large quantities of food, followed by efforts to purge the food through vomiting or other means



Striving for Success

- ◆ **Need for Achievement:** Stable, learned characteristic in which a person obtains satisfaction by striving for and achieving challenging goals
 - ◆ People with high need for achievement are selective in picking challenges
 - ◆ Avoid situations with success coming too easily or unlikely to come
 - ◆ People with low achievement motivation tend to be motivated primarily by a desire to avoid failure

Measuring Achievement Motivation

- ◆ Thematic Apperception Tests (TAT)




Striving for Friendship

- ◆ **Need for affiliation:** Interest in establishing and maintaining relationships with other people
 - ◆ Gender is a great determinant of how much time is spent with friends



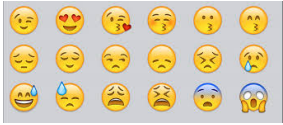
Striving for Impact on Others

- ◆ **Need for power:** Tendency to seek control or influence over others and to be seen as a powerful individual
 - ◆ Significant gender differences exist in the display of need for power



Understanding Emotional Experiences

- ◆ **Emotions:** Feelings that generally have both physiological and cognitive elements
 - ◆ Influence behavior










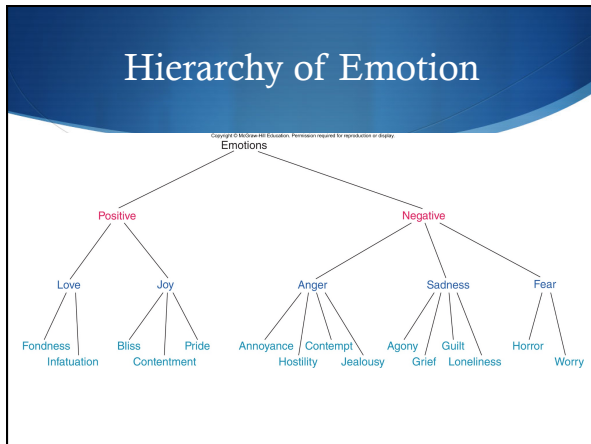
Functions of Emotion

- Preparing us for action
- Shaping our future behavior
- Helping us interact more effectively with others

Determining the Range of Is Experienced Emotion as Universal as Expressed Emotion?

Carroll Izard suggested that there are ten basic emotions: those evident at birth (seen here) plus contempt, shame, and guilt.

		
(a) Joy (mouth forming smile, cheeks lifted, twinkle in eye)	(b) Anger (brows drawn together and downward, eyes fixed, mouth squarish)	(c) Interest (brows raised or knitted, mouth softly rounded, lips may be pursed)
		
(d) Disgust (nose wrinkled, upper lip raised, tongue pushed outward)	(e) Surprise (brows raised, eyes widened, mouth rounded in oval shape)	(f) Sadness (brow's inner corner raised, mouth corners drawn down)
		
		(g) Fear (brows level, drawn in and up, eyelids lifted, mouth corners retracted)



Do People in All Cultures Express Emotion Similarly?

- ◆ **Facial-affect program**
 - ◆ Activation of a set of nerve impulses that make the face display the appropriate expression
- ◆ **Facial-feedback hypothesis**
 - ◆ Hypothesis that facial expressions not only reflect emotional experience but also help determine how people experience and label emotions

Roots of Emotions

- ◆ **The James-Lange theory**
 - ◆ Emotional experience is a reaction to bodily events occurring as a result of an external situation
 - ◆ **Drawbacks**
 - ◆ Visceral changes would have to occur relatively quickly
 - ◆ Physiological arousal does not invariably produce emotional experience
 - ◆ Internal organs produce a relatively limited range of sensations

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graph LR
    Stimulus[Snarling Dog] --> R1[1st Response: Conscious Fear]
    R1 --> R2[2nd Response: ANS Arousal]
    
```

"I'm shaking because I'm afraid"

Roots of Emotion

- ◆ **The Cannon-Bard theory**
 - ◆ Physiological arousal and emotional experience are produced simultaneously by the same nerve stimulus
 - ◆ Rejects the view that physiological arousal alone leads to the perception of emotion

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graph LR
    Stimulus[Snarling Dog] --> R1[1st Response: Subcortical Brain Activity]
    Stimulus --> R2[2nd Response: ANS Arousal]
    R1 --> R3[Conscious Fear]
    R2 --> R3
    
```

"I'm shaking and feeling afraid at the same time"

Roots of Emotion

- ◆ **The Schachter-Singer theory**
 - ◆ Emotions are determined by a nonspecific kind of physiological arousal and its interpretation
 - ◆ Based on environmental cues
 - ◆ Supports a cognitive view of emotions

Stimulus → **1st Response** → **2nd Response**

Snarling Dog → Cognitive Appraisal → ANS Arousal → Conscious Fear

"The snarling dog is dangerous and that makes me feel afraid!"

FEAR

Comparison of the Three Models

James-Lange theory

Activation of visceral bodily changes

Brain interprets visceral changes as emotional experience

Cannon-Bard theory

Activation of thalamus

Activation of bodily changes in response to brain

Message to cortex regarding emotional experience

Schachter-Singer theory

Activation of general physiological arousal

Observation of environmental cues

Determination of label to place on arousal, identifying emotional experience

Perceiving an emotion-inducing event or situation (such as a stranger following you)

Roots of Emotion

- ◆ **Contemporary perspectives on the neuroscience of emotions**
 - ◆ Different emotions produce activation of different portions of the brain
 - ◆ **Amygdala**, plays an important role in the experience of emotions
 - ◆ Provides a link between the perception of an emotion-producing stimulus and the recall of that stimulus later

Cognition and Emotion

The brain's shortcut for emotions

Thalamus

Visual cortex

Amygdala

Short-cut enables instant fear response

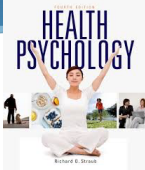

Slightly slower interpretation: "This is a snake! Get away!"

To pounding heart

Health Psychology: Stress, Coping, and Well-Being


Health Psychology

- ◆ **Health psychology:** Investigates the psychological factors related to wellness and illness, including the prevention, diagnosis, and treatment of medical problems
- **Psychoneuroimmunology (PNI):** Study of the relationship among psychological factors, the immune system, and the brain

Stress: Reacting to Threat and Challenge

- ◆ **Stress:** Person's response to events that are threatening or challenging
- ◆ **Stressors**
 - ◆ Circumstances and events in life
 - ◆ Stressors produce threats to our well-b



The Nature of Stressors:

- ◆ Stress varies according to individuals
 - ◆ Bungee jumping
- ◆ For people to consider an event stressful, they must:
 - ◆ Perceive it as threatening or challenging
 - ◆ Lack all the resources to deal with it effectively

Categorizing Stressors

Cataclysmic events

- Strong stressors that occur suddenly to people at once




Personal stressors

- Major life events, that have immediate impact but that generally fade with time



Categorizing Stressors

- ◆ **Posttraumatic stress disorder (PTSD):** Victims of major catastrophes or strong personal stressors feel long-lasting effects
 - ◆ Include re-experiencing the event in vivid flashbacks or dreams
 - ◆ Faced by victims of personal stress
- ◆ **Background stressors**
 - ◆ Everyday annoyances that cause minor effects
 - ◆ Have long-term ill effects if they continue or are compounded by other stressful events



The High Cost of Stress

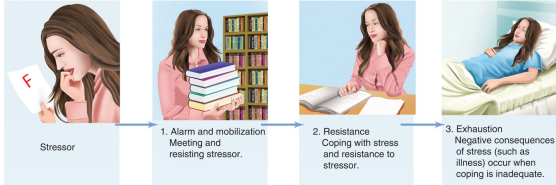
- ◆ Both biological and psychological consequences
- ◆ **Psychophysiological disorders:** Medical problems influenced by an interaction of psychological, emotional, and physical difficulties
- ◆ Stress affects us in multiple ways
 - ◆ Increases the risk of illness
 - ◆ Slows down the recovery from diseases
 - ◆ Reduces ability to cope with stress in future

The General Adaptation Syndrome Model: The Course of Stress


- ◆ Theory developed by Selye
- ◆ Physiological response to stress follows the same set pattern regardless of the cause of stress
- ◆ Consists of three phases
 - ◆ Alarm and mobilization
 - ◆ Resistance
 - ◆ Exhaustion

Stages of the General Adaptation Syndrome (GAS) Model

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Stressor → 1. Alarm and mobilization: Meeting and resisting stressor. → 2. Resistance: Coping with stress and resistance to stressor. → 3. Exhaustion: Negative consequences of stress (such as illness) occur when coping is inadequate.



Hans Selye, The Stress of Life, New York: McGraw-Hill Education, Copyright © 1978 McGraw-Hill Education. All rights reserved. Used with permission.

Psychoneuroimmunology(PNI) and Stress

- ◆ Focuses on the outcomes of stress
- ◆ Main consequences of stress:
 - ◆ Physiological results
 - ◆ Harmful behaviors
 - ◆ Indirect health-related behaviors

Coping with Stress

Emotion-focused coping

- Managing emotions in the face of stress, seeking to change the way one feels about or perceives a problem

Problem-focused coping

- Attempting to modify the stressful problem or source of stress

Avoidant coping

- Use more direct escape routes, such as drug or alcohol use
- Least effective

Learned Helplessness

- ◆ Occurs when people conclude that unpleasant or aversive stimuli cannot be controlled
 - ◆ Cease trying to remedy the avers they actually can exert some infl
- ◆ Victims conclude that there is no responses they make and the out
- ◆ Experience more physical sympt

Coping Styles: Hardiness and Resilience

- ◆ **Hardiness:** Personality trait characterized by a sense of commitment, the perception of problems of challenges, and a sense of control
 - ◆ Three components
 - ◆ Commitment
 - ◆ Challenge
 - ◆ Control
- ◆ **Resilience:** Ability to withstand, overcome, thrive after profound diversity


Psychological Aspects of Illness and Well-Being

- How do psychological factors affect health-related problems such as coronary heart disease and cancer?

The As, Bs, and Cs of the Heart

TYPE A Personality	TYPE B Personality

- Type A behavior pattern** - involving hostility, competitiveness, and time feeling driven
- Type B behavior pattern** - cooperative, noncompetitive, and nonaggressive manner
- Type D behavior pattern** - Insecurity, anxiety, and the negative outlook puts them at risk for repeated attacks



Psychological Aspects of Cancer

- Emotional responses of cancer patients to their disease affects its course
- Psychological therapies have the potential for improving quality of life and even extending the lives of cancer patients

Cleveland Clinic TAHOA | EDWARDS, MD | CENTER FOR INTEGRATIVE MEDICINE
Holistic Psychotherapy

What is holistic psychotherapy?
 Holistic psychotherapy uses traditional methods of psychotherapy along with complementary therapies and mind-body techniques to create a link between the mind, body and spirit, and to understand the deeper level of being a person.

At Cleveland Clinic, holistic psychotherapy is delivered by licensed clinicians who are trained in mind-body medicine, with certification in traditional Chinese acupuncture, and who have received training in social work.


What are the top conditions (diseases) treated in holistic psychotherapy at Cleveland Clinic?
 Depression, anxiety, chronic pain, insomnia, stress, and substance use disorders.

Keynote: A treatment that works brings to the patient the greatest sense of choice in health care. It is a choice to own one's life, to be in control of one's own destiny, and to be able to live a better life. The holistic approach is supported by solid scientific evidence, and it is the most effective way to achieve lasting results.

Keynote: Holistic psychotherapy is a patient-centered approach that focuses on the patient's unique needs and goals. It is a holistic approach that focuses on the patient's unique needs and goals. It is a holistic approach that focuses on the patient's unique needs and goals.

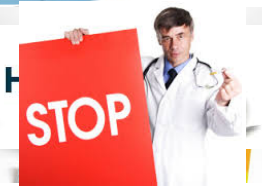
Smoking

- Why people smoke:
 - Genetics
 - Situational factors
 - Seen as "cool"
 - Media exposure
 - A "rite of passage"



Smoking

- ◆ **Quitting smoking**
 - ◆ Nicotine replacement drugs
 - ◆ Behavioral strategies
 - ◆ Changes in societal norms and attitudes toward the habit
 - ◆ Long-term effect of information about the negative consequences



Following Medical Advice

- ◆ **Noncompliance**
 - ◆ Result of misunderstanding medical directions
- ◆ **Creative nonadherence**
 - ◆ Alter a treatment prescribed by a physician by substituting their own medical judgment
- ◆ **Positively framed messages:**
 - ◆ Suggests that a change in behavior will lead to health related gain.
 - ◆ Best for preventative behavior
- ◆ **Negatively framed messages:**
 - ◆ Highlights what you can lose by not performing behavior.
 - ◆ Best for leading to detection of disease

Well-Being and Happiness

- ◆ **Subjective well-being:** People's sense of their happiness and satisfaction with their lives
- ◆ Characteristics of happy people:
 - ◆ Have high self-esteem - Positive illusions
 - ◆ Have a firm sense of control
 - ◆ Optimistic in nature
 - ◆ Men and women are generally made happy by the same sorts of activities – But not always
 - ◆ Like to be around other people

Well-Being and Happiness

- ◆ Money does
- ◆ Set points for happiness
 - ◆ Most people have a set level of happiness
 - ◆ 30% rate of return
- ◆ Despite the ups and downs of life by returning to the set level

