# 7. Motivation and Emotion

We will now study motivation and emotion. We will cover the different theories of motivation and emotion, their biological bases and their specific components.

#### The sections in this unit are:

- 7.1. Theories of emotion
- 7.2. Theories of motivation
- 7.3. Biological bases of Hunger, thirst, sex, pain
- 7.4. Social motivation

## 7.1 Theories of Emotion

#### Emotion

- a psychological state involving three distinct components:
  - i. subjective experience
  - ii. physiological response
  - iii. behavioral or expressive feature

#### Mood

- prolonged, less explicit, affective state
- not usually determined by a single event

### James-Lange theory

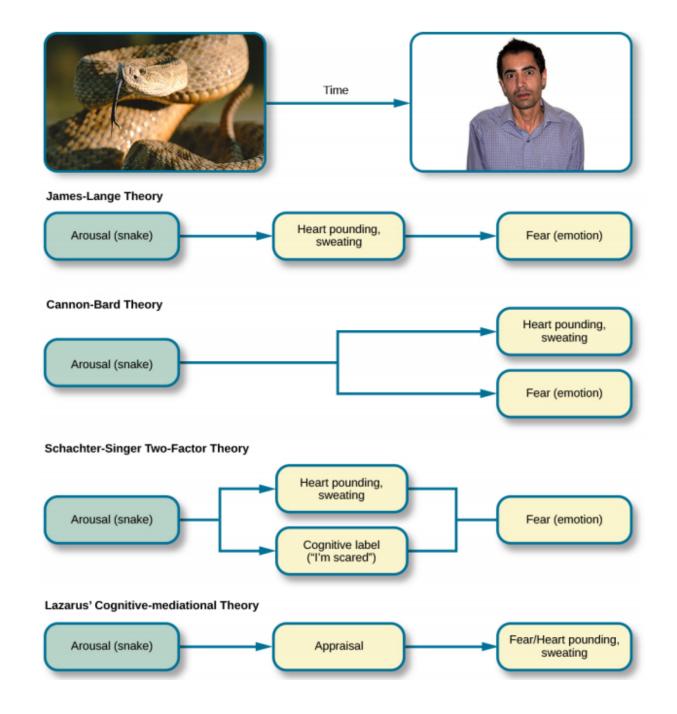
- stimulus causes arousal→ emotion
- facial feedback hypothesis

#### Cannon- Bard theory

- relevant stimulus generate arousal
- information sent to central nervous system and cortex

#### Two-factor theory

- quality of emotional experience depends on how arousal is labeled
- excitation transfer



## 7.2 Theories of Motivation

# What drives us? What makes us behave as we do?

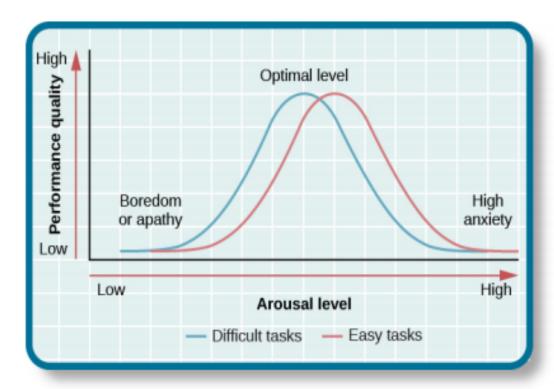
- Motivation
  - Describes the wants or needs that direct behavior towards a goal

### Drive theory

- deviations from homeostasis create physiological needs to regain balance
- e.g., no food  $\rightarrow \downarrow$  blood sugar  $\rightarrow$  hunger
- habit- likely to engage in previous behaviors that met need

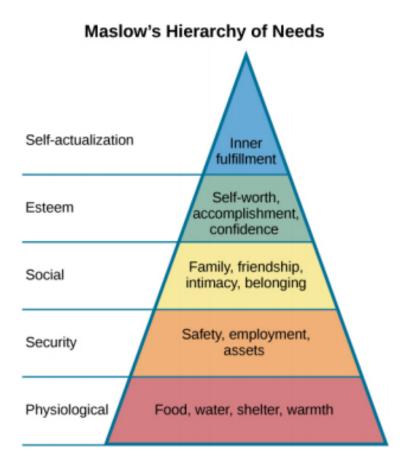
#### Yerkes-Dodson law

- optimal arousal levels depend on complexity and difficulty of task
- complex task→ low arousal
- simple task→ Nigh arousal



### Maslow's hierarchy of needs

- physiological needs→ basic needs→ self-actualization
- ongoing lifelong process



# 7.3 Biological Bases: Hunger, Thirst, Sex, Pain

## Hunger

- biological instinct for survival
- empty stomach→ hunger pains and chemicals that initiate hunger in brain
- glucose= blood sugar from food that provides energy for body
- insulin= helps reduce glucose levels thus impacting hunger

## Hunger

- hypothalamus
- set-point- weight your body works to maintain
- Eating Disorders
  - social and cultural pressures for ideal beauty
  - anorexia, bulimia, binge eating disorder

### Thirst

- Produced by depletion of fluid outside and within cells
- Peripheral and central nervous system
  - subfornical organ and lateral hypothalamic nucleus
- Angiotensin-produced by the kidneys

### Sexual behavior

- Sexual motivation
  - Limbic System
    - amygdala
    - nucleus accumbens
- Hormones produced in endocrine system
  - estrogen (women)
  - testosterone (both)

- Dr. Alfred Kinsey
  - Kinsey scale- used to categorize individual's sexual orientation
- Masters and Johnson
  - sexual response cycle- excitement, plateau, orgasm and resolution

Biology of Pain

- Nociception process
  - contact with stimulus

reception- nerve ending sense stimulus

transmission-relayed to central nervous system

 pain center receptionbrain further processes

## **Types of Pain**

Physical pain

physical characteristics, intensity and interpretation

acute vs chronic

- Social pain
  - pain of social disconnection

- Psychological pain
  - depression and other mental disorders

# 7.4 Social Motivation

 Human need to interact with others and be accepted by them

- extrinsic
  - receive something from others

- intrinsic
  - biological motives
  - sense of personal satisfaction
- Albert Bandura
  - self-efficacy motivates
    behavior