

## Chapter 2. The History of Motivation and Emotion

- Overview
- Brief history of motivation
- Brief history of emotion

## Brief History of Motivation

The ancient Greek philosophers, philosophers from 1600 on, and early psychologists all had opinions about motivation.

## Aristotle's Theory

- Causes of behavior:
  - Efficient causes trigger the behavior, e.g., food triggers eating.
  - Final cause is the purpose of behavior, e.g., eat to provide nourishment to body.

## Aristotle's Theory, continued

- Formal cause refers to a theory, e.g., humans innately prefer sweets as an aid to survival.
- Material cause refers to role of brain in behavior, e.g., brain's hypothalamus triggers hunger.

# Hedonism

Motivation is governed by hedonism.

## Ancient Sources

- **Hedonism**: pursue pleasure and avoid pain.
- For ancient Greek philosophers Socrates (470-399 B.C.), Democritus (460-370 B.C.), and Epicurus (341-271 B.C.), hedonism meant pleasure is to exceed pain when averaged over the long run.

## *Later Philosophers*

- Hobbes (1640) on incentive motivation:  
approach pleasing, avoid displeasing stimuli.
- Locke (1690) on choice: small immediate versus large delayed reward, nearness of reward increases our desire for it.

## *Later Philosophers, continued*

Bentham's (1789) **principle of utility**: things are beneficial if they increase happiness or decrease unhappiness.



## *Sigmund Freud (1920)*

- **Pleasure principle:** pursue pleasure, felt as sudden decrease in tension.
- **Reality principle:** circumstances determine when to attain pleasure, postpone for greater pleasure later.

## *Edward Lee Thorndike (1911)*

- **Law of effect:** satisfying consequences strengthen behavior, and
- Dissatisfying consequences weaken behavior.
- A reenactment of Thorndike's famous puzzle box experiment is at  
[www.youtube.com/watch?v=BDujDOLre-8](http://www.youtube.com/watch?v=BDujDOLre-8)

## *Law of Effect Today*

- Consequences refer to observables (reinforcers/punishers) rather than to subjective states.
- Reinforcers are consequences that increase behavior.
- Punishers are consequences that decrease behavior.

## *Current Trends*

- Impulsiveness: tendency to choose immediate reward, influenced more by nearness of reward.
- Self control: tendency to choose delayed rewards, influenced less by nearness of reward.
- Benefits of self-control: higher grades, less alcohol use, better adjustment, better interpersonal relations.

## *Current trends, continued*

- **Positive psychology:** science that investigates what promotes maximal functioning of people, groups, and institutions.
- Study the conditions that produce happiness.

## Evolution and Motivation

Our evolutionary past helps determine what currently motivates people today.

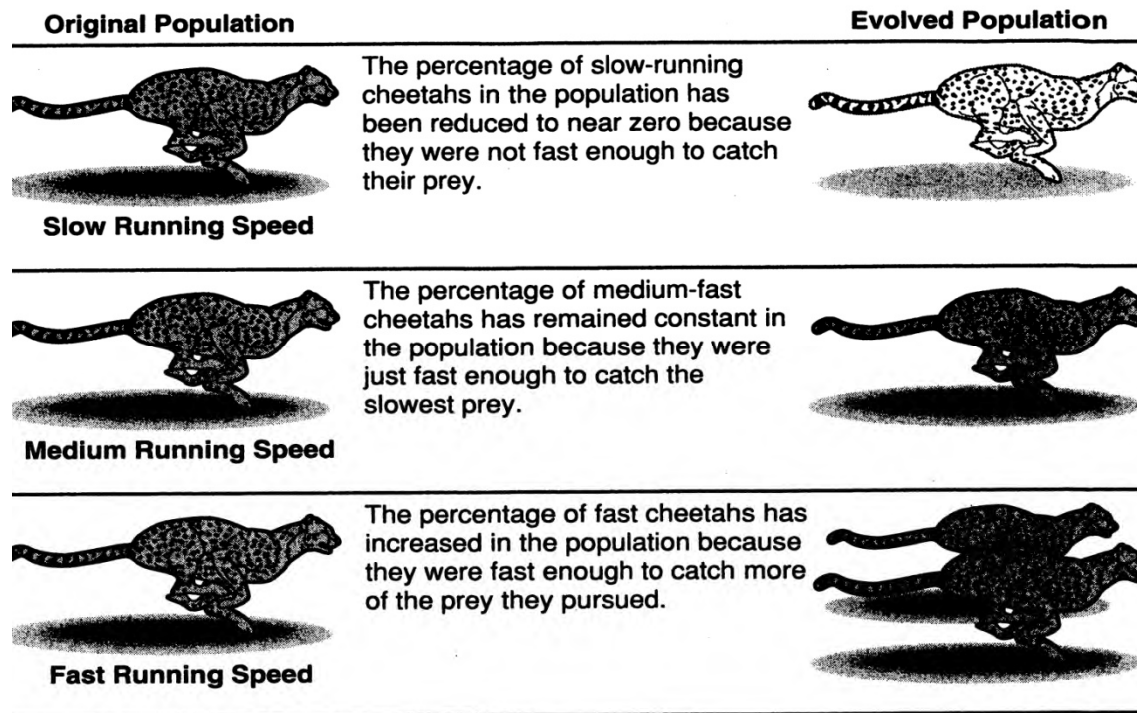
## *Charles Darwin (1859)*

- **Theory of evolution:** changes in the frequency of physical and psychological traits are explained by principles of variation and selection.
- Video illustrating evolution with length and shape of humming bird's bill is at [http://www.pbs.org/wgbh/evolution/library/11/2/quicktime/e\\_s\\_4.html](http://www.pbs.org/wgbh/evolution/library/11/2/quicktime/e_s_4.html).

## *Charles Darwin (1859), continued*

- Variation: amount or value of a particular trait varies in frequency in the population.
- Selection: environment selects trait that aids survival; trait increases in frequency.





**Figure 2.1. Variation and Selection in Evolution.**

The percentage of slow-, medium-, and fast-running cheetahs changes over succeeding generations. Slow-running cheetahs decrease in the population because they are not fast enough to catch even the slowest prey. Medium-fast cheetahs hold their own, since they can catch the slowest prey. Fast-running cheetahs increase in the population because they can catch a greater number of prey they pursue.

## *Charles Darwin, continued*

- Variation leads to population thinking.
- **Population thinking**: view emphasizing uniqueness of each individual and individual differences.
- Example: People differ in strength of their psychological needs and their personality traits.

## *Herbert Spencer (1899)*

- Pleasure selects for behaviors that aid survival.
- Pain eliminates behaviors that are harmful to survival.
- Pleasure motivates eating, drinking, and sex.
- Remove the pleasure of those behaviors, and the result is an uninhabited planet.

## *Instincts*

- **Instinct:** Inherited impulses that result in specific patterns of behavior.
- Some motivated behaviors appear to be instinctive.
- Examples: sucking, crying, smiling, emotional feelings.

## *Current Trends*

- Instincts viewed as species-typical behavior.
- Behaviors exhibited by all members of the species.
- Behaviors that are innate.
- Behaviors that are released or activated by a stimulus.

## *Current Trends, continued*

- Love as an example of an instinct (or emotion) that evolved to solve the **commitment problem**.
- Commitment means one individual remains loyal and faithful to another for the survival benefits of each.
- Love evolved to ensure commitment.

## Unconscious Motivation

- Inaccessibility to one's motives
- Being unaware of sources of one's motivation
- A main originator of unconscious motivation is Sigmund Freud.
- A PBS 57-minute video about Sigmund Freud titled *Freud Under Analysis* is available at <http://www.youtube.com/watch?v=4RbusaCNYFI>.

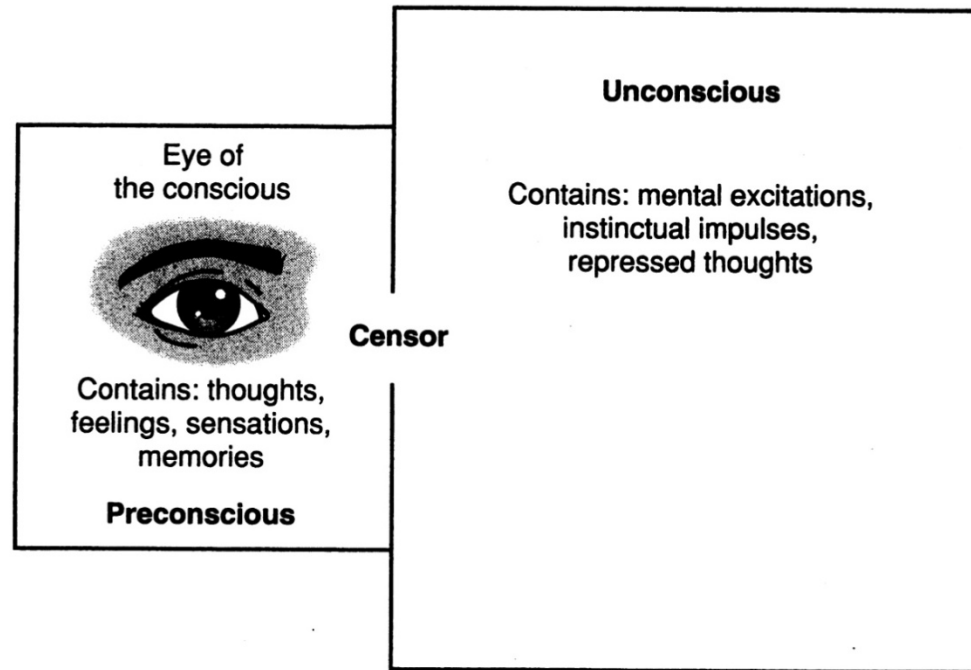
## *Freud's Conscious-Unconscious Distinction*

- Freud uses an analogy of two rooms to explain the unconscious, preconscious, and conscious.
- **Unconscious:** area of mind that is not open to inspection and is analogous to a large room that contains repressed impulses, instincts, desires.



## *Freud's Conscious-Unconscious Distinction, continued*

- **Preconscious:** area of mind that is accessible to inspection and is analogous to a small room containing thoughts, feelings, sensations.
- **Consciousness:** area of mind that is currently being inspected and is analogous to having attracted the eye of the conscious in the small room.



**Figure 2.2. Freud's Concept of Motivation.**

Freud used two adjoining rooms separated by a doorway as a metaphor for his unconscious and preconscious motivation. Unconscious thoughts and impulses reside in the large room and try to enter the preconscious by slipping by the censor, who is standing guard between the two rooms. Thoughts and impulses in the smaller room of the preconscious compete for the attention of the conscious.

## *Freud's Conscious-Unconscious Distinction, continued*

- **Repression:** Censor prevents instinctual impulses from entering small room, i.e., from reaching the pre-conscious.
- Function of repression is to protect person from instincts that could produce anxiety, embarrassment, and punishment.

## *Motivational Instincts and the Unconscious*

- According to Freud, instincts originate in the body and exert pressure.
- Aim of instinct is to be satisfied through interaction with an object.
- Main Freudian instincts: sex, death, ego preservation.

## *Satisfying Unconscious Impulses*

- Instincts can be satisfied:
  - Through joke work
  - Through dreams: manifest (actual) content and latent (meaning) content

## *Current Trends*

- Unconscious motivation as being unaware of processing and reacting to a stimulus.
- Person begins responding prior to being aware of intentions to do so.
- Demonstration of intending to response prior to awareness of intention is available at <http://www.youtube.com/watch?v=IQ4nwTTmcgs>.

## Internal Sources of Motivation

When motivation for behavior begins inside the organism or person as in the case of a drive or need.

## *Drive Concept*

- Mechanism: how we do something or means by which an act is performed.
- **Drive**: stimulus that induced behavior and keeps behavior going even if stimulus is now absent.



## *Psychological Needs*

- Needs are inherent characteristics that indicate a psychological deficit.
- Person is lacking some necessary ingredient available in the environment.

## *Psychological Needs, continued*

- **Primary needs:** Murray's (1938) physiological needs, e.g., need for food or iron.
- **Secondary or psychogenic:** Murray (1938) postulated 22 psychological needs, e.g., need for achievement or affiliation.

## *Psychological Needs, continued*

- Example of two of Murray's needs & *Psychological Insight Test* to measure the needs:
  - *Achievement*: To accomplish tasks, surpass self and others.  
“I am driven to ever greater efforts by an unslaked ambition.”
  - *Affiliation*: To approach others, win their affection, remain loyal.  
“I am in my element when I am with a group of people.”

## *Psychological Needs, continued*

- Two more of Murray's Needs & *Psychological Insight Test* to measure the needs:
  - *Autonomy*: To be independent and free, resist coercion.  
“I am unable to do my best work when in a subservient position.”
  - *Dominance*: To control your environment, to influence others.  
“I enjoy organizing or directing activities of a group, team or club.”

## *Current Trends*

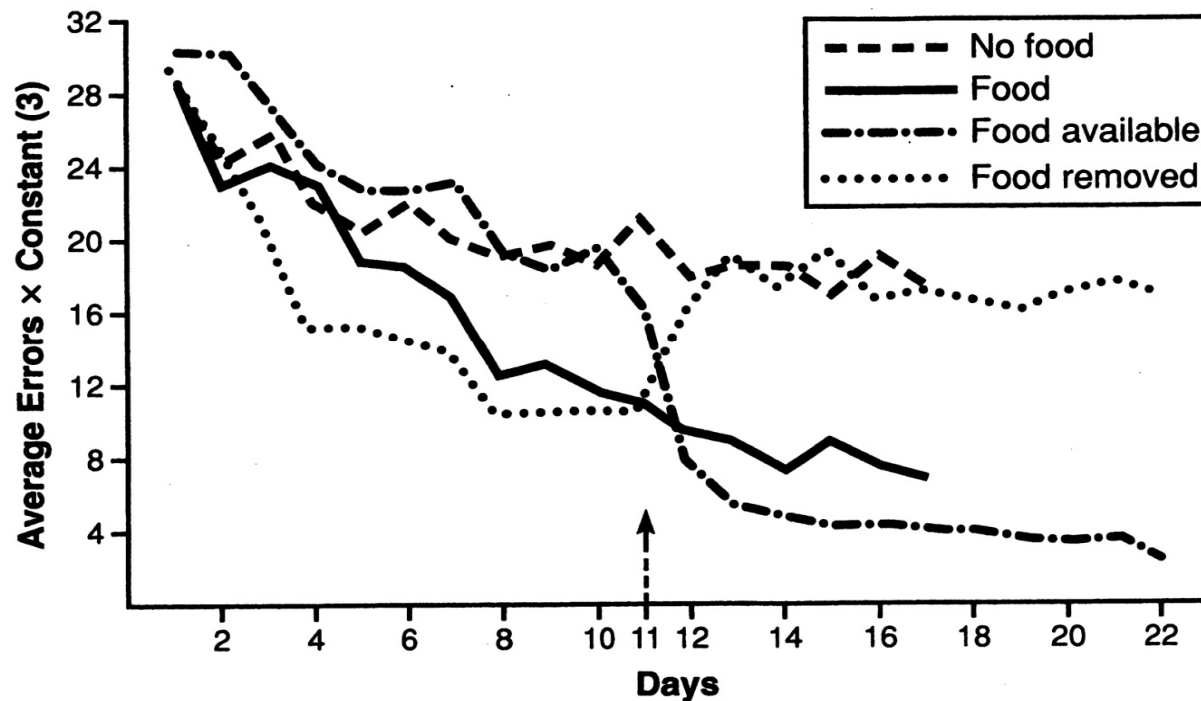
- Danger of creating too many psychological needs so that needs lose their explanatory power.
- A solution is to arrange needs in a hierarchy so that lower order needs are derived from higher needs.

## *Current Trends, continued*

- **Existential concern**: a basic psychological need shared by all people.
- Existential concerns: one's own death, isolation, self-identity or self-insight, freedom or free will, meaning of life.

## External Sources of Motivation

- Incentives: stimuli that attract or repel.
- Tolman & Honzik (1930) experiment of hungry rats learning a maze:
  - Provide food incentive and maze errors decrease.
  - Remove food incentive and maze errors increase.



**Figure 2.3. Incentive Change and Performance.**

When a food incentive is introduced on trial 11, there is a sudden decrease in the number of errors in traversing a maze and when food is removed errors increase. *Source: "Introduction and Removal of Reward and Maze Performance in Rats" by E. C. Tolman and C. H. Honzik, 1930, University of California Publications in Psychology, 4, figure 4. Copyright 1930 The Regents of the University of California.*

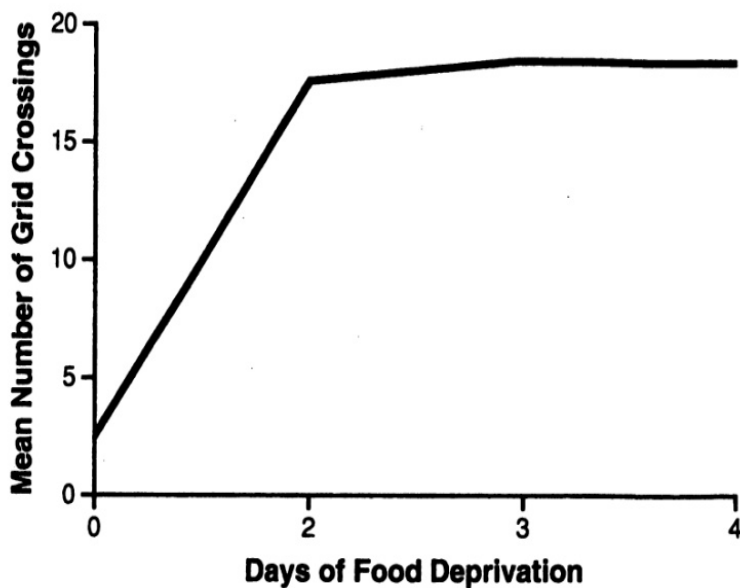


## External and Internal Sources Induce Behavior

- Motivation depends on both internal and external sources.
- Example: Hunger and food combine to motivate behavior.

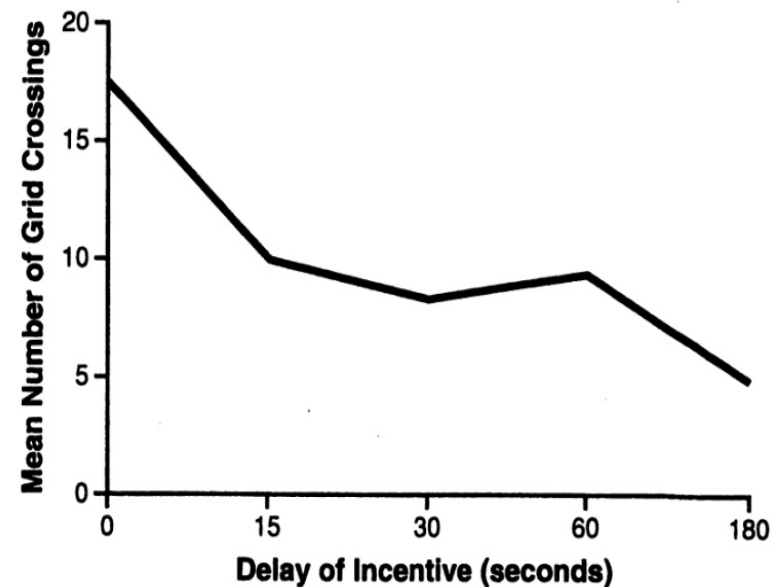
## *Warden's (1931) Incentive-Drive Link*

- **Incentive-drive:** Incentive (water) links with drive (thirst) to motivate behavior.
- Increased hunger drive increases electrified grid crossings for food incentive.
- Delayed food incentive decreases electrified grid crossings in hungry rats.



**FIGURE 2.4a Drive and Performance.** As the number of days of food deprivation increases, rats make more crossings of an electrified grid in order to obtain food.

Source: From "A Study of Hunger Behavior in the White Rat by Means of the Obstruction Method" in C. J. Warden, Ed., *Animal Motivation* (table 3), 1931, New York: Columbia University Press.



**FIGURE 2.4b Incentive Delay and Performance.** As the length of the delay for a food incentive increases, the number of electrified grid crossings made by hungry rats decreases.

Source: From "The Effect of Delayed Incentive on the Hunger Drive in the White Rat" in C. J. Warden, Ed., *Animal Motivation* (table 6), 1929/1931, New York: Columbia University Press.

## *Lewin's (1936, 1938) Field Theory*

- Theory that uses internal and external sources to develop idea of psychological force as motivation.
- **Psychological force**: Motivation depends on valence of objects in life space (personal environment), psychological tension, and psychological distance.

## *Lewin's (1936, 1938) Field Theory, continued*

$$\text{Psychological Force} = \frac{\text{Valence of goal properties; tension in person}}{\text{Psychological distance between person and goal}}$$

## *Current Trends*

- **Temporal motivation theory**: description of how incentive value decreases with incentive delay
- Delayed incentives have less value or are less motivating than near incentives, e.g., value of tomorrow's exam is greater than next week's exam.

## Brief History of Emotion

Historically, description of emotion shifted from outward physiological movement of the person to movement that occurs within the person.

## Emotion as Subjective Feeling

- Personal feelings of affect that arise in consciousness.
- Feelings of bodily symptoms.
- Feelings that flood consciousness.



## Basic Emotions

- Early Greeks (BC years) to Descartes (1649) to James (1884) considered basic emotions, e.g., love, hate, joy, sadness, hope, fear, desire.
- Cognitive interpretations of stimulus changes determine emotions.

## Emotion as Motive for Action and Thought

- Emotions serve as impulses for action and thought.
- **Action readiness**: the impulse for action of emotion-relevant behavior.
- Motor explosion: nonadaptive response during an emotion, e.g., jump for joy.

## Table 2.4. Stout's (1903) View of the Class of Ideas Revived by Emotions

- Joy “success and gratification”
- Grief “loss and defeat”
- Fear “danger”
- Anger “insult and injuries”
- Jealousy “encroachment of others on ... our own peculiar possessions”

## Accompaniments of Emotion

- Physiological arousal has long been viewed as an accompaniment of emotion, e.g., heart rate.
- Bacon and Descartes noted that emotions involved physiological accompaniments.

## *Physiological Arousal*

Arousal serves as either the readiness for action or as information for the qualitative feel of an emotion.

## Table 2.4. Ideas on the Physiological Accompaniments of Emotion of Bacon (1627) and Descartes (1649)

- Fear: Paleness, tremble, hair erection, startle, screech
- Grief: Sigh, sob, groan, tears, distorted face, grind teeth
- Joy: Vigor of eyes, sing, leap, dance, at times tears
- Anger: Paleness, blush, tremble, foam at mouth

## Table 2.4. Ideas on the Physiological Accompaniments of Emotion of Bacon (1627) and Descartes (1649), continued

- Lust: Flagrancy in eyes, priapism
- Love: Pulse is fuller and stronger, heat in breast
- Hate: Pulse feeble, quick; cold, heat alternate in breast
- Sadness: Pulse feeble, slow; constriction around heart

## *Facial Expression*

- Facial expressions have long been viewed as accompaniments of emotion.
- Expressions as indicator of emotional feelings.
- Expressions as signals used to satisfy one's social motives.



## *Current Trends*

- There is not a good correspondence between patterns of physiological arousal and associated subjective emotional feelings.
- Current research attempts to link brain maps of emotion with subjective feelings and associated actions.