Psychology 020
Chapter 10: Motivation & Emotion
November 27, 2007

ANNOUNCEMENTS:
DECEMBER EXAM
Tuesday December 4
7-9 p.m.

- Covers material in chapters 6, 7, 8, 9, and 10 as well as Lecture material.

*** Bring pencil, eraser & student card**

MOTIVATION

- a process that influences the direction, persistence, and vigor of self-directed behavior.

THEORIES OF MOTIVATION

1. DRIVE THEORY (and HOMOESTASIS)

- **HOMEOSTASIS** - the body strives to maintain an internal physical equilibrium.
- Disruptions in homeostasis produce "drives" (an internal state of tension) that motivate behaviors aimed at reducing this tension.

CURRENTLY: this theory is important for understanding motivation related to bodily function.

2. EXPECTANCY THEORY (and INCENTIVES)

- "pull" of external stimuli that have a high value to the individual.

1. "Intrinsic" vs. "Extrinsic" motivation
2. increasing the external reward for a behavior make the behavior less intrinsically rewarding (i.e. < rewarding for its own sake).

3. BEHAVIORAL THEORY (Operant Conditioning)

1. Maximize positive consequences
2. Minimize negative consequences

4. VARIOUS HUMAN DRIVES

BIOLOGICAL DRIVES

* Survival related

- Hunger
- Thirst
- Sexual drives

UNCONSCIOUS DRIVES

- Freudian theory

SELF-ACTUALIZING DRIVES

- Humanistic & Existential theories
- Need for achievement

SOCIAL DRIVES

- Need for affiliation

EMOTIONS AS A MOTIVATIONAL FORCE

BIOLOGICAL DRIVES & the REGULATION OF HUNGER & EATING

a) Brain regulation

Initial theory

a. Lateral hypothalamus ("hunger on") & ventromedial hypothalamus
b. ("Hunger off")
c. NOW, know Paraventricular nucleus is more important

b) **Hormonal regulation**

a. Insulin (high levels stimulate hunger)
b. Leptin (high levels inhibit hunger)

c) **Glucostatic theory** fluctuations in blood glucose levels are monitored in the brain by glucostats (specialized neurons)

d) Learned preferences & habits

- Exposure & observational learning
- Food paired with comfort (classical conditioning)
- When & what we eat is a learned behavior

e) Food-related cues

- Appearance, odor, effort required

f) Anxiety & appetite

- Severe anxiety & diminished appetite.
- Sympathetic NS activity suppresses eating.

- **How do biological and environmental factors interact?**
- **How hungry would you need to be to eat something you would otherwise find repulsive?**
- ***Survival is a strong instinct.***

FACTORS EFFECTING WEIGHT & APPETITE

- **Genetic Predisposition**
  - Body Mass Index and adoption study
- **The Concept of Set Point**

- Size not number of fat cells

- **Bodily Homeostasis**
  - Dietary restraint leads to disinhibition

EATING DISORDERS
Eating disorders are linked to Societal Definitions of Beauty

Body Dissatisfaction has increased in both women & men over the past 25 years

- Women want to be thinner than what men actually find attractive

- Men want to be more buff than women actually find attractive

** But discrepancy greater for women*

EATING DISORDERS & MISPERCEPTION

A) ANOREXIA NERVOSA

- People with Anorexia Nervosa see themselves as fat even when they are deathly thin
- Prevalence ~1%
  Of this 1%:
  - Prior to puberty: 50% are male
  - Post puberty: 1-5%
- Onset: 14 - 17
- Multiple Health Problems
- depletion of bone mass
- brain atrophy
- organ failure
- Death in 15% of cases

Anorexia Nervosa (Diagnostic Criterion)

I. Refusal to maintain body weight
II. Intense fear of being fat
III. Despite being underweight
IV. 15% under expected weight
V. Distortions in perception of body weight
   - Tied into self-esteem

- Amenorrhea

SUBTYPES

- 1. Restricting
- 2. Purging

B) BULIMIA NERVOSA

Prevalence: 1 - 4.5 %
* Of these, 5-10% male

Onset: late teens or early 20s

Subtypes

- Purging
- Non-purging (i.e. fasting or exercise)
-

Bulimia Nervosa (Diagnostic Criterion)

- Frequent, recurrent cycles of
  - Episodes of binge eating
  - Dangerous measures to prevent weight gain
  - *At least twice a week for 3 months*
- Self-evaluation unduly influenced by weight
- Sense of powerlessness

C) BINGE EATING DISORDER

- Frequent, recurrent cycles of episodes of binge eating
- Sense of lack of control of eating
- Marked distress about binge eating.
- On average, at least 2 days a week for 6 months.
- Greater number of post pubertal males impacted than for Anorexia

** No compensatory behaviors*

CAUSES OF EATING DISORDERS

i) BIOLOGICAL FACTORS

- *Genetic – higher concordance amongst identical twins*
- *Abnormal activity of serotonin & other chemicals that regulate eating*

ii) PSYCHOLOGICAL

Anorexia – perfectionistic, need for control
- report parents disapproving with high standards
- report more stressful events related to parents

Bulimia – depressed, anxious with low impulse control
- lack stable sense of personal identity
- bingeing triggered by stress;
followed by guilt & self contempt.

iii) SOCIAL/CULTURAL

- cultural standards of beauty as thin
- highest prevalence in Western industrialized countries.

BACK TO GENERAL THEORIES OF MOTIVATION …..

5) <u>PSYCHODYNAMIC THEORY</u> (Freud)

- *Unconscious drives & impulses motivate behavior*
- Attempts to keep these impulses out of consciousness
- 3 components of personality (Id, Ego, & Superego) struggling for control

1) ID

- instinctive impulses
- **EROS** - sexual
- **THANATOS** - aggressive
  ** Pleasure principle*

2) EGO

- mediates between id and superego
- **"Ego strength"**
  ** Reality principle*

3) SUPEREGO

- morals
- sense of right or wrong

6) <u>HUMANISTIC THEORY</u> (Abraham Maslow)

- viewed individuals as essentially good
- basic need to develop their capacities.

"What a man can be, he must be."

** Very different from Freud's ideas.*

* Hierarchy of needs that must be met in order

DEFICIENCY NEEDS - physiological survival AND
GROWTH NEEDS - to develop our potential.

7) SEXUAL MOTIVATION

Sexual Motivation and Behavior: Determining Desire

- Hormonal regulation
  - Estrogens
  - Androgens
    - Testosterone (sex drive in both genders)
- Pheromones
  - Synchronized menstrual cycles
- Aphrodisiacs
- Erotic materials
- Attraction to a Partner

Sexual Aggression –motivated by need to control rather than sexual gratification

Study: PREVALENCE OF UNWANTED SEXUAL ACTIVITY

Sexual Assault:

MYTHS & STEREOTYPES

- *Sex is a "right" within a relationship.*
- *"No" means he/she is playing hard to get.*
- *Males can't be sexually assaulted.*
- *Females are never the sexual aggressors.*

RESEARCH ON VIOLENT PORNOGRAPHY & SEXUAL VIOLENCE

- Freud's "Catharsis principle" – research mixed
- Social Learning theory – research indicated that watching
- violent pornography increased aggression towards women

MOTIVES FOR PREMARITAL SEX
(Canada Youth AIDS Study)

- Expressing love or affection - 27 % (M); 52 % (F).
- Physical pleasure - (M) > (F).
- Physical attraction 28 % (M); 9 % (F).
- Curiosity.
- To please partner.
- Pressure from peers.

* Gender differences less noticeable in married couples.

CHOSING SEXUAL PARTNERS:
The Mystery of Sexual Orientation

- **SEXUAL ORIENTATION** - A person's erotic & emotional orientation towards members of the same or opposite gender.

KINSEY – sexual orientation on a continuum

- Heterosexual – Bisexual – Homosexual

PREVALENCE OF HOMOSEXUALITY
Homosexuality:

- **Found in many animal species**
- **In all cultures**
- **Male > female**

KINSEY STATS (1953)

- **At least one homosexual experience to orgasm (in adulthood).**
  - MALES ~ 37 %
  - FEMALES ~ 13 %

  * Estimates criticized as too high

- **National Health & Social Life Survey (1992)**

	MALES	FEMALES
Exclusively Homosexual	2 %	1 %
1 or more homosexual experience	7 - 8 %	4 - 5 %
Attraction to opposite sex (without homosexual behavior)	4 %	2 %
Exclusively Heterosexual	92 %	95 %

THEORIES OF SEXUAL ORIENTATION

A) BIOLOGICAL THEORIES OF SEXUAL ORIENTATION

- GENETICS ~ *50 % concordance rate for identical twins, So, other factors also important*

- BRAIN FACTORS **(1953)**
  - differences in anterior portion of the hypothalamus.
  - Homosexual men similar to heterosexual women.

- PRENATAL FACTORS
  - Maternal stress
  - HY Antigen antibodies

- HORMONE LEVELS
  - Testosterone levels related to > sexual behavior (especially in males), so administered testosterone
  - Effect - increased homosexual behavior
- LEARNING THEORY **(Classical or operant Conditioning)**
  - Homosexuality is likely to develop if the individual has
    - » *Positive Homosexual Experiences, &/or*
    - » *Negative Heterosexual Experiences.*
      ** Little support for this theory*
- FREUD ON SEXUAL ORIENTATION
  - Infant's sexuality is undifferentiated (ID)
  - Heterosexuality - *OEDIPAL COMPLEX* - boy loves & desires his mother, fears that his father will castrate him, so learns to identify with his father to regain his father's approval.
  - Homosexuality - opposite occurs.
  - NEGATIVE OEDIPAL COMPLEX - child loves same sex parent & identifies with opposite sex parent.
- Interactionist Theory (BEM, 1995)
  - emphasize interaction between biological and environmental factors.

Biology - impacts the child's personality/temperament.
+ Environment - Temperament affects gender roles and gender-nonconforming behavior (i.e. tendency to behave more like opposite gender).

- View others who are different as "exotic" (because they view members of their own gender as different, they see them as exotic/erotic).

CONCLUSIONS: BASED ON CURRENT RESEARCH FINDINGS:

- Some genetic contribution. (but only 50 % concordance rates)
- Some environmental factors, but unsure how this contributes.
- Some biological mechanism.
- Evident early in development & difficult to change.

* **CURRENTLY NO DEFINITVE EXPLANATION.**

The Human Sexual Response

- Masters and Johnson – 1966

- VASOCONGESTION - an accumulation of blood in the blood vessels of a region of the body, especially the genitals; A swelling or erection results.

- MYOTONIA - Muscle contractions.
  - 4 universal Stages:

Masters and Johnson – 1966

<u>Stages in the Sexual Response cycl</u>e:

- Excitement - Vasocongestion
  - » > Pulse Rate & > Blood Pressure.
  - » Erection (M) & Vaginal lubrication (F)
- Plateau
  - » Continuation of vasocongestion & Myotonia
  - » Further increases in breathing, heart & pulse rate.
- Orgasm
  - » series of rhythmic contractions in pelvic organs.
  - » Ejaculation (M) *(F) somewhat controversial*
- Resolution
  - » return of pulse rate, breathing, and blood pressure to unaroused levels.

Gender Differences in Sexual Response?

- Similar physiological response
    - male and female genitals develop from the same embryonic tissue.
- Similar subjective experience
    - Research study - written description of orgasm
        - » Experts couldn't differentiate between male & female.
- Multiple Orgasm
    - Recent research findings - multiple orgasm in some men

EMOTION

"Reactions consisting of physiological changes, feelings, and expressive behaviours".

Elements of emotional experience

- Cognitive component
  Subjective conscious experience
- Physiological component
    - Bodily (autonomic) arousal
- Behavioural component
    - Characteristic overt expression

UNDERSTANDING EMOTIONS

- Emotions:
    - closely linked to thoughts
    - reciprocal relationship with brain chemistry
    - Emotions motivate some behavior (e.g. jealousy)
    - Emotions may also prevent behavior (e.g. guilt)

Emotion and behaviour: Case study

- "Sam" killed son while delusional
- Felt absolutely nothing (no love, no empathy, no remorse)
- Emotions contribute to a sense of conscience
- Positive emotions can inhibit negative or violent behaviours

Emotional intelligence involves:

- Ability to understand and identify one's own emotions and those of others.
- Ability to regulate own emotions.
- Ability to motivate oneself.

** High emotional intelligence associated with success in interpersonal relationships.*

Emotion and autonomic arousal:

- Prepares us for fight or flight

- Physiological processes can be interpreted in different ways

Two independent neural pathways
1. Sensory to Thalamus to Amygdala
   Unconscious (Physiological & Behavioural) and reflexive
2. Sensory to Thalamus to Cerebral cortex
   Conscious (interpretation component)

Emotions lateralized: Left Hemisphere (positive emotions) Right Hemisphere (negative emotions)

Theories of Emotion

1. James-Lange Somatic Theory
   Feel afraid because pulse is racing
   Physiological arousal then interpreted cognitively
2. Cannon-Bard Theory
   a. Thalamus sends signals simultaneously to the cortex & the autonomic nervous system
   b. Neither causes the other
   c. Spinal cord injuries (still experience emotion without bodily feedback)
3. Evolutionary theories
   a. Innate reactions with little cognitive interpretation
      i. Evolved because they facilitated survival
      ii. Universal emotions are the same across different cultures (7 basic emotions). They are present at birth even in infants born blind.
4. Cognitive-affective theories of emotion
   a. Argue strong connection between thoughts & feelings
   b. Lazarus' cognitive-affective theory
      i. All emotional responses requires some appraisal
      ii. Conscious or unconscious
      iii. Same appraisal → same emotion
5. Schachter's Two-Factor Theory
   a. Look at external cues to decide what to feel
   b. Level of arousal determines level of emotion
   c. Situation also informs us and determines what emotion we are experiencing

Functions of Emotion

1. Communication (facilitates effective communication that transcends cultural boundaries)
2. Survival value:
   a. Prepares for fight or flight in situations of threat
   b. Fear (flight from potentially dangerous situation)
   c. Anger (fight or self-defence)
   d. Sadness (elicits help from others)

3. Call to Action
    a. Felt emotions lead us to action

Happiness

Commonsense notions about happiness are incorrect

- Income, age, parenthood, intelligence, attractiveness **largely uncorrelated** with happiness
- Physical health, good social relationships, religious faith, & culture are **modestly correlated**
- Love, marriage, work satisfaction, personality are **strongly correlated**

Happiness is subjective (not objective) – Money can't buy happiness!