LEARNING

Classical conditioning

- Associative learning
  - allows prediction (associate stimuli)
  - respondent behavior
  - Pavlov’s dogs (1904 Nobel prize)
    * US (food) leads to:
      - UR (salivation to food)
    * CS (bell) becomes associated with US, leads to:
    * CR (salivation to bell)

Elements of classical conditioning:
- Acquisition
- Extinction
- Spontaneous recovery
- Generalization
- Discrimination

Implications:
- Rescorla’s research on predictability
- Garcia’s research of biological predispositions
  * easier to condition food aversions to taste rather than sight or sound
  * easiest to condition behaviors that promote survival

Applications:
- Aversive conditioning—pairing a negative stimulus with a desired stimulus can help kick bad habits
- Drug addicts sometimes have cravings related to environment
- Classical conditioning of immune response (Ader & Cohen study)
- Extinction can help cure phobias

Operant conditioning

- Associative learning
  - consequences of behavior
  - operant behavior
- Thorndike’s Law of Effect
- Skinner
  - Operant chamber (Skinner Box)
  - Shaping
    - Success vs. approximations
  - Discrimination
- Reinforcement
  - Positive reinforcement—pleasurable stimulus after a response (strengthens the response)
  - Negative reinforcement—reduces or removes a negative stimulus (still strengthens the response)
  - Primary reinforcers (water, food, etc.) vs. secondary reinforcers (money, etc.)
  - Schedules of reinforcement
    - Continuous (rapid learning)
    - Partial (intermittent)
      - Ratio (certain # of behaviors)
        * Fixed (5 visits to restaurant = free meal)
        * Variable (slot machine)
      - Interval (certain period of time)
        * Fixed (ex. each day @ 3 p.m.)
        * Variable (ex. shooting stars)
- Punishment
  - Positive punishment (add bad thing)
  - Negative punishment (take away good)
  * Both create avoidance behaviors (ex. lie—becomes neg. reinforced)

Latest contributions

- Latent learning (Tolman)
  - cognitive maps (demonstrate learning after award is given)
- Intrinsic motivation (desire to do something for its own sake)
  - When rewards are given for activity that is intrinsically rewarding, enjoyment declines (overjustification effect)
- Extrinsic motivation (desire to do something for reward)
  - Should be recognition for a job well done
- Biological predispositions
  - Easier to condition behaviors that match natural behavior
- Legacy of Skinnerian thinking
  - Criticism of deterministic philosophy, dehumanization, loss of personal freedom
- Observational learning (modeling)
  - Mirror neurons (biological basis)
  - promote empathy
- Bandura’s Bobo doll study
  - Child watches adult, mimics
  - Increase of violence, aggression
- Media influence
  - Violent crimes—87% on TV, 13% real life
  - Violent action is correlated to viewing violence (media, video games) - leads to desensitization
**DISORDERS (CONTINUED)**

**Schizophrenia (#5)**

- Considered the “cancer” of disorders
- 1% of population worldwide (suggests biological basis)
- Involves a break with reality (psychosis)
- **NOT multiple personality**

**Explanations of schizophrenia**

- Brain abnormalities:
  - Dopamine receptor activity
  - D4 receptors 6x normal
  - Glutamate—may relate to negative symptoms
  - Enlarged ventricles
  - Shrunken thalamus

- Environmental factors:
  - Low birth weight, famine, oxygen deprivation?
  - Virus during pregnancy? Flu link during 2nd trimester

- Genetic factors:
  - Much higher chance of shared schizophrenia with identical vs. fraternal twins

- Psychological factors/warning signs:
  - Birth complications
  - Mother with schizophrenia
  - Separation from parents
  - Disruptive or withdrawn behavior
  - Poor muscle coordination
  - Poor attention span
  - Poor peer relationships/solo play
  - Emotional unpredictability

- Typical onset—teens or early 20s

**Personality disorders (#16)**

- Cluster A (eccentric)
  - Paranoid personality disorder
  - Schizoid personality disorder—odd, withdrawn behavior
  - Schizotypal personality disorder—with some schizophrenic-like symptoms

- Cluster B (dramatic)
  - Antisocial personality disorder—lack of remorse, empathy (mirror neurons); typical onset about 8 yrs.
  - Borderline personality disorder—on the borderline of psychosis
  - Histrionic personality disorder—dramatic personality
  - Narcissistic personality disorder—extreme self-absorption

- Cluster C (anxious)
  - Avoidant personality disorder—stays away from others
  - Dependent personality disorder
  - Obsessive-compulsive personality disorder

**Somatoform disorders (#8)**

- Somatization disorder—body problem caused by psychological problem (ex. ulcers)
- Conversion disorder—psychological problem converted to non-biological physical problem (ex. paralysis in “Heidi”)
- Hypochondriasis
SOCIAL PSYCHOLOGY

Group behavior

Social facilitation vs. social inhibition
* related to Yerkes-Dodson Law

Social loafing

Deindividuation
* loss of identity, others don’t know who you are

Group polarization
* movement to more extreme positions

Groupthink (Janus)
* influenced by desire for harmony

Minority influence
* self-confidence, determination key

Prejudice (attitude) — leads to discrimination (behavior)
* Social roots: social inequality, blame-the-victim, in-group vs. out-group leading to in-group bias
* Emotional roots: Fear, anger (leads to scapegoating)
* Cognitive roots: Categorization, availability heuristic, just-world phenomenon
* Jane Elliot study—children and stereotyping - self-fulfilling prophecies

Attraction and altruism

Passionate love (two-factor theory)
vs. companionate love (key is equity, self-disclosure)
* Physical attractiveness key
* Similarity
* Proximity (mere exposure effect)

Altruism
Bystander affect
* diffusion of responsibility
* pluralistic ignorance
* Explained by social exchange theory
* Reciprocity norm
* Social responsibility norm

Peacemaking, GRIT
*Superordinate goals

Aggression and conflict

Biology: genetics, amygdala, decreased frontal lobe activity, testosterone levels

Psychology
* Frustration-aggression principle
* Modeling (observational learning)
* Social scripts (mental tapes on how to act)
* Video games?
* Catharsis hypothesis (builds more anger)

Conflict
* Social traps
  - pursue self-interest, everyone loses
* Enemy perceptions
  - mirror-image perceptions

Attribution theory

Internal vs. external attributions
* Fundamental attribution error
* Actor-observer bias
* Self-serving bias

Attitude change

Cognitive/affective components of attitudes (attitude vs. opinion)
Action affecting attitudes
* Foot-in-the-door
* Door-in-the-face

Persuasion
* Central route to persuasion
* Peripheral route to persuasion

Role playing (Zimbardo prison study)
Cognitive dissonance (Festinger)

Group influence

Conformity (Asch study)
* chameleon effect
* mood linkage (mimicry)

Normative social influence vs. Informational social influence

Obedience (Milgram’s study)