

Final exam review

January 2008

100 questions

No essay

Ch. 3 terms

- Nature, nurture and human diversity terms

Genes: Our Codes for Life

Chromosomes containing **DNA** (*deoxyribonucleic acid*) are situated in the nucleus of a cell.

Nucleus
(the inner area of a cell that houses chromosomes and genes)

Chromosome
(threadlike structure made largely of DNA molecules)



Cell
(the basic structural unit of a living thing)

Genes: Our Codes for Life

Segments within DNA consist of **genes** that make proteins to determine our development.

Chromosome
(threadlike structure made largely of DNA molecules)



DNA
(a spiraling, complex molecule containing genes)



Gene
(segment of DNA containing the code for a particular protein; determines our individual biological development)

Evolutionary Psychology

- Their most important ideas
 - 1. the study of the evolution of behavior using the principles of natural selection
 - 2. All organisms are really “gene producing machines”
 - 3. Our genes predispose us to act in ways that enhance our survival (genetically predisposed). Those behaviors have been selected for...
 - 4. We have reproductive success, if we are able to pass on our genes. So, what behaviors lead to that success?

Culture and the Self

VALUE CONTRASTS BETWEEN INDIVIDUALISM AND COLLECTIVISM

Concept	Individualism	Collectivism
Self	Independent (identity from individual traits)	Interdependent (identity from belonging)
Life task	Discover and express one's uniqueness	Maintain connections, fit in, perform role
What matters	Me — personal achievement and fulfillment; rights and liberties; self-esteem	Us — group goals and solidarity; social responsibilities and relationships; family duty
Coping method	Change reality	Accommodate to reality
Morality	Defined by individuals (self-based)	Defined by social networks (duty-based)
Relationships	Many, often temporary or casual; confrontation acceptable	Few, close and enduring; harmony valued
Attributing behavior	Behavior reflects one's personality and attitudes	Behavior reflects social norms and roles

Sources: Adapted from Thomas Schoeneman (1994) and Harry Triandis (1994).

Gender Roles

Our culture shapes our **gender roles** — expectations of how men and women are supposed to behave.

Gender Identity — means how a person views himself or herself in terms of gender.

Variation Across Culture

Cultures differ. Each culture develops **norms** – rules for accepted and expected behavior. Men holding hands in Saudi Arabia is the norm (closer **personal space**), but not in American culture.



Jason Reed/ Reuters/Corbis

Ch. 15

- Personality theory terms

Id, Ego and Superego: Summary

The **Id** unconsciously strives to satisfy basic sexual and aggressive drives, operating on the pleasure principle, demanding immediate gratification.

The **ego** functions as the “executive” and mediates the demands of the id and superego.

The **superego** provides standards for judgment (the conscience) and for future aspirations.


The Neo-Freudians

Jung believed in the **collective unconscious**, which contained a common reservoir of images derived from our species' past. This is why many cultures share certain myths and images such as the mother being a symbol of nurturance.



Carl Jung (1875-1961)

Humanistic Perspective: Carl Rogers' self concept



⌘ Carl Rogers (1902-1987)

⌘ Emphasized the self concept as the central feature of personality.

☒ focused on growth and fulfillment of individuals

☒ **requires three conditions:**

- **genuineness**
- **acceptance - *unconditional positive regard***
- **empathy**

⌘ **Unconditional Positive Regard**

☒ an attitude of total acceptance toward another person

Neo-Freudians

- Alfred Adler
 - *importance of childhood social tension*
- Karen Horney
 - sought to balance Freud's *masculine biases*
- Carl Jung
 - emphasized the *collective unconscious*
 - concept of a shared, inherited reservoir of memory traces from our species' history
 - All three: Freud had too much emphasis on sexual and aggressive instincts

Freud and Dream Analysis

Another method to analyze the unconscious mind is through interpreting manifest and latent contents of dreams.

For Freud, dreams were the *royal road to consciousness*



The Nightmare, Henry Fuseli (1791)

The Big Five

THE "BIG FIVE" PERSONALITY FACTORS

(Memory tip: Picturing a CANOE will help you recall these.)

Trait Dimension	Endpoints of the Dimension
Conscientiousness	Organized ↔ Disorganized
	Careful ↔ Careless
	Disciplined ↔ Impulsive
Agreeableness	Soft-hearted ↔ Ruthless
	Trusting ↔ Suspicious
	Helpful ↔ Uncooperative
Neuroticism (emotional stability vs. instability)	Calm ↔ Anxious
	Secure ↔ Insecure
	Self-satisfied ↔ Self-pitying
Openness	Imaginative ↔ Practical
	Preference for variety ↔ Preference for routine
	Independent ↔ Conforming
Extraversion	Sociable ↔ Retiring
	Fun-loving ↔ Sober
	Affectionate ↔ Reserved

Source: Adapted from McCrae & Costa (1986, p. 1002).

Self-Serving Bias

We accept responsibility for good deeds and successes more than for bad deeds and failures.

Defensive self-esteem is fragile and egotistic whereas **secure self-esteem** is less fragile and less dependent on external evaluation.

Humanistic Perspective

Humanists argued for the study of normal people struggling to achieve when developing a personality theory.

They emphasized the growth of “healthy” individuals.



Carl Rogers
(1902-1987)



Abraham Maslow
(1908-1970)

Seligman's Positive Psychology

Positive psychology, such attempts to foster human fulfillment.

The components are optimism, flow, well being, satisfaction and hope.



Martin Seligman

Walter Mischel challenges personality trait theory

- **behaviors are not consistent across time and across situations**
- **the inner psyche of the individual and/or the existence of traits do not predict future behaviors very well.**



Social-Cognitive Perspective, 623

Bandura believes that personality is the result of an interaction that takes place between a person's internal factors, their behavior and their social context or environment.



Albert Bandura

Learned helplessness

Martin Seligman:
the hopelessness
and passive
resignation an
animal or human
learns when
unable to avoid
repeated aversive
events



Ch. 16 and Ch. 17

- Psychopathology and Psychotherapy terms

Generalized Anxiety Disorder

Symptoms

1. Persistent and uncontrollable tenseness and apprehension.
2. Autonomic arousal.
3. Unable to identify or avoid the cause of their feelings.

Obsessive-Compulsive Disorder

Persistence of unwanted thoughts (obsessions) and urge to engage in senseless rituals (compulsions) that cause distress.

COMMON OBSESSIONS AND COMPULSIONS AMONG CHILDREN AND ADOLESCENTS WITH OBSESSIVE-COMPULSIVE DISORDER

Thought or Behavior	Percentage Reporting Symptom
<i>Obsessions (repetitive thoughts)</i>	
Concern with dirt, germs, or toxins	40
Something terrible happening (fire, death, illness)	24
Symmetry, order, or exactness	17
<i>Compulsions (repetitive behaviors)</i>	
Excessive hand washing, bathing, tooth brushing, or grooming	85
Repeating rituals (in/out of a door, up/down from a chair)	51
Checking doors, locks, appliances, car brake, homework	46

Source: Adapted from Rapoport, 1989.

Criticisms of Dissociative Identity Disorder

Critics argue that diagnosis of DID has increased in the late 20th century. Also DID has not been found in other countries.

Critics Arguments

1. Role-playing by people open to therapist's suggestion.
2. Learned response that reinforces reductions in anxiety.

Bipolar Disorder

Formerly called manic-depressive disorder, alteration between depression and mania signals bipolar disorder.

Depressive Symptoms

Gloomy
Withdrawn
Inability to make decisions
Tired
Slowness of thought

Manic Symptoms

Elation
Euphoria
Desire for action
Hyperactive
Multiple ideas

Symptoms of Schizophrenia

Literal translation “split mind”. A group of severe disorders characterized by:

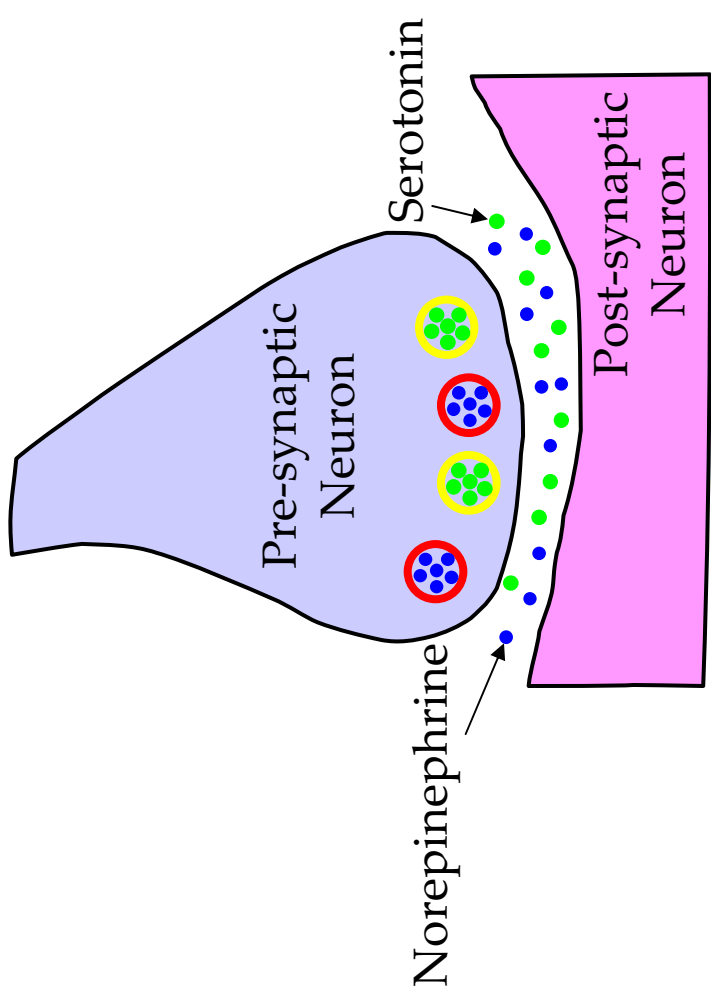
1. Disorganized and delusional thinking.
2. Disturbed perceptions.
3. Inappropriate emotions and actions.

Antisocial Personality Disorder

Disorder in which the person (usually men) exhibits a lack of conscience for wrongdoing, even toward friends and family members. Formerly called *sociopath* or *psychopath*.

Neurotransmitters & Depression

Reduction of
norepinephrine and
serotonin has been
implicated in
depression.



Drugs that alleviate
mania reduce
norepinephrine.

Understanding Schizophrenia

Schizophrenia is a disease of the brain exhibited in the symptoms of the mind.

Brain Abnormalities

Dopamine Overactivity: Researchers have found that schizophrenic patients express higher levels of dopamine D4 receptors in the brain.

Psychoanalysis: Methods

Dissatisfied with hypnosis, Freud developed the method of **free association** to unravel the unconscious mind and its conflicts.

The patient lies on a couch and speaks about whatever comes to his or her mind.



<http://www.english.upenn.edu>

Humanistic Therapy

The therapist engages in **active listening** and echoes, restates, and clarifies the patient's thinking, acknowledging expressed feelings.



Michael Rougier/ *Life Magazine* © Time Warner, Inc.

Light Exposure Therapy

Seasonal Affective Disorder (SAD), a form of depression, has been effectively treated by **light exposure therapy**. This form of therapy has been scientifically validated.



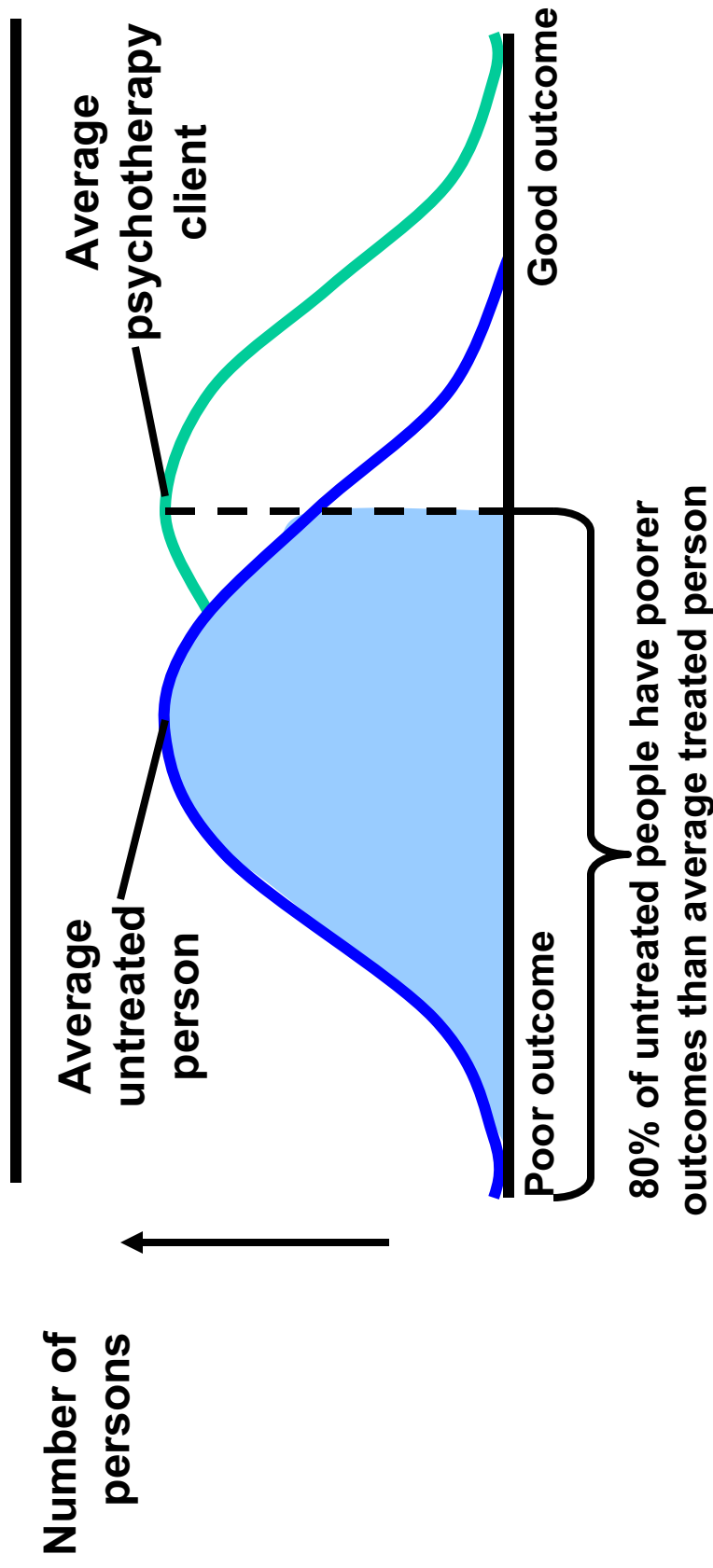
Courtesy of Christine Brune

Cognitive Therapy

- Cognitive Therapy
 - teaches people new, more adaptive ways of thinking and acting
 - based on the assumption that thoughts intervene between events and our emotional reactions

Does Therapy Work?

- Meta-analysis
 - procedure for statistically combining the results of many different research studies

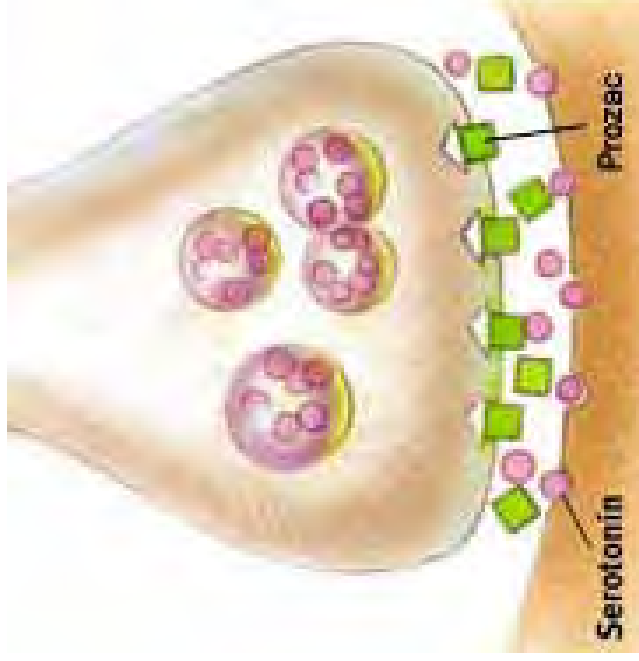


Double-Blind Procedures

To test the effectiveness of a drug, patients are tested with the drug and a placebo. Two groups of patients and medical health professionals are unaware of who is taking the drug and who is taking the placebo.

Antidepressant Drugs

Antidepressant drugs like Prozac, Zoloft, and Paxil are Selective Serotonin Reuptake Inhibitors (SSRIs) that improve the mood by elevating levels of serotonin by inhibiting reuptake.



Post-Traumatic Stress Disorder

Four or more weeks of the following symptoms constitute post-traumatic stress disorder (PTSD).

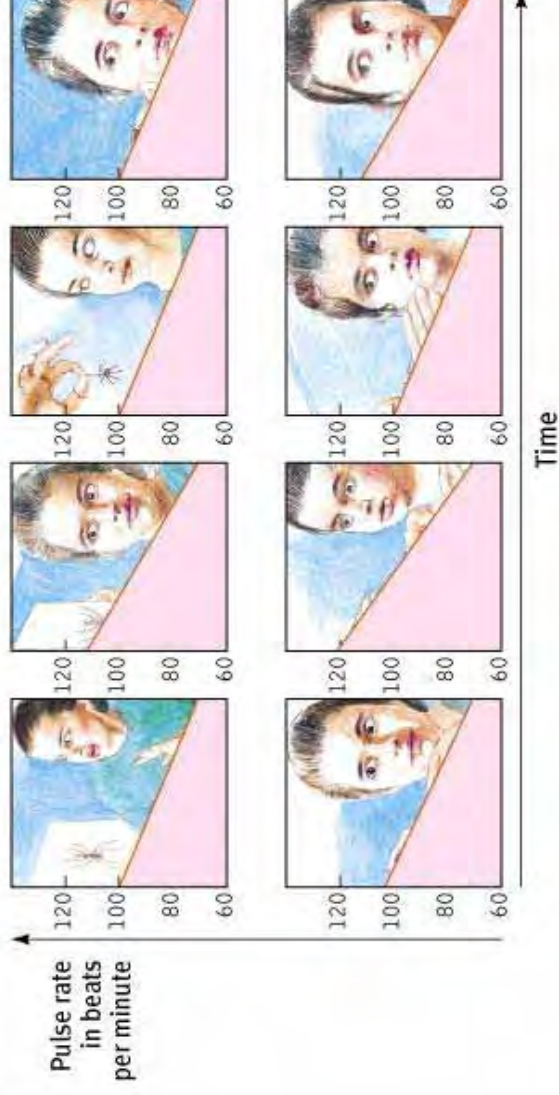
1. Haunting memories.
2. Nightmares.
3. Social withdrawal.
4. Jumpy anxiety.
5. Sleep problems.



Systematic desensitization

A step by step procedure for becoming relaxed in a situation that would normally cause you extreme discomfort.

At each step in the process the person must learn to associate calm feelings with the stimulus



Ch. 18, Social Psychology terms

Peacemaking and Sherif study, 767

Superordinate Goals

Sherif demonstrated this in a 1966 study when he required Boy Scouts to work together to solve a problem with the camp water supply. Where formerly the boys had been feuding, they got along and solved the problem because cooperation was required.

Role Playing Affects Attitudes, 727-729

Zimbardo (1972) assigned the roles of guards and prisoners to random students and found that guards and prisoners developed role-appropriate attitudes.



Phillip G. Zimbardo, Inc.



Originally published in the *New Yorker*

Individual Behavior in the Presence of Others

Social facilitation: Refers to improved performance on tasks in the presence of others. Triplett (1898) noticed cyclists' race times were faster when they competed against others than when they just raced against the clock.



Michelle Agnis/ NYT Pictures

Conformity, 731

conformity: going along with group behavior (Solomon Asch studies)

Under certain conditions we will conform even though we know something is incorrect

His line study asked which of three comparison lines was identical to a standard line.

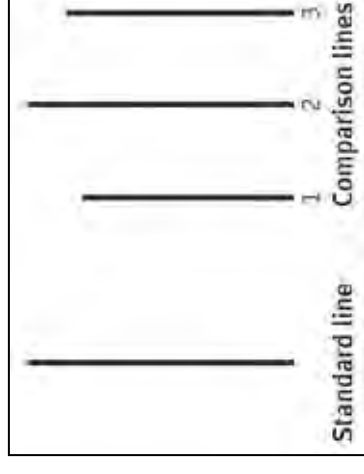


Photo: www.design.otago.ac.nz/grant/psyc/COMPLIANCE.HTML

Social Loafing

The tendency of an individual in a group to exert less effort toward attaining a common goal than when tested individually (Latané, 1981).

Deindividuation, 739

The loss of self-awareness and self-restraint in group situations that foster arousal and anonymity.

Ex: Klan behavior, mobs, riots



Mob behavior

In and Out Groups, 746

Ingroup: People with whom one shares a common identity. **Outgroup:** Those perceived as different from one's ingroup. **Ingroup Bias:** The tendency to favor one's own group.



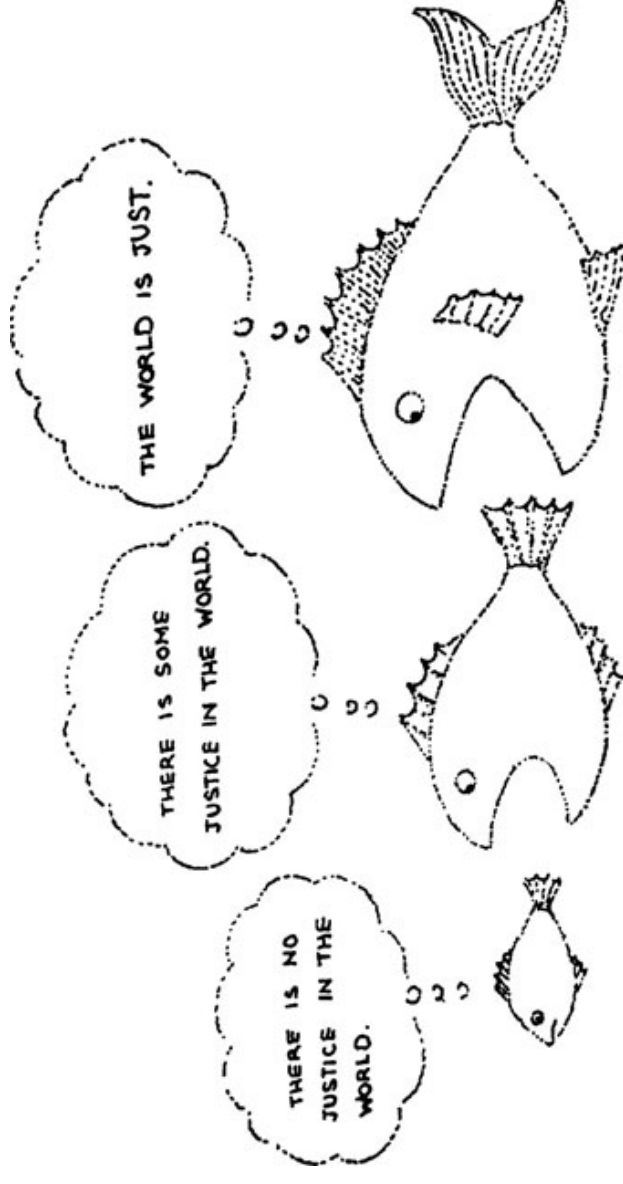
Mike Hewitt/ Getty Images

Scotland's famed "Tartan Army" fans.

Cognitive Roots of Prejudice: Just World Phenomenon, 748

The tendency of people to believe the world is just, and people get what they deserve and deserve what they get (**the just-world phenomenon**).

© The New Yorker Collection, 1981, Robert Mankoff from cartoonbank.com. All Rights Reserved.



MANKOFF

Fundamental Attribution Error, 724

The tendency to overestimate the impact of personal disposition and underestimate the impact of the situations in analyzing the behaviors of others leads to the **fundamental attribution error**.

We see Joe as quiet, shy, and introverted most of the time, but with friends he is very talkative, loud, and extroverted.

Small Request – Large Request, 727

In the Korean War, Chinese communists solicited cooperation from US army prisoners by asking them to carry out small errands. By complying to small errands they were likely to comply to larger ones.

Foot-in-the-Door Phenomenon: The tendency for people who have first agreed to a small request to comply later with a larger request.

Groupthink, 740

A mode of thinking that occurs when the desire for harmony in a decision-making group overrides the realistic appraisal of alternatives.

Attack on Pearl Harbor
Kennedy and the Cuban Missile Crisis
Watergate Cover-up
Chernobyl Reactor Accident

Actions Can Affect Attitudes: Cognitive Dissonance, 728

Why do actions affect attitudes? One explanation is that when our attitudes and actions are opposed, we experience tension.

This is called **cognitive dissonance**.

To relieve ourselves of this tension we bring our attitudes closer to our actions (Festinger, 1957).

Milgram Experiment



- *“Teachers” were deceived into thinking they were administering shocks to learners.*
- *Milgram wanted to see if they would obey directions in a university setting*
- *When the “learner” gave a wrong answer to a word pair question, the “teacher” was to deliver a shock.*

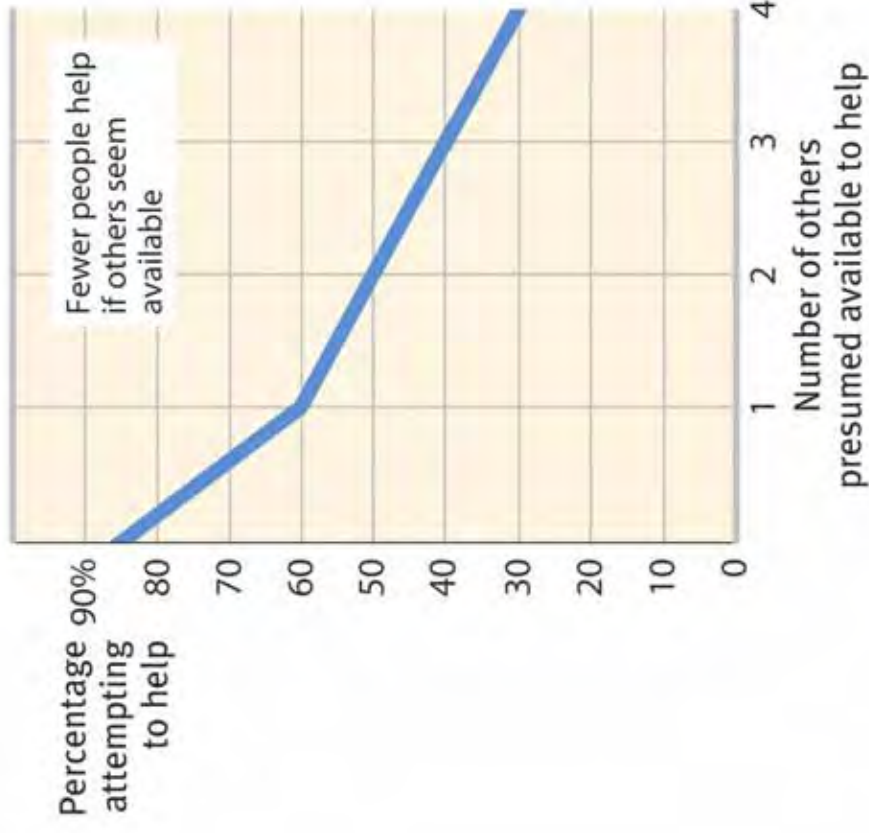
General findings of the Milgram

Obedience experiment

- a. the teachers were more obedient than predicted (a majority complied)
- b. legitimate authority can be blindly followed

Bystander Effect, 766

Tendency of any given bystander to be less likely to give aid if other bystanders are present.



Mirror image Perceptions, 758

People in conflict form diabolical images of one another.



<http://www.cnn.com>

Saddam Hussein
“Wicked Pharaoh”



<http://www.aftonbladet.se>

George Bush
“Evil”

Ch. 8, Learning terms

Operant Conditioning

Operant conditioning procedures enable therapists to use **behavior modification**, in which desired behaviors are rewarded and undesired behaviors are either unrewarded or punished.

A number of withdrawn, uncommunicative 3-year-old autistic children have been successfully trained by giving and withdrawing reinforcements for desired and undesired behaviors.

Acquisition, 318

Acquisition is the initial stage in classical conditioning in which an association between a neutral stimulus and an unconditioned stimulus takes place.

1. In most cases, for conditioning to occur, the neutral stimulus needs to come before the unconditioned stimulus.
2. The time in between the two stimuli should be about half a second.

Stimulus Generalization, 320

Tendency to respond to stimuli similar to the conditioned stimulus is called **generalization**.

When John Watson conditioned the baby Albert's fear (CR) by making a loud noise in the presence of a white rat, Albert he subsequently became fearful to other white objects such as a rabbit and a Santa Claus mask



Operant & Classical Conditioning,

326

1. Classical conditioning involves **respondent behavior** that occurs as an automatic response to a certain stimulus. The behavior occurs **AFTER** the stimulus.
2. Operant conditioning involves **operant behavior**, a behavior that operates on the environment, producing rewarding or punishing stimuli. The behavior occurs **BEFORE** the stimulus.

Types of Reinforcers: Positive and negative

TABLE 8.1

WAYS TO INCREASE BEHAVIOR

Operant Conditioning Term	Description	Example
Positive reinforcement	<i>Add</i> a positive stimulus	a hug, TV on
Negative reinforcement	<i>Remove</i> an aversive stimulus	seat belt turns off buzzer

Updating Skinner: Motivation types, 335

1 Intrinsic Motivation: The desire to perform a behavior for its own sake.

2 Extrinsic Motivation: The desire to perform a behavior due to promised rewards or threats of punishments.

3 Those given rewards for something they already like to do tend to lose interest in the activity.



Biological Predisposition and operant conditioning, 335

Biological constraints predispose organisms to learn associations that are naturally adaptive. Breland and Breland (1961) showed that animals drift towards their biologically predisposed instinctive behaviors.



Photo: Bob Bailey

Marian Breland Bailey

Punishment, 332

An aversive event that decreases the behavior it follows.

WAYS TO DECREASE BEHAVIOR

Type of Punisher	Description	Possible Examples
Positive punishment	Administer an aversive stimulus	Spanking; a parking ticket
Negative punishment	Withdraw a desirable stimulus	Time-out from privileges (such as time with friends); revoked driver's license

Negative reinforcement v. punishment

- “If you clean your room, you will no longer have to stay inside”
- The behavior reinforced is cleaning their room.
- In contrast, if you say, “Because you did not clean your room, you will have to stay inside today,” you are punishing the person by restricting their freedom. You are giving them something they don’t like.

Classical or Pavlovian Conditioning, 317



⌘ Unconditioned Stimulus (UCS)

☑ effective stimulus that unconditionally- automatically and naturally- triggers a response

⌘ Unconditioned Response (UCR)

☑ unlearned, naturally occurring automatic response to the unconditioned stimulus
☒ **salivation when food is in the mouth**

Classical or Pavlovian Conditioning



⌘ Conditioned Stimulus (CS)

- ☒ previously neutral stimulus that, after association with an unconditioned stimulus, comes to trigger a conditioned response

⌘ Conditioned Response (CR)

- ☒ learned response to a previously neutral conditioned stimulus

Albert Bandura and Observational Learning, pp. 341-346

⌘ Observational Learning

- ☒ learning by observing and imitating others

⌘ Modeling

- ☒ process of observing and imitating behavior

☒ Imitation

The process of duplicating desired behaviors from a competent model.



Ch. 4, Human development terms

Rooting reflex 142

Infants are born with reflexes that aid in survival, including rooting reflex which helps them locate food.

Schemas, 147

Schemas are mental molds into which we pour our experiences.



Two-year-old Gabriella has learned the schema for "cow" from her picture books.



Gabriella sees a moose and calls it a "cow." She is trying to assimilate this new animal into an existing schema. Her mother tells her, "No, it's a moose."



Gabriella accommodates her schema for large, shaggy animals and continues to modify that schema to include "mommy moose," "baby moose," and so forth.

Object permanence, 149

In the sensorimotor stage, babies take in the world by looking, hearing, touching, mouthing, and grasping. Children younger than 6 months of age do not grasp object permanence, i.e., objects that are out of sight are also out of mind.



Doug Goodman

At 8 months of age what is out of sight is not out of mind.

Erikson on Identity and Intimacy, 171

⌘ Identity

- ☒ According to Erikson, one's sense of self
- ☒ the adolescent's task is to solidify a sense of self by testing and integrating various roles


⌘ Intimacy

- ☒ the ability to form close, loving relationships
- ☒ a primary developmental task in late adolescence and early adulthood



Crystallized v. fluid intelligence

184



⌘ Crystallized Intelligence

- ☒ one's accumulated knowledge and verbal skills
- ☒ tends to increase with age

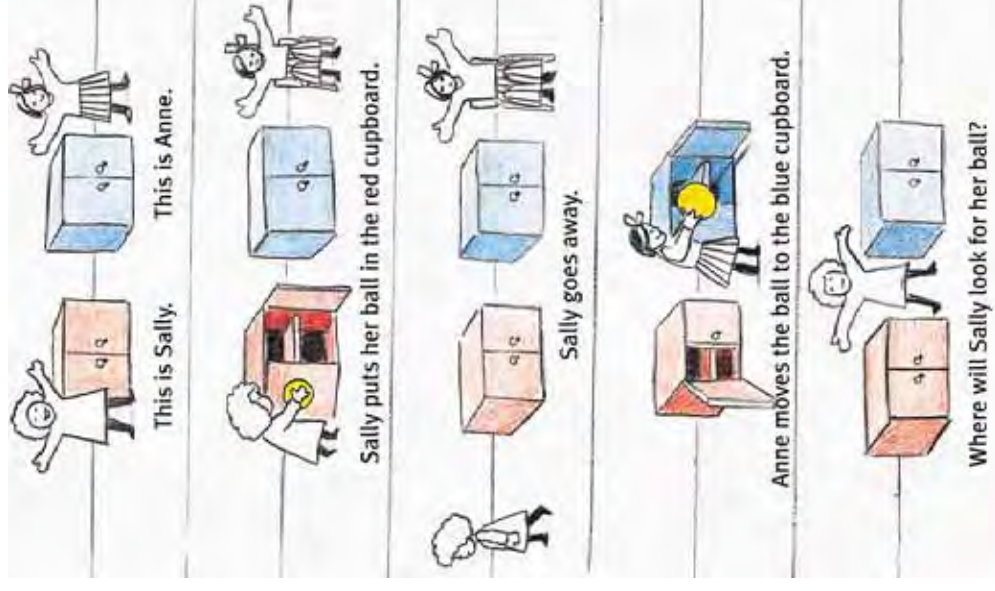
⌘ Fluid Intelligence

- ☒ one's ability to reason speedily and abstractly
- ☒ tends to decrease during late adulthood

Theory of Mind, 151

Preschoolers, although still egocentric, develop the ability to understand another's beliefs or mental state when they begin forming a theory of mind.

The problem on the right probes such ability in children.



Imprinting and critical period, 156

- Konrad Lorenz studied the importance of “imprinting,” a *critical period* when bonding occurs
- This is shown in the movie when the chicks take to Amy

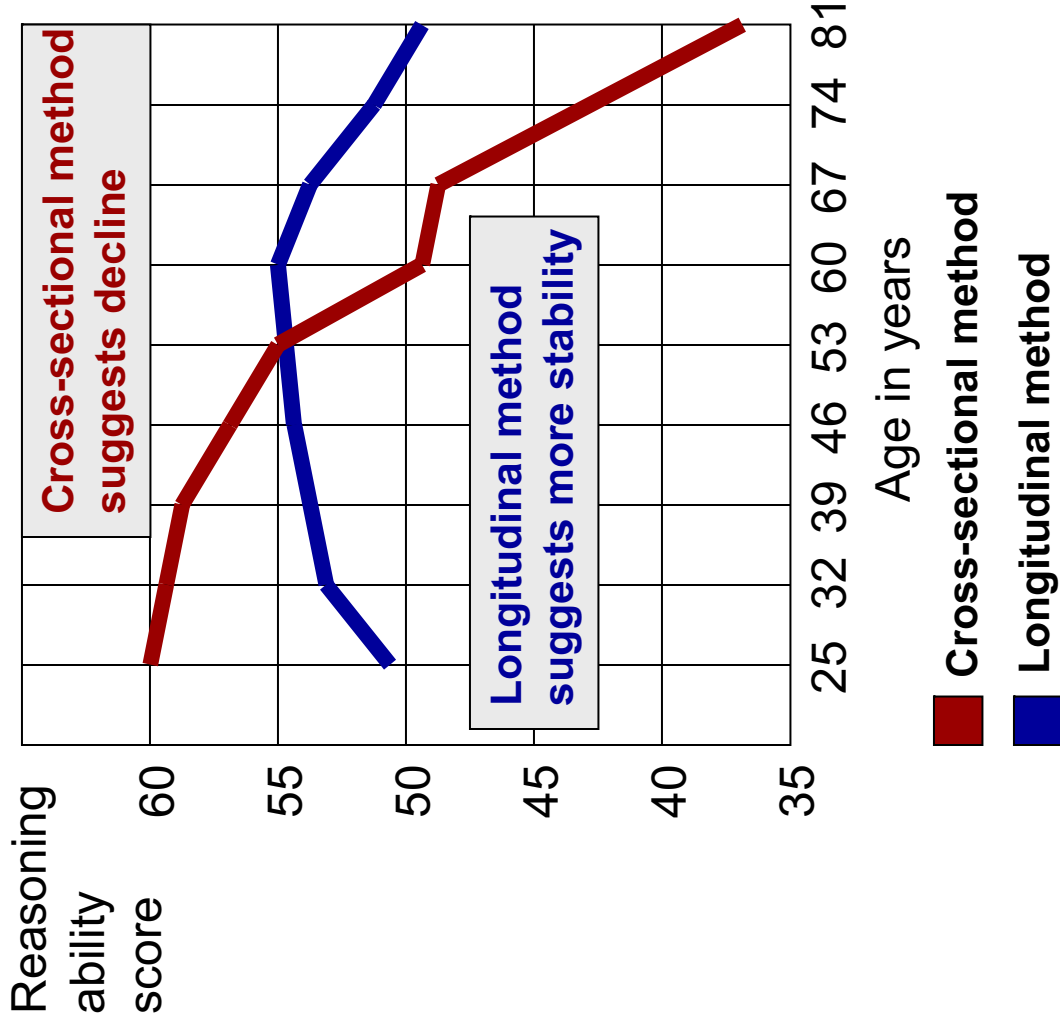


<http://tecfa.unige.ch/tecfa/teaching/UVLibre/0001/bin42/lorenz2.jpg>

PIAGET'S STAGES OF COGNITIVE DEVELOPMENT

Typical Age Range	Description of Stage	Developmental Phenomena
Birth to nearly 2 years	<i>Sensorimotor</i> Experiencing the world through senses and actions (looking, touching, mouthing, and grasping)	<ul style="list-style-type: none">• Object permanence• Stranger anxiety
2 to about 6 or 7 years	<i>Preoperational</i> Representing things with words and images; use intuitive rather than logical reasoning	<ul style="list-style-type: none">• Pretend play• Egocentrism• Language development
About 7 to 11 years	<i>Concrete operational</i> Thinking logically about concrete events; grasping concrete analogies and performing arithmetical operations	<ul style="list-style-type: none">• Conservation• Mathematical transformations
About 12 through adulthood	<i>Formal operational</i> Abstract reasoning	<ul style="list-style-type: none">• Abstract logic• Potential for mature moral reasoning

Cross sectional and longitudinal studies 183



⌘ Cross-Sectional Study

☒ a study in which people of different ages are compared with one another

⌘ Longitudinal Study

☒ a study in which the same people are restudied and retested over a long period

Ch. 9 Memory terms

Flashbulb Memory, 350

A unique and highly emotional moment may give rise to a clear, strong, and persistent memory called **flashbulb memory**. However, this memory is not free from errors.



Ruters/Corbis

President Bush being told of 9/11 attack.

Memory, 351

- **Storage**
 - the retention of encoded information over time
- **Retrieval**
 - process of getting information out of memory

Storage-

Short Term Memory, 362

- Short Term Memory
 - limited in duration and capacity
 - “magical” number 7 ± 2

Memory, 362

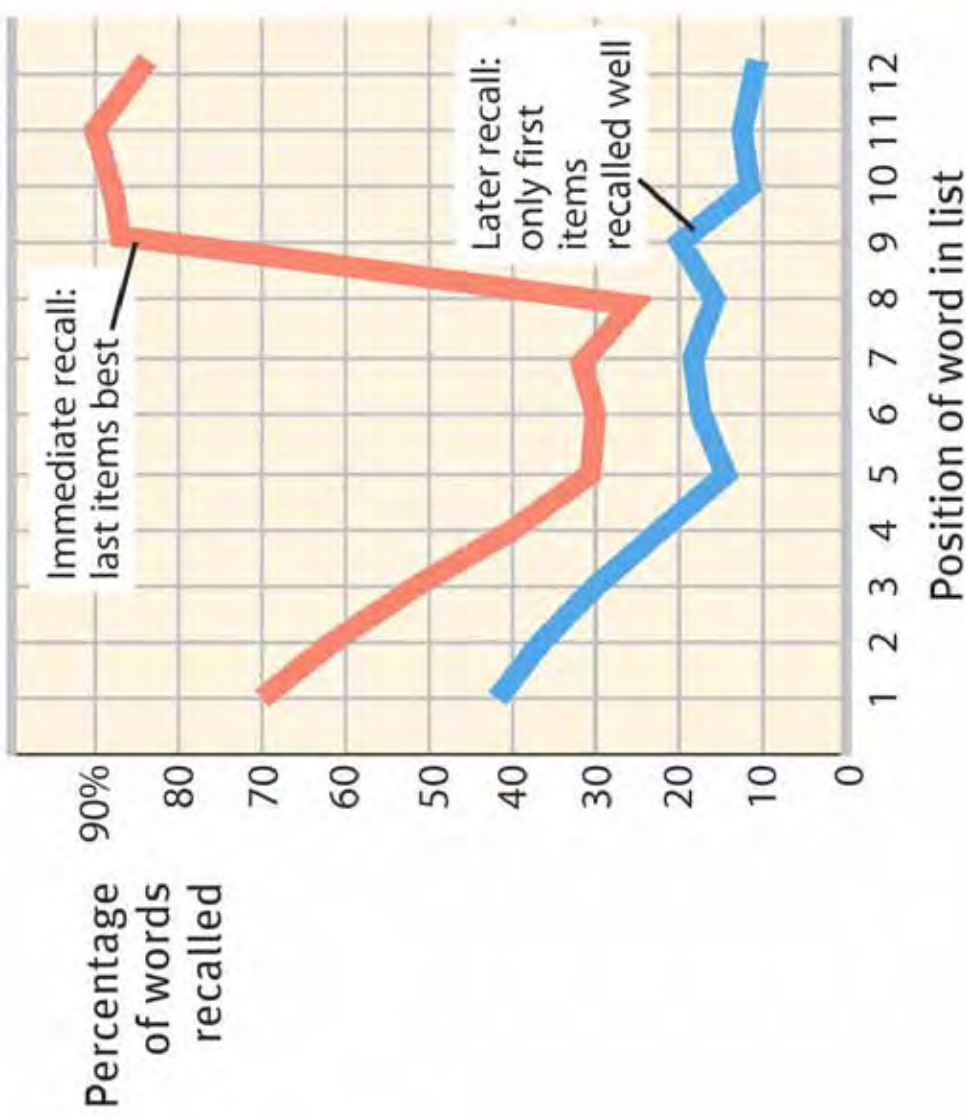
- **Sensory Memory**
 - the immediate, initial recording of sensory information in the memory system
- **Working Memory**
 - focuses more on the processing of briefly stored information

Memory, 362-3

- Short Term Memory
 - activated memory that holds a few items briefly
 - look up a phone number, then quickly dial before the information is forgotten
- Long Term Memory
 - the relatively permanent and limitless storehouse of the memory system

Serial Position Effect, 356

1. TUV
 2. ZOF
 3. GEK
 4. WAV
 5. XOZ
 6. TIK
 7. FUT
 8. WIB
 9. SAR
 10. POZ
 11. REY
 12. GIJ
- } Better recall
- } Poor recall
- } Better recall



What Do We Encode? 356

- **Semantic Encoding**
 - encoding of meaning
 - including meaning of words
- **Acoustic Encoding**
 - encoding of sound
 - especially sound of words
- **Visual Encoding**
 - encoding of picture images

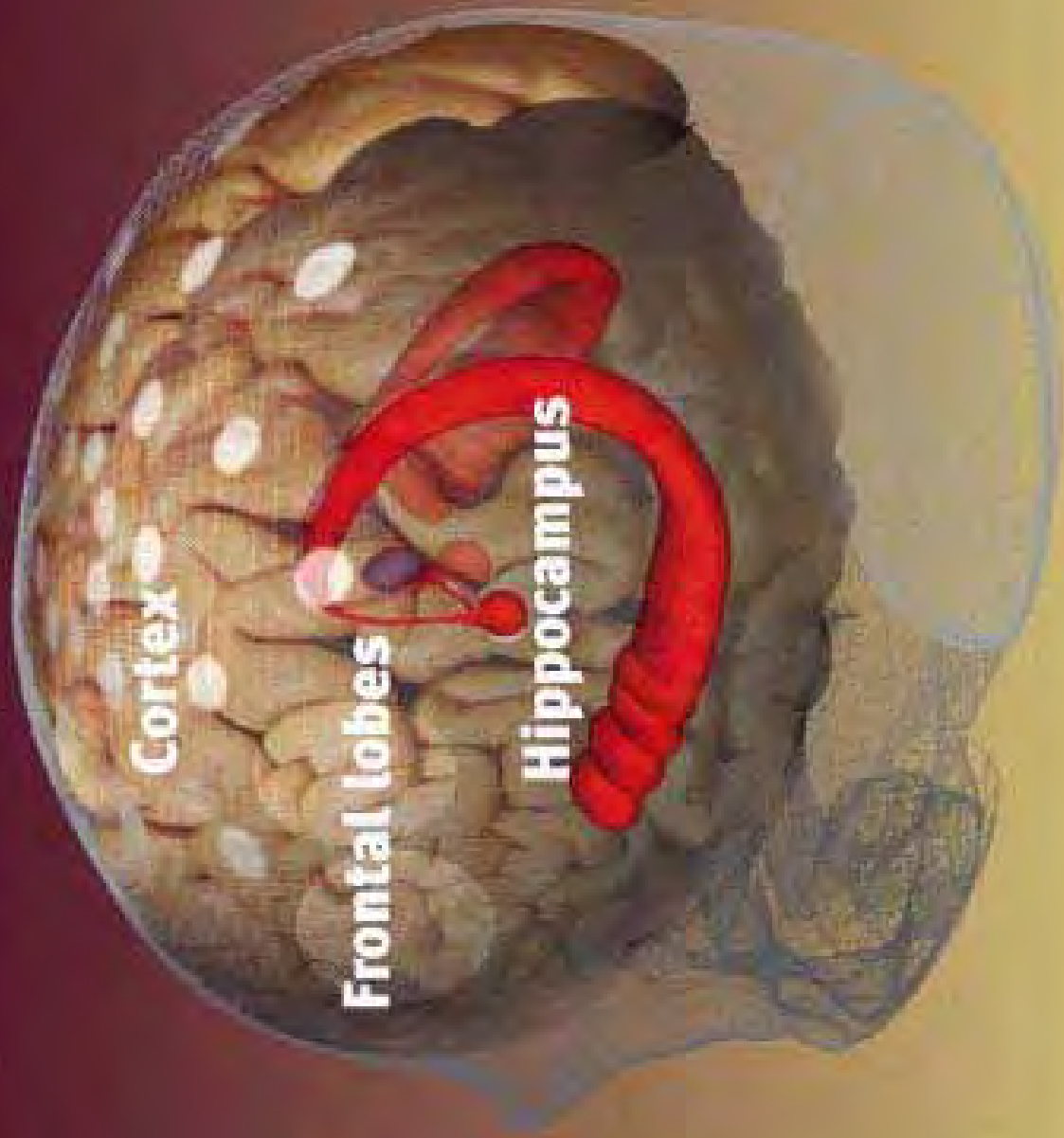
Storage- Retaining Information, 362

- **Sensory Memory**
 - the immediate, initial recording of sensory information in the memory system
- **Iconic Memory**
 - a momentary sensory memory of visual stimuli
 - a photographic or picture image memory lasting no more than a few tenths of a second
 - Registration of exact representation of a scene
- **Echoic Memory**
 - momentary sensory memory of auditory stimuli

Storage-

Long Term Memory, 367

- Amnesia- the loss of memory
- Explicit Memory
 - memory of facts and experiences that one can consciously know and declare
 - hippocampus**- neural center in limbic system that helps process explicit memories for storage
- Implicit Memory
 - retention without conscious recollection
 - motor and cognitive skills
 - dispositions- conditioning



The location of Long Term Memory, 367

- Explicit Memory
 - memory of facts and experiences that one can consciously know and declare
 - hippocampus**- neural center in limbic system that helps process explicit memories for storage
 - Verbal in the left
 - Visual in the right

Retrieval Cues, 373-4

- Deja Vu- (French) already seen
 - cues from the current situation may subconsciously trigger retrieval of an earlier similar experience
 - "I've experienced this before"
- Mood Congruent Memory
 - tendency to recall experiences that are consistent with one's current mood
 - memory, emotions or moods serve as retrieval cues
- State Dependent Memory
 - what is learned in one state (while one is high, drunk or depressed) can more easily be remembered when in same state

Forgetting as Interference,

379

- Learning some items may disrupt retrieval of other information
 - Proactive (forward acting) Interference
 - disruptive effect of prior learning on recall of new information
 - Retroactive (backwards acting) Interference
 - disruptive effect of new learning on recall of old information

Forgetting as Interference

French, learned beforehand, interferes proactively

papier
livre plume
école

Study French



proactive interference

Study Spanish

papel
libro pluma
escuela



Spanish 101
Mid-term
exam



Spanish, learned afterward, interferes retroactively

papier
livre plume
école

Study French



retroactive interference

Study Spanish

papel
libro pluma
escuela



French 101
Mid-term
exam

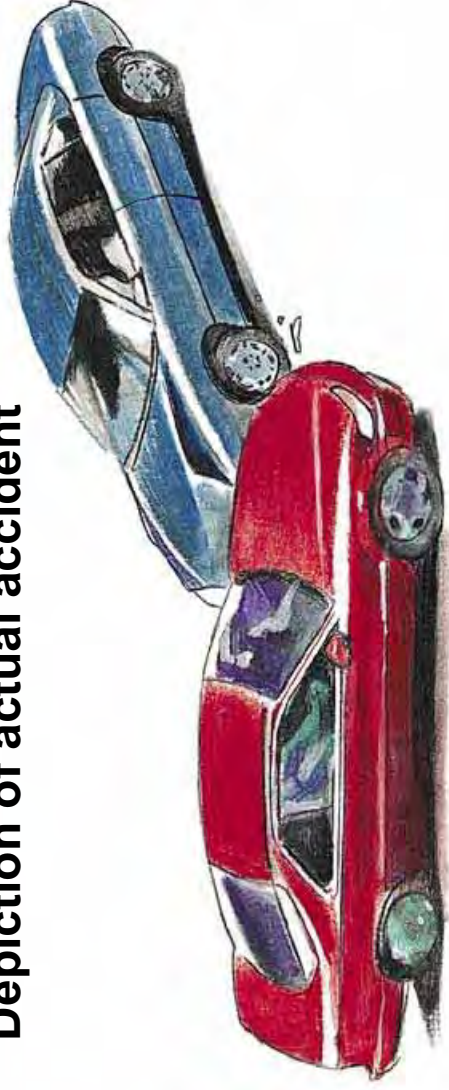


Memory Construction, 382

- We filter information and fill in missing pieces
- **Misinformation Effect**
 - incorporating misleading information into one's memory of an event
- **Source Amnesia**
 - attributing to the wrong source an event that we experienced, heard about, read about, or imagined (misattribution)

Memory Construction and the misinformation effect, 382

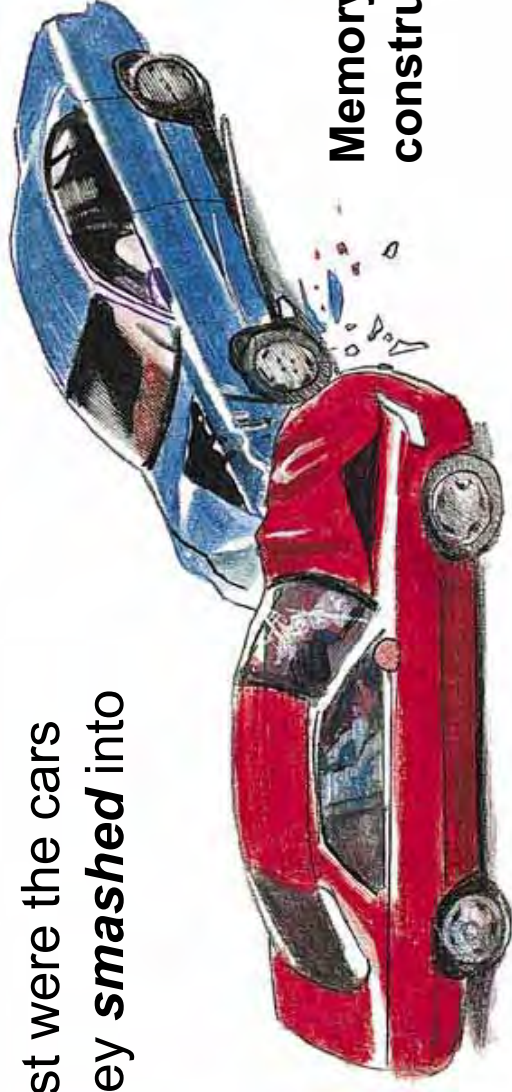
Depiction of actual accident



Eyewitnesses incorrectly reconstruct memories when questioned. If asked a leading question they assume more damage was done.

Leading question:

“About how fast were the cars going when they **smashed** into each other?”



Memory construction

Ch. 10 Language and thinking terms

Obstacles in Solving Problems

Confirmation Bias: A tendency to search for information that confirms a personal bias.

2 – 4 – 6

Rule: Any ascending series of numbers. 1 – 2 – 3 would comply. Ss had difficulty figuring out the rule due to a confirmation bias (Wason, 1960).

Representativeness Heuristic

Judging the likelihood of things or objects in terms of how well they seem to represent, or match, a particular prototype.

If you meet a slim, short, man who wears glasses and likes poetry, what do you think his profession would be?

An Ivy league professor or a truck driver?

Framing Decisions

Decisions and judgments may be significantly affected depending upon how an issue is framed.

Example: What is the best way to market ground beef — as 25% fat or 75% lean?

Belief Bias

The tendency of one's preexisting beliefs to distort logical reasoning by making invalid conclusions.

God is love.

Love is blind

Ray Charles is blind.

Ray Charles is God.

Anonymous graffiti

Language

- **Semantics**
 - the set of rules by which we derive meaning from morphemes, words, and sentences in a given language
 - also, the study of meaning
- **Syntax**
 - the rules for combining words into grammatically sensible sentences in a given language

Language

- **Babbling Stage**
 - beginning at 3 to 4 months
 - the stage of speech development in which the infant spontaneously utters various sounds at first unrelated to the household language
- **One-Word Stage**
 - from about age 1 to 2
 - the stage in speech development during which a child speaks mostly in single words

Language

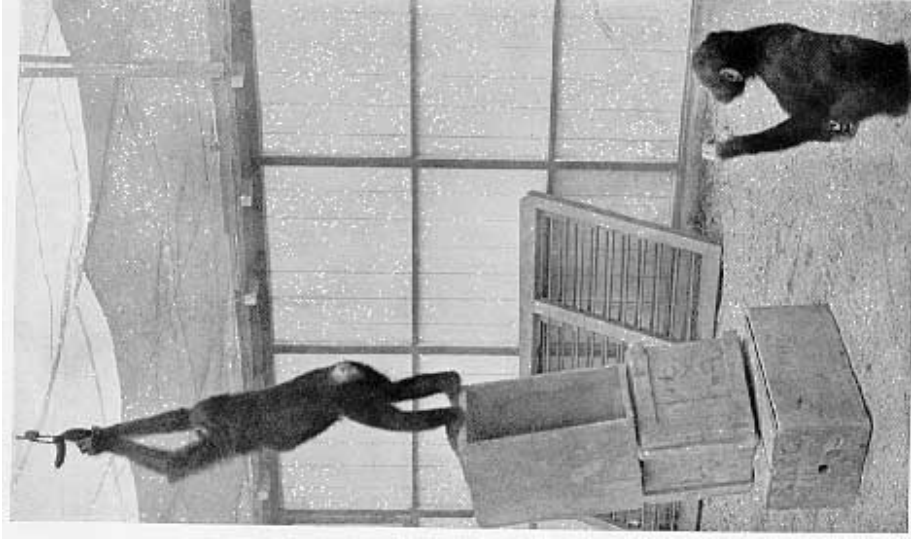
- **Two-Word Stage**
 - beginning about age 2
 - the stage in speech development during which a child speaks mostly two-word statements
- **Telegraphic Speech**
 - early speech stage in which the child speaks like a telegram – “go car” – using mostly nouns and verbs and omitting “auxiliary” words

Insight

Insight involves a sudden novel realization of a solution to a problem.

Humans and animals have insight.

Walter Kohler conducted this experiment in the 1920s.



Grande using boxes to obtain food

Linguistic Relativity

- Or linguistic determinism:
 - Benjamin Lee Whorf's hypothesis that language determines the way we think

Ch. 11 Intelligence terms

Charles Spearman and “g”, 432

- Helped develop factor analysis
- Believed there was a general intelligence or, g factor, that underlies all intelligent behavior
- Mental abilities are highly correlated
- He was one of the leaders of the modern testing movement and believed in eugenics



Factor analysis, 432

- **Factor Analysis**
 - statistical procedure that identifies clusters of related items (called factors) on a test
 - used to identify different dimensions of performance that underlie one's total score
- **General Intelligence (g)**
 - factor that Spearman and others believed underlies specific mental abilities
 - measured by every task on an intelligence test

Savantism, 433

- Savant Syndrome
 - condition in which a person otherwise limited in mental ability has an amazing specific skill
 - Examples
 - **Computation**
 - **Drawing**
 - **Musical ability**
 - **Artistic talents**

Robert Sternberg's theory of intelligence

- Triarchic theory of intelligence includes three components:
 - Analytical
 - Creative
 - Practical



<http://www.apa.org/apf/sternberg.jpg>

Emotional Intelligence: 4 Components

Component	Description
Perceive emotion	Recognize emotions in faces, music and stories
Understand emotion	Predict emotions, how they change and blend
Manage emotion	Express emotions in different situations
Use emotion	Utilize emotions to adapt or be creative

Emotional Intelligence, 436

1 Emotional intelligence is the ability to perceive, understand, and use emotions (Salovey and colleagues, 2005).

2 The test of emotional intelligence measures overall emotional intelligence and its four components.

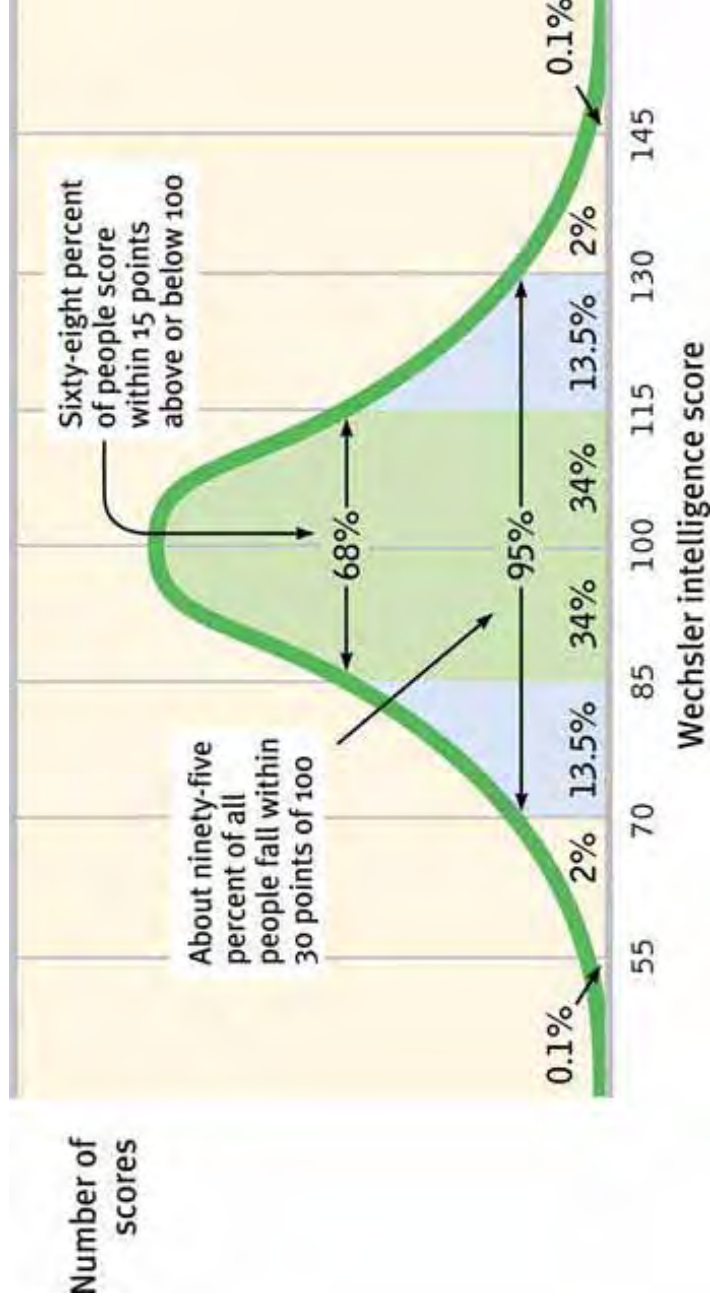


Standardization, 446

1. Standardizing a test involves administering the test to a representative sample of future test takers in order to establish a basis for comparing one student's score with another.
2. Standardized tests are given the same way and scored the same way to allow for comparisons among students so they can be ranked.

Normal Curve, 447

Standardized tests establish a normal distribution of scores on a tested population in a bell-shaped pattern called the **normal curve**.



Reliability, 448

A test is *reliable* when it yields consistent results.
How accurate is the score?

To establish reliability researchers establish different procedures:

1. **Split-half Reliability:** Dividing the test into two equal halves and assessing how consistent the scores are.
2. **Reliability using different tests:** Using different forms of the test to measure consistency between them.
3. **Test-Retest Reliability:** Using the same test on two occasions to measure consistency.

Validity, 448

Validity of a test refers to what the test is supposed to measure or predict. A test is valid if it measures what it claims to measure.

1. **Content Validity:** Refers to the extent a test measures a particular behavior or trait.

Example: driving test contains driving tasks

1. **Predictive Validity:** Refers to the function of a test in predicting a particular behavior or trait.

A criterion is the behavior measured that the test is designed to predict.

Example: ACT is designed to predict college g.p.a.

Bias in testing: The stereotype threat for men and women, 465

A **stereotype threat** is a self-confirming concern that one will be evaluated based on a negative stereotype.

This phenomenon appears in some instances in intelligence testing among African-Americans and among women of all colors on math. For men it might relate to verbal fluency. It can be counteracted if the person is tested in a way that makes the situation threat-free.