

1. Theoretical Perspectives



Theories: Big ideas

- **To study development, start with models or theories**
- **No theory can explain all aspects of development.**
- **What theories explain different aspects of development?**

1.1 Evolutionary

1.2 Biological

**1.3 Learning
(Behaviorism)**

**1.4 Cognitive
Development**

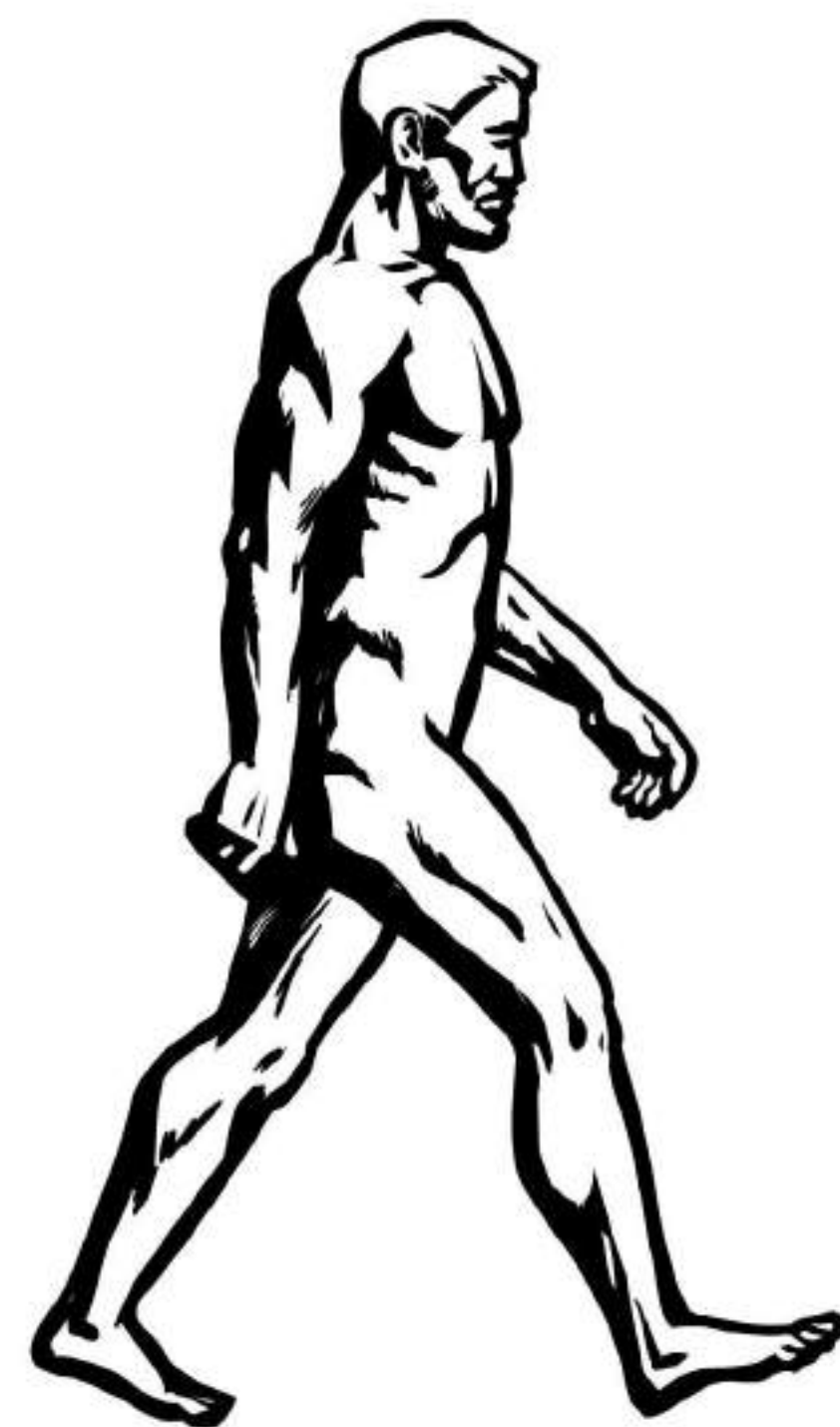
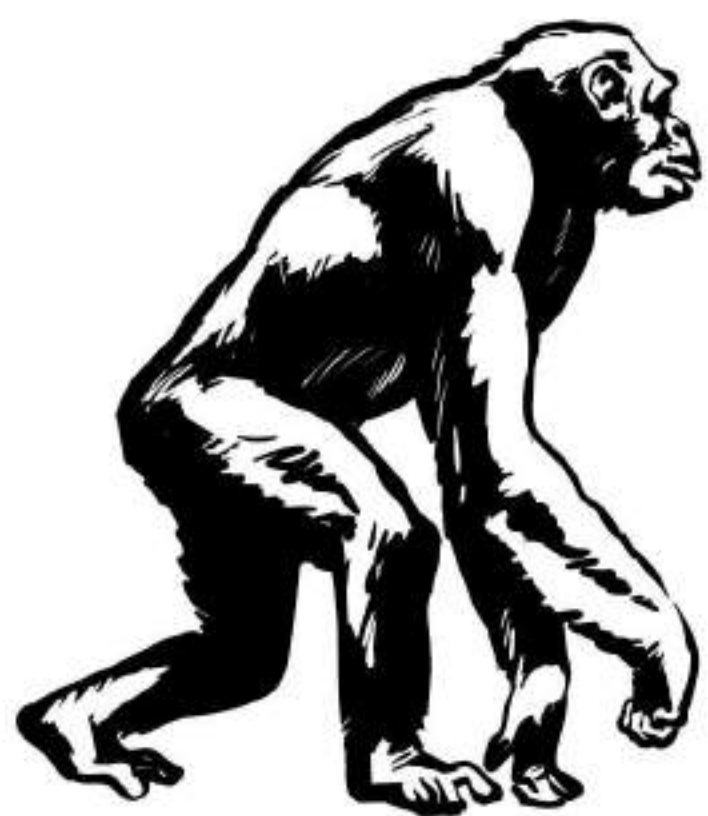
**1.5 Social Cognitive
(Social Learning)**

1.6 Sociocultural

1.7 Ecological

1.8 Psychodynamic

1.1 Evolutionary



Development by species adaptations

- **“Ontogeny recapitulates phylogeny”**
- **Developmental traits
from past adaptations**
- **Example: Men’s late-life
reproductive capability
from successful
adaptation**

1.2 Biological



Development by heredity

- **Genes define many traits**
- **Some genes determine**
 - **Example: genes determine hair color**
- **Some genes predispose**
 - **Example: genes give potential for alcoholism**

1.3 Learning (Behaviorism)



Development by modifying behavior

- **Emphasis on behavior, not thought or feeling**
- **Example: Study parents' punishment style, not attitude**
- **Emphasis on learning new behaviors or extinguishing old behaviors**

Learn by consequences

- **Positive reinforcement = pleasant result (reward)**
- **Quick reward best to reinforce new behavior**
- **Negative reinforcement = take away unpleasant threat**
- **Example: Do chores to prevent (more) nagging**

Learn by consequences

- **Punishment = unpleasant result (physical or social)**
- **Consequences not emotional**
- **Reinforcement from parent, teacher, environment**

1.4 Cognitive Developmental



Development by thinking/changing

- **Building and modifying
concepts about reality**
- **“Information processing”
in brain to learn and
organize knowledge**

Development by thinking/changing

- **Emphasis on thought processes**
- **Make learning more efficient**
- **Make applying knowledge more effective**

1.5 Social Cognitive (Social Learning)



Development by observing and imitating

- **Learning from others, with or without their help**
- **Studying role models**
- **Example: Playing dress-up like adult**
- **Example: Viewing and reviewing experts' performances**

1.6 Sociocultural



SOCIETY

Development by social influences

- **Emphasizes impact of surrounding environment**
- **Cultural expectations, attitudes, customs**
- **Economic/class status**
- **Religion**

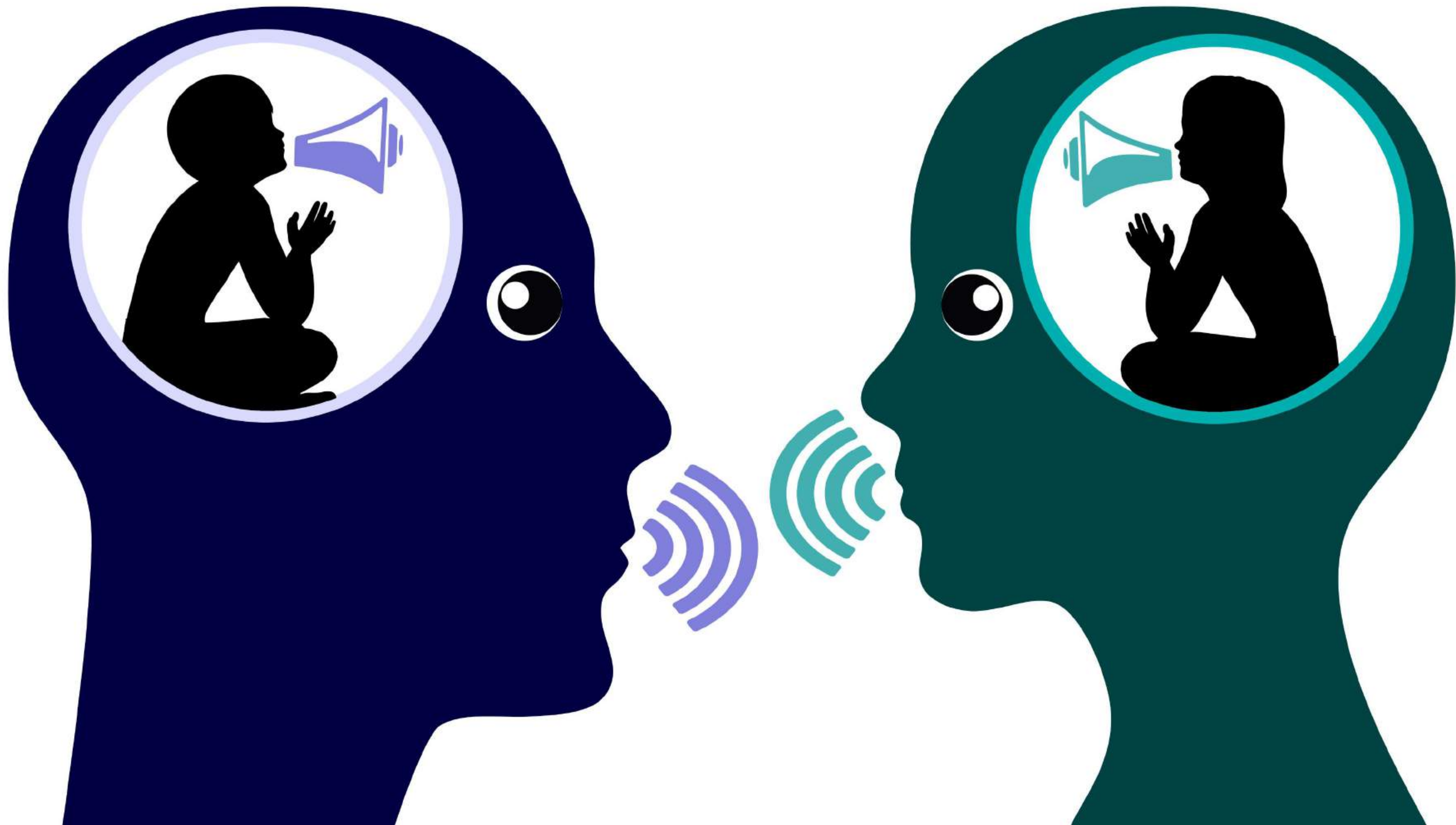
1.7 Ecological



Development by total of environmental forces

- Impact of people, place and time**
- Self**
- Nuclear/extended family**
- Local/regional setting**
- Time in history, events, available technology**

1.8 Psychodynamic



Development by unconscious urges

- **Emphasizes impact and guidance of unconscious mind**
- **Forgotten childhood experiences**
- **Innate motives and urges triggered at certain ages**

2. Research Strategies and Methodology



Research: Why?

- **Developmental psychologists test theories**
- **Study behavior or trait that changes over time**
- **When does it change?**
- **How does it change?**

2.1 Experimental

2.2 Correlational

2.3 Observational

2.4 Cross-Sectional

2.5 Longitudinal

2.6 Cross Sequential

2.7 Case Study

2.1 Experimental



Experimental design

- **Study cause/effect**
- **Samples of population**
- **Experimental/control groups if needed**
- **Independent variable: what gets manipulated**
- **Dependent variable: what gets measured for change**

Experimental example

- **Cause-effect of praise on 10-year olds' helpfulness**
- **Independent variable:
amount of praise given
to each child**
- **Dependent variable:
measure of helpfulness
after 3 days**

2.2 Correlational



Correlation

- **Relationship between 2 things or events**
- **Example: compare effects of heredity & environment on trait using mono- and dizygotic twins**
- **Look for variation in both kinds of twins**

Correlation

- **Result: variation in both kinds of twins**
 - **Trait affected by both environment/heredity**

Correlation

- **Statistics of correlation**
 - **+1 perfect positive correlation**
 - **0 no correlation**
 - **-1 perfect negative correlation**

2.3 Observational



Observational study

- **Note behaviors or traits in a group**
- **Group might be sample of larger population**
- **Example: studying verbal behavior of children playing unsupervised**

2.4 Cross-Sectional



Cross-sectional study

- **“Snapshot”**
- **Collect data on group at one point in time**
- **Example: ask group of teens opinions on curfew**

2.5 Longitudinal



Longitudinal study

- **Study cohort (same-age group) through time**
- **Example: interview group born in 2010 at one-year intervals, noting changes in attitudes toward opposite sex**

2.6 Cross Sequential



Cross-sequential

- **Combining longitudinal and cross-sectional**
- **Example: interview cohorts born in 1990, 2000, and 2010 at intervals of 5 years**
- **Study many years of life in shorter time than with just one cohort**

2.7 Case Study



Case study

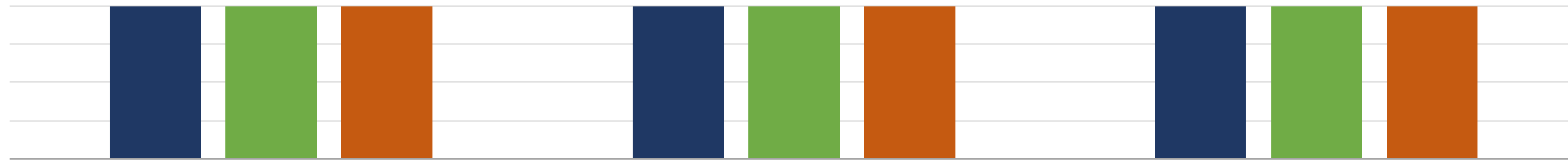
- **Observe one individual or group**
- **Subject has unusual traits or in unusual circumstance**
- **Example: study refugee child's school adaptation**
- **Reported as narrative with analysis, supported by theory**

3. Biological Development Throughout the Lifespan

Two Ways to Study Human Development

#1

Study by Attribute/Domain



Physical → Cognitive → Social



Infant



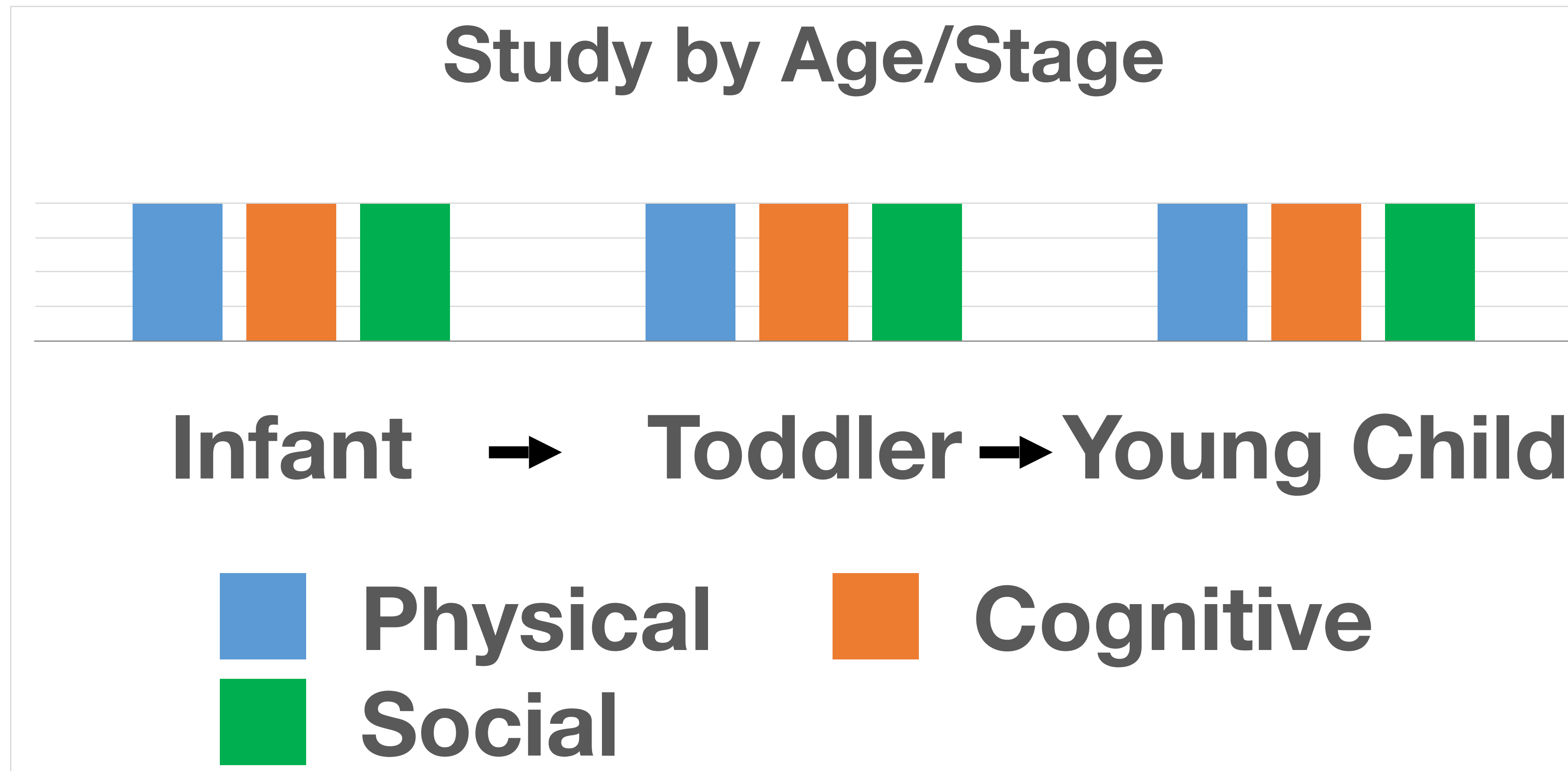
Toddler



Young Child

Two Ways to Study Human Development

#2



3.1 Heredity, Genetics, and Genetic Testing

3.2 Genetic Disorders

3.3 Development of the Brain and Nervous System

3.4 Hormonal Influences

3.5 Prenatal Influences

3.6 Teratogens

**3.7 Influences of
Drugs**

**3.8 Nutritional
Influences**

**3.9 Perinatal
Influences**

3.10 Motor Development

3.11 Physical Growth, Maturation, and Aging

3.12 Sexual Maturation

3.1 Heredity, Genetics, and Genetic Testing



Inherited traits

- **Genetic code on chromosome pairs**
- **Egg/sperm have half chromosomes to match**

Inherited traits

- **Sex-determining chromosome pair:**
- **XX = female**
- **XY = male**
- **Sperm determines sex**

Chromosomes and traits

- **X chromosome has female traits**
- **Y has male traits**
- **On other chromosome pairs, traits determined by dominant gene**

Chromosomes and traits

- **Traits to be analyzed**
 - **Allosomal = on sex chromosome**
 - **Autosomal = on all other chromosomes**
 - **Example: red/green color-blindness is autosomal (not sex-linked)**

Genetic testing

- **Amniocentesis to find genetic anomalies on chromosomes**
- **During weeks 14-16 of pregnancy**
- **Amniotic fluid drawn to analyze genetic codes on chromosomes**

Amniocentesis results

- **Test can determine range of genetic flaws and known abnormalities**
- **Down syndrome**
- **Blood type mismatch**
- **Neural tube defects, e.g. spina bifida**

3.2 Genetic Disorders



Genetic abnormalities

- **From genes on sex chromosome or from autosomes**
- **From mutations in DNA**

Genetic abnormalities

- **Examples:**
 - **Down syndrome**
 - **Hemophilia**
 - **Muscular dystrophy**
 - **Culture-specific diseases**

3.3 Development of the Brain and Nervous System



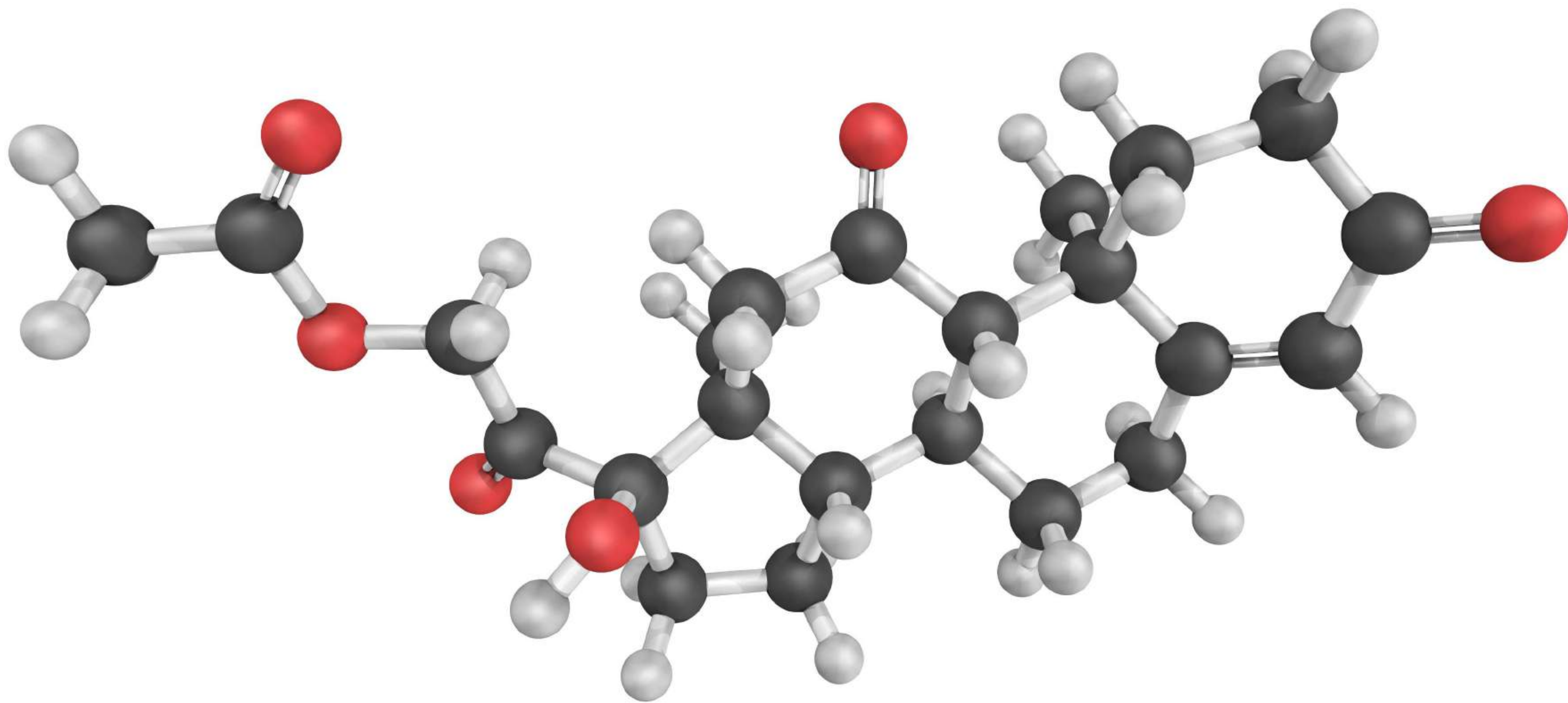
Prenatal stages

- **Zygote: single cell**
- **Blastocyst: cell cluster**
- **Embryo: Differentiated endoderm, mesoderm, ectoderm (weeks 3-12)**

Prenatal stages

- **Spinal cord and brain emerge weeks 4-5**
- **Neurons migrate to specific brain areas**

3.4 Hormonal Influences



Hormones in pregnancy

- **Hormones: chemicals from glands that trigger body reactions**
- **Preparation of womb**
- **Sex determination**
- **Preparation of mother's milk**

3.5 Prenatal Influences



Prenatal influences

- **Environmental: air, water, soil**
- **Ingested/injected: food, drugs**
- **Mother's health: wellness, disease**
- **Emotional/attitudinal: factors that cause +/- hormone release**

3.6 Teratogens





Teratogens: negative influences

- **Environmental toxins e.g. pollutants in air, water**
- **Consumed substances e.g. alcohol, nicotine**
- **Diseases e.g. rubella, HIV**
- **Embryonic stage most vulnerable → women may not know of pregnancy**

Teratogen effects

- **Death, malformation, growth retardation, or functional defect**
- **Effects influenced by**
 - **Timing of exposure**
 - **Amount of exposure**
 - **Genetics (from twin studies)**
 - **Males more susceptible**

3.7 Influences of Drugs



Pregnancy and drugs

- **Prescribed: may give more benefit than risk**
- **Alcohol → fetal alcohol syndrome (spectrum)**
- **Nicotine → low birth weight, preterm delivery, sudden infant death**

Pregnancy and drugs

- **Recreational drugs**
- **Cocaine → low birth weight, stillbirth, spontaneous abortion**
- **Marijuana (heavy use) → brain damage**
- **Heroin → addiction passed to child**

3.8 Nutritional Influences



Pregnancy nutrition

- **Extra nutrients for mother's tissue and to avoid low birth weight**
- **Nutrients to be monitored or supplemented**
- **Folic acid, iodine for neural support**
- **Vitamin D for bones**
- **Iron for blood**

3.9 Perinatal Influences



Perinatal factors

- **From 6th month through 1st week after birth**
- **Birth options and risks**
 - **Home with midwife**
 - **Birth center**
 - **Hospital**
- **Postpartum depression**
 - **Sadness, fatigue, worry about caring/harming**

3.10 Motor Development



Motor development

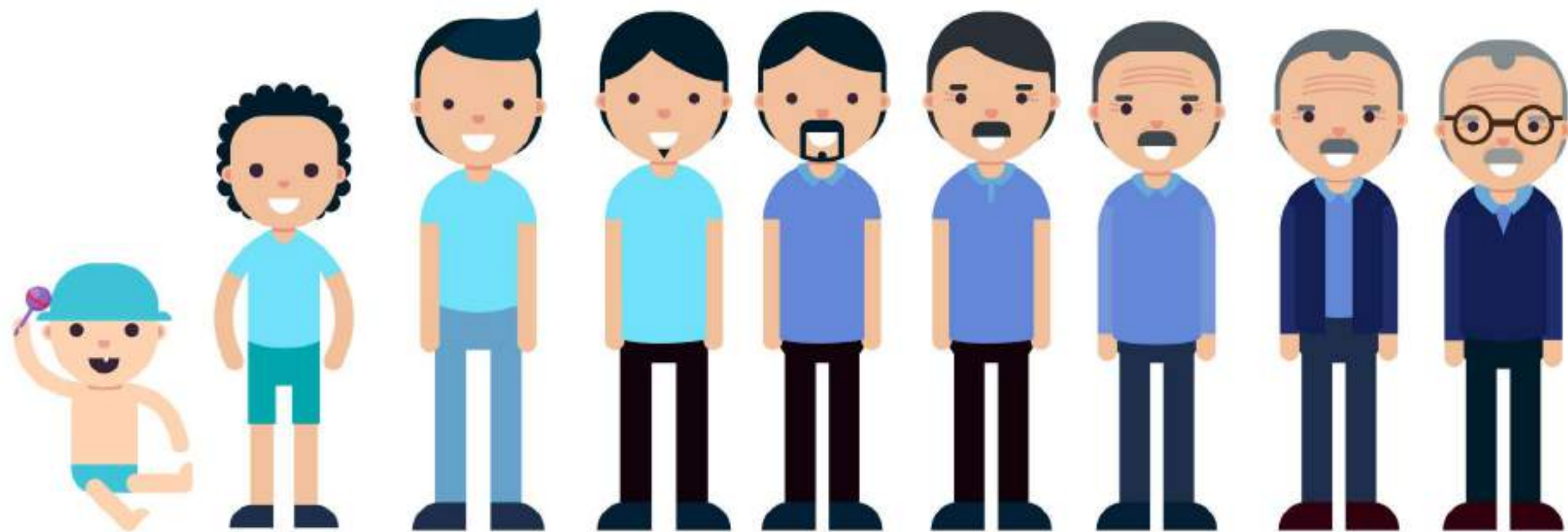
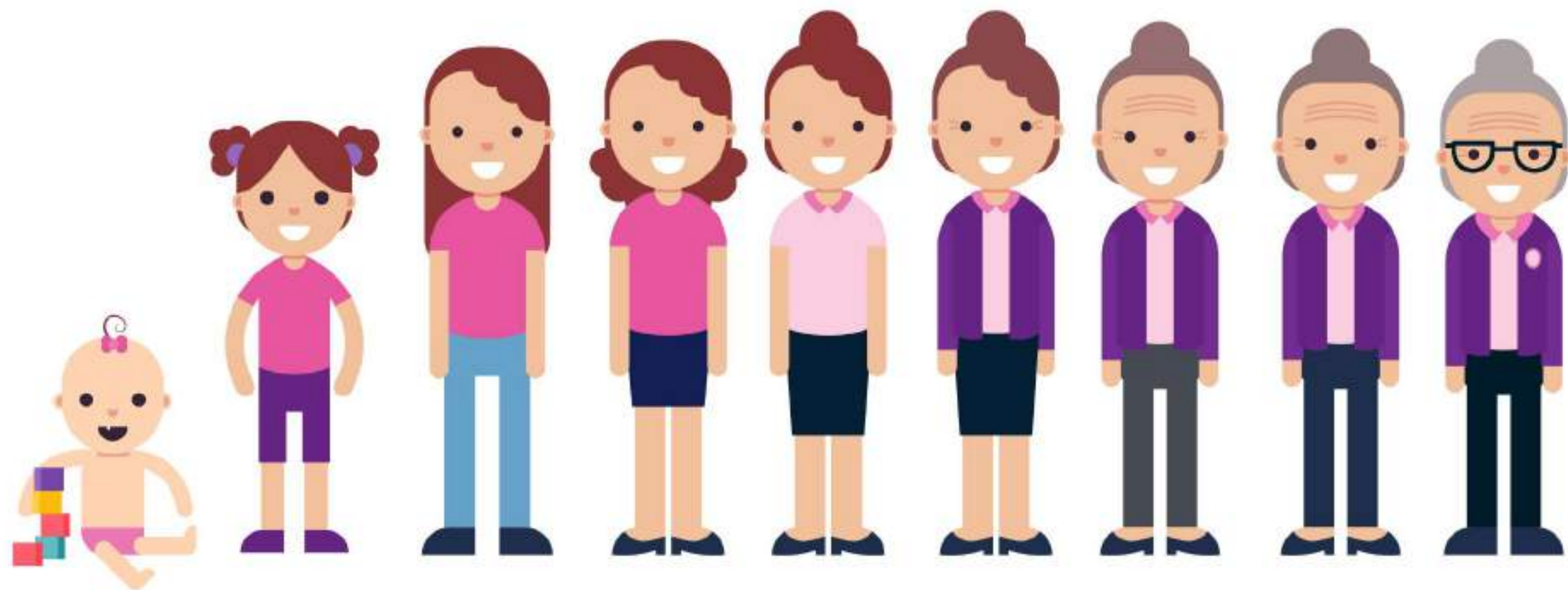
Newborn reflexes (not intentional)

- Moro (startle)
- Walking
- Rooting (turn to stroke)
- Palmar (grasp)
- Plantar (flex down)
- Babinski (flex up)

Voluntary movement

- **Proximodistal development = gross and close (leg/arm) before fine and far (toes/fingers)**
- **Scooting, standing, crawling, hand/mouth manipulating**
- **Walk & first words around age 1**

3.11 Physical Growth, Maturation, and Aging



First 2 years

- **Rapid growth and weight gain**
- **If not, even with good nutrition → failure to thrive**
- **Change body proportion**
- **Body “catches up” with head size**

Childhood

- **Early childhood**
 - **Control of large motor**
 - **Start controlling small motor**
- **Middle childhood**
 - **Gain muscle strength**
 - **Large/small motor mastery**

Adolescence and Young Adulthood

- **Gain to full height**
- **Muscle maturity → peak**
- **Sexual maturity → peak**

Middle Adulthood

- **Weight gain**
- **Joint deterioration**
- **Presbyopia (lens hardening → near-sighted)**

Middle Adulthood

- **Hearing loss**
- **Sexual changes**
- **Menopause in women**
- **Andropause in men**

Late Adulthood

- **Primary aging**
- **Continued from middle adulthood**
- **Graying/thinning hair**
- **Thinning of skin**
- **Loss of height**
- **Muscle loss**

Late Adulthood

- **Secondary aging from disease**
- **Arthritis**
- **Diabetes**
- **Hypertension**
- **Heart disease**

3.12 Sexual Maturation



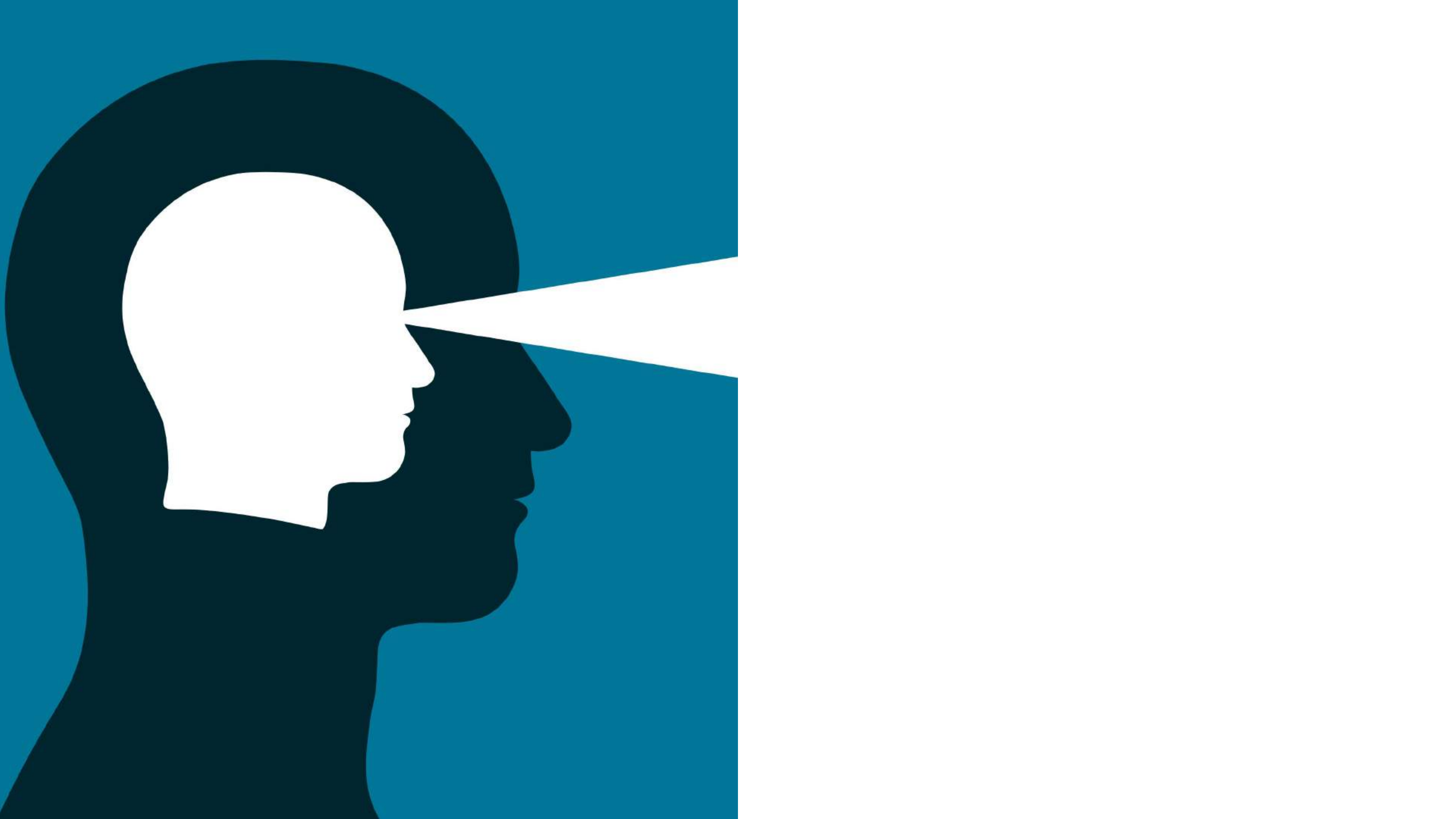
Primary sex features

- **Females enter puberty 2 years earlier than males**
- **Menarche earlier from higher nutrients/fats**
- **Females: estrogen and progesterone → develop ovaries, uterus, vagina**
- **Males: testosterone → enlarged penis/testicles**

Secondary sex features

- **Females: breasts, hips**
- **Males: Adam's apple, voice change, facial hair**
- **Both: pubic/underarm hair, change sweat glands**

4. Perceptual Development Throughout the Lifespan



**4.1 Sensorimotor
Activities**

4.2 Sensitive Periods

**4.3 Sensory
Deprivation**

4.4 Habituation

4.5 Sensory Acuity

4.1 Sensorimotor Activities



Early perception

- **Infants perceive with hands + mouth + eyes + ears**
- **Intermodal perception**
- **Example: info from mouth or hands recognized by eyes**

Early perception

- **Objects not recognized as unified until parts seen moving together**
- **“Visual cliff” proves depth perception (evolutionary?)**
- **Object permanence after ~8 mo.**

4.2 Sensitive Periods



Sensitive periods: opportunity windows

- **Sensitive period = time
when certain experiences
ideal for development**
- **Examples in infancy:**
 - **Language learning**
 - **Scooting, crawling
before walking**

4.3 Sensory Deprivation



Sensory malnutrition

- **Related to sensitive periods in infancy**
- **2 Sources:**
 - **Visual/auditory problems**
 - **Lack of tactile sensation (being touched)**

Sensory malnutrition

- **Harlow's surrogate mother experiment**
- **Monkey infants socially maladjusted, depressed**
- **Eastern European infant orphanages 1990's**
- **Untouched infants growing up with social, mental deficits**

4.4 Habituation



Programmed to ignore

- **Fish know nothing about water**
- **Sensory novelty stimulates, but repetitive input gets ignored – “tuned out” by brain**
- **Helps us cope in setting**
- **Makes us adaptable in new setting**

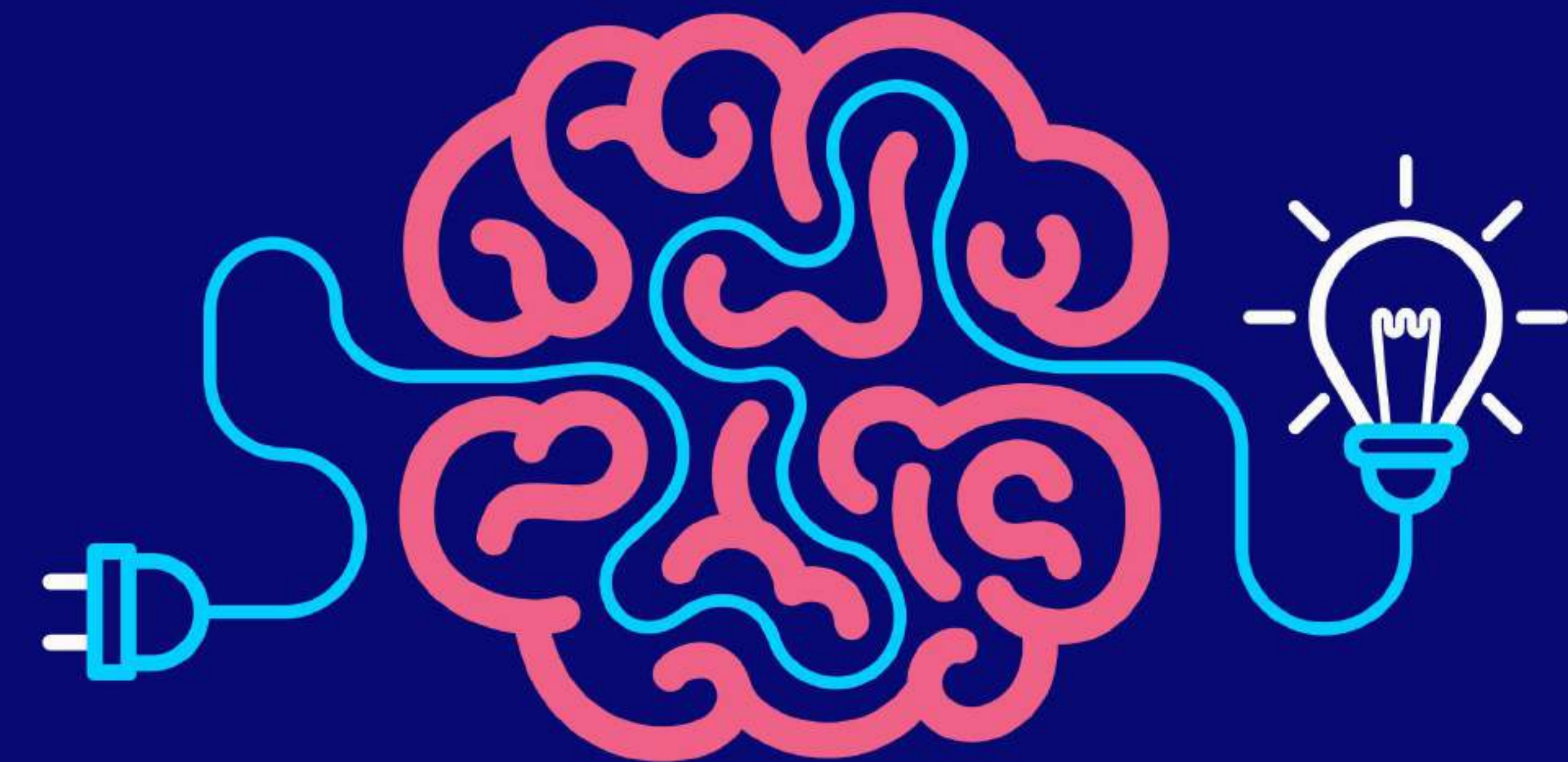
4.5 Sensory Acuity



Developing acuity

- **Visual ~8 to 18 years**
- **Auditory ~10 to 15 years**
- **Acuity declines after that**
- **Training and/or necessity can enhance acuity**
- **Examples: athletes, musicians**

5. Cognitive Development Throughout the Lifespan



5.1 Thinking

5.2 Piaget's Cognitive Development Theory

5.3 Vygotsky's Sociocultural Theory

5.4 Play

**5.5 Information
Processing**

5.6 Executive Function

5.7 Attention

5.8 Memory

**5.9 Problem Solving
and Planning**

**5.10 Environmental
Influences**

5.11 Expertise

5.12 Wisdom

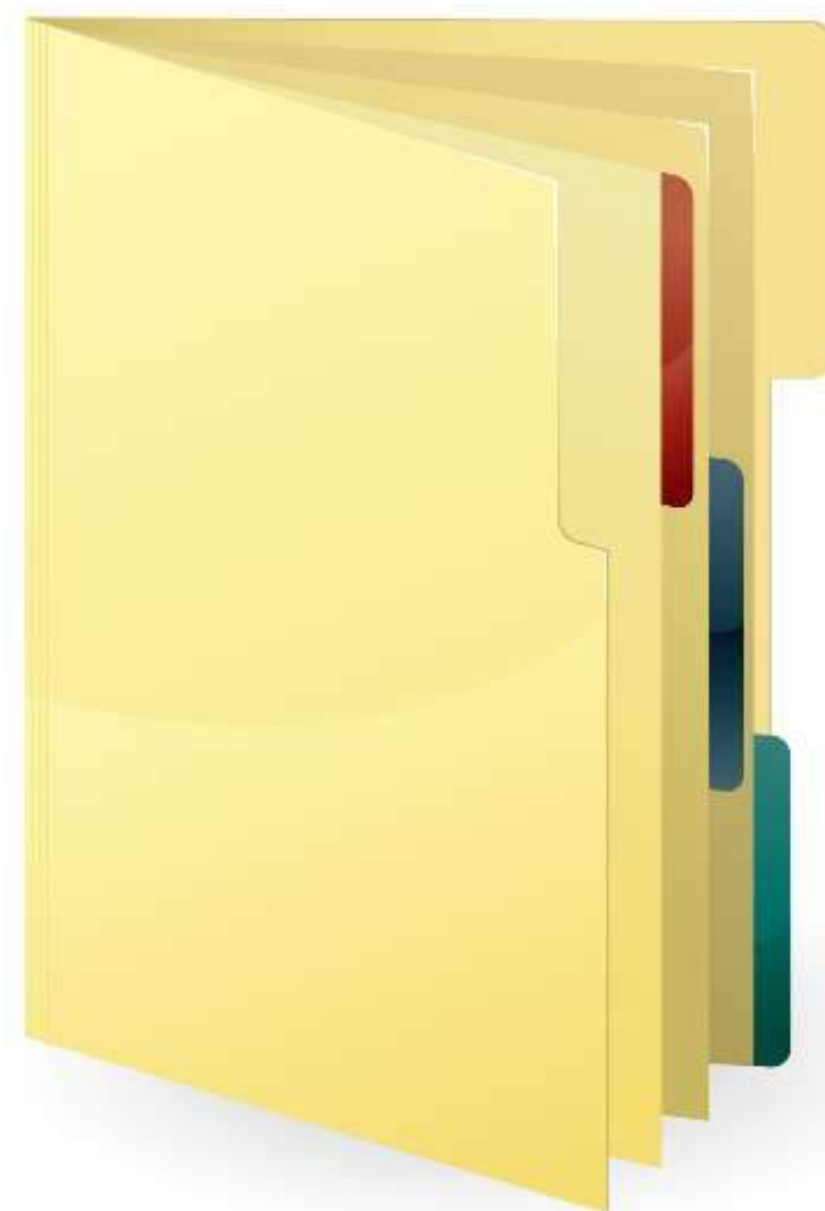
5.1 Thinking



Thinking and its development

- Thinking differences infant to child to teen to adult
- How/when do changes occur?
- What can/can't be thought at different ages?

5.2 Piaget's Cognitive Development Theory



Piaget: observing child thinking/acting

- **Before cognitive science, but mostly accurate**
- **Stages/ages with distinct thinking traits**
- **Should show up across cultures**

Piaget: First model

- **Schema = concept or category of information**
 - **Disequilibrium = new facts don't match schema**
 - **Adaptation (reorganize)**
 - Accommodate (modify)**
 - Assimilate (incorporate)**
- **New equilibrium**

Piaget: Example

- Schema: DOG = small, furry
- Disequilibrium: Say “DOG” parent says, “No, CAT”

Piaget: Example

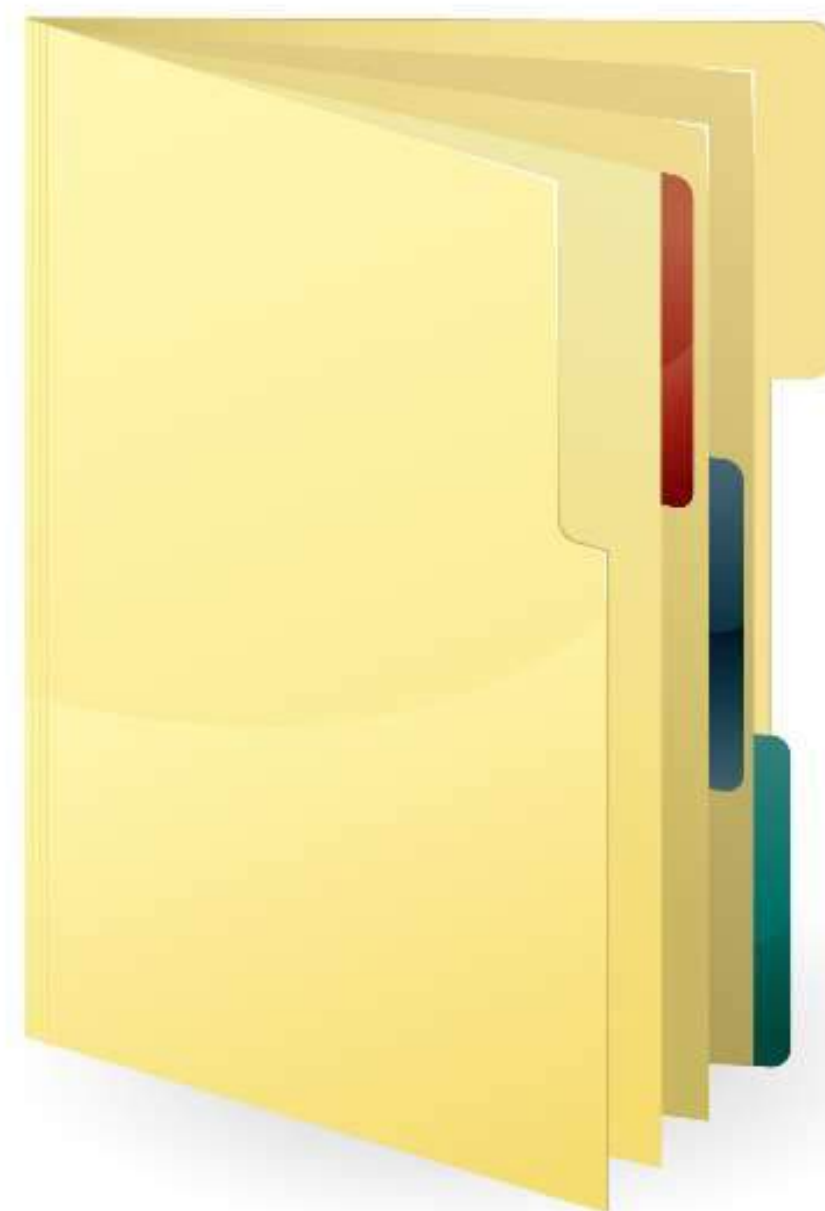
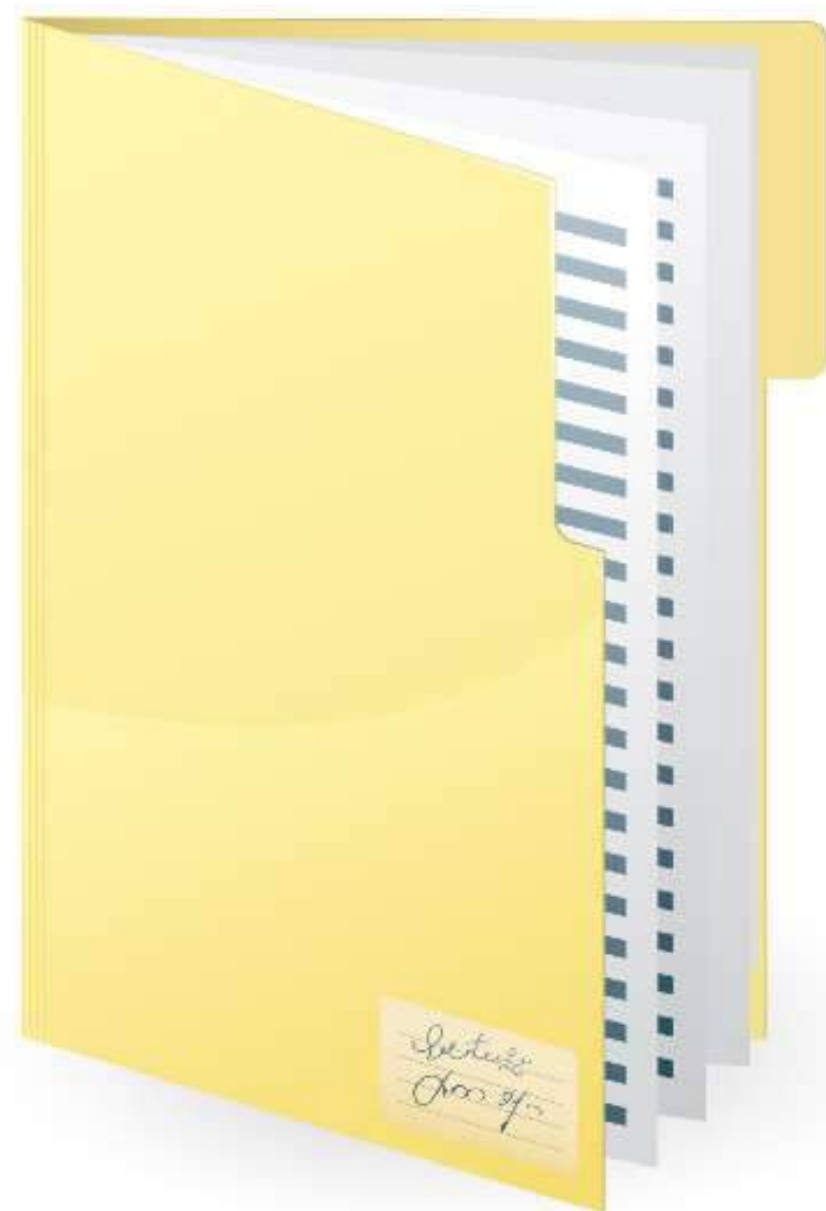
- Adaptation

Accommodation:

Some small, furry are
not dogs

Assimilation: Create
new CAT schema

→ New equilibrium
achieved



Sensorimotor stage (0-2)

Characteristics & challenges

- **Senses and manipulation**
- **Focus and intention**
- **Object permanence**
- **Imitation**
- **“Random” explorations and experimentation**

Preoperational (2-7)

- **Centration (can filter only 1 attribute out of many), so not able to understand**
- **Conservation of quantity**
- **Reversibility of operations**
- **Egocentric viewpoint**
 - **From “my” perspective**
 - **Animism (“Ball is sad”)**

Preoperational (2-7)

- **“Play” as primary learning mode**
- **Language acquisition**
- **Also time of mastering gender identity/stability**

Concrete operations (7-11)

- **Mastery of previous challenges**
- **Less egocentric**
- **Logical reasoning**
 - **Classification (by attribute)**
 - **Seriation (sequencing)**

Formal operations (11-)

- **Abstract reasoning**
 - **Literary symbols**
 - **Ideological implications**
- **Quantitative concepts**
(higher math, geometry)
- **Hypothetical reasoning**
 - **Generate hypotheses**
 - **Idealization**

5.3 Vygotsky's Sociocultural Theory



Vygotsky: Social learning

- **Internalization = soaking up environment (learning) through interaction with others**
- **Observation and imitation central to learning**

Scaffolded learning

- Parent/sibling/teacher assesses zone of proximal development (gap in skills or knowledge)
- “Teacher” sets up mediated learning experiences
- Sets environment to fill in gap sequentially

5.4 Play

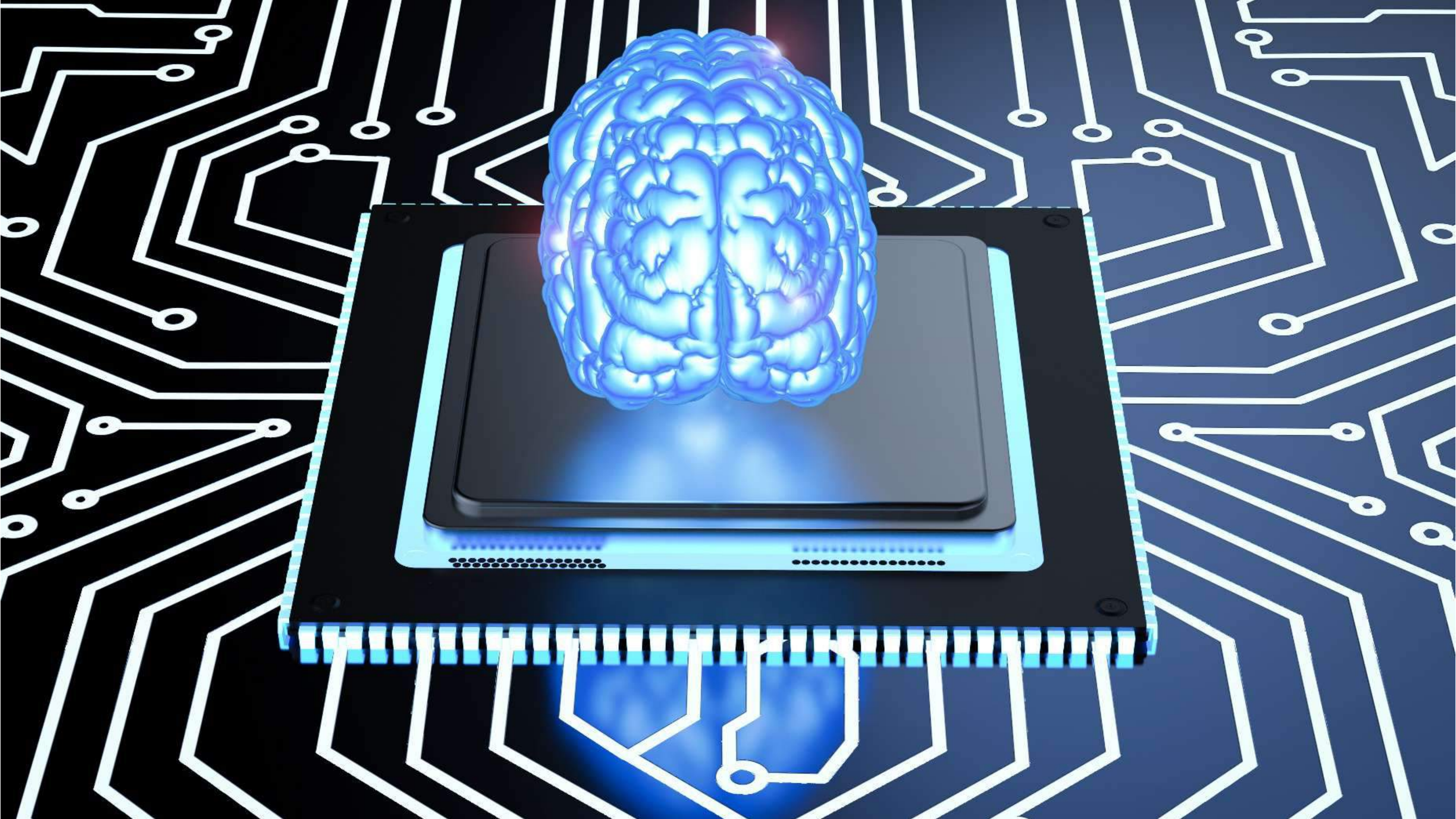




Play: child's work

- **Fits Piaget and Vygotsky**
- **Stages of play:**
 - **Solitary**
 - **Parallel**
 - **Cooperative**
- **Types of play:**
 - **Constructive**
 - **Symbolic/pretend**

5.5 Executive Function



Executive function

- **All brain processes that affect learning/behavior**
- **Examples: control of attention, memory**
- **Early childhood (2-5):**
 - **Inhibitory control (block impulses)**
 - **Working (temporary) memory**

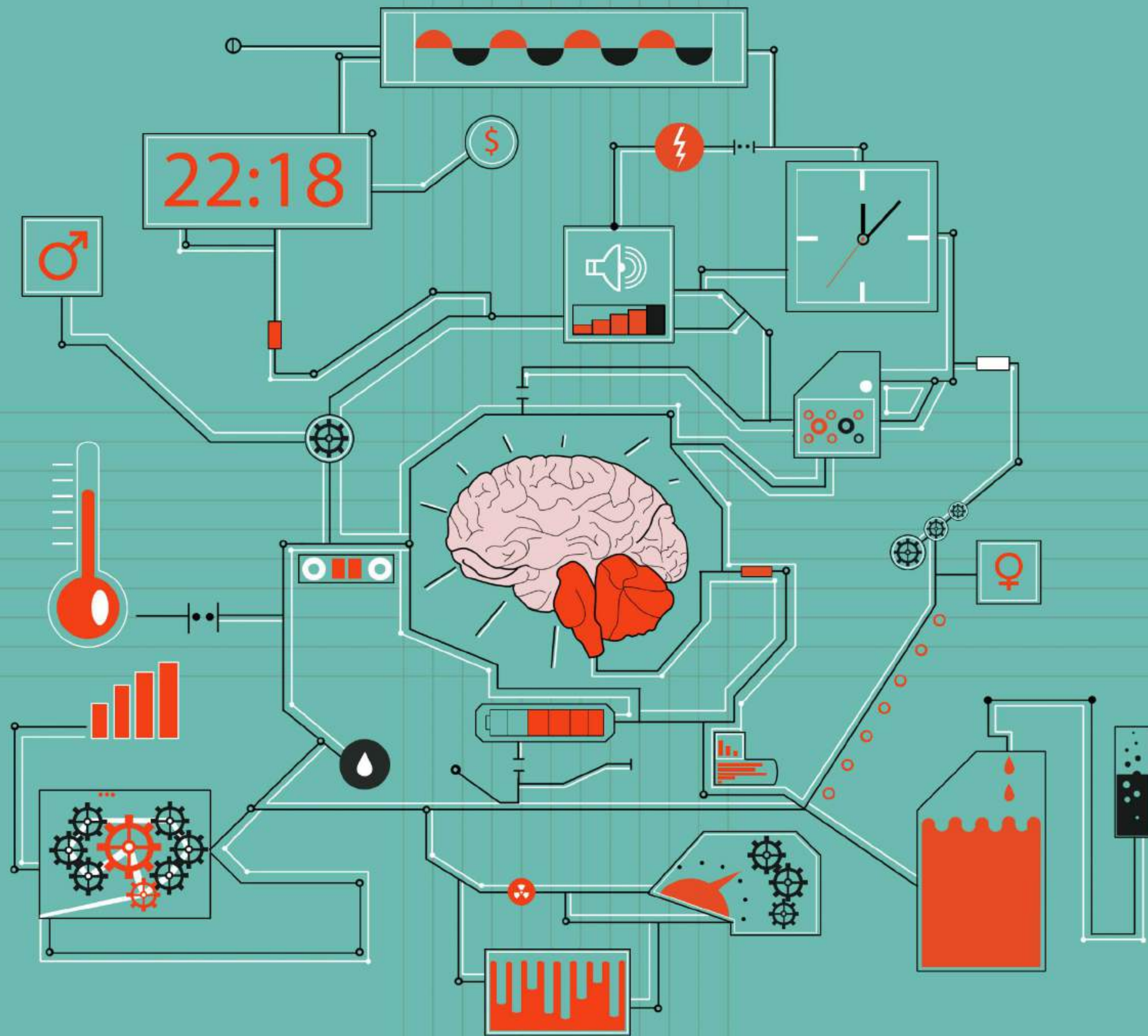
Executive function

- **Middle childhood (6-12):**
 - **Verbal working memory**
 - **Plan/organize**
 - **Cognitive flexibility**
- **Adolescence:**
 - **Strong improvement of all previous**

Executive function

- **Adulthood:**
 - **Myelination in prefrontal cortex for maximum cognitive ability (peak 20-29)**
 - **Decline in memory in later adulthood**
 - **Cognitive flexibility starts declining age 70**

5.6 Information Processing



Cognitive science brain models

- Explain how executive function works
- How stimuli “out there” → useable knowledge
- Memory processes:
 - Attend (focus)
 - Encode (retain)
 - Retrieve (recall)

5.7 Attention

NEXT EXIT

**ATTENTION
PLEASE!**

Attention

**Act of focusing/filtering
sensory input**

- **Sensory input is constant,
changing, and vast**
- **From earliest age, brain
learns to filter and attend
to small portion of input**

5.8 Memory



Working memory (aka “short-term memory”)

- **Like computer RAM
(temporary storage
before processing)**
- **Capable of storing few
bits of information**
- **Size of bits can be
enlarged by chunking**

Rehearsal

**Prevent loss of working
memory contents**

- **Maintenance rehearsal =
rote/repetition**
- **Elaborative rehearsal =
encoding by activity or
by relating to previous
knowledge**

Long-term memory

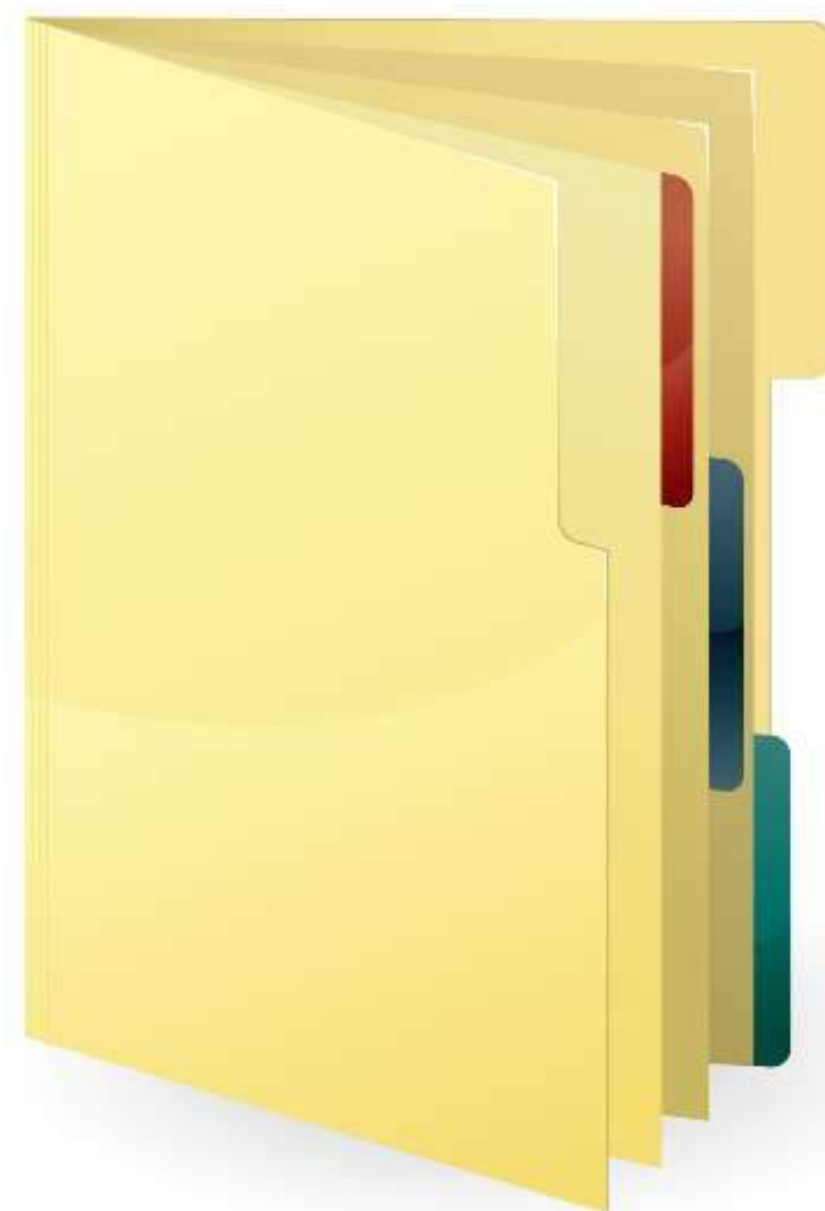
Like computer storage

- **Semantic = facts and information**
- **Episodic = experiences and events**
- **Procedural = “how-to”**

Schemata (plural)

Organizational metaphor

- **Like folders on computer screen to show contents**
- **Schema = concept or category (e.g. “dog”) [like document folder]**
- **Subschema = sub-category [folder in folder]**



5.9 Problem Solving and Planning



Problem-solving ability

- **Related to developing prefrontal cortex and myelin sheathing**
- **Ability in childhood, big increase in adolescence, more in early adulthood**

Synthesizing memory for new situations

- **Brainstorming (idealizing and rearranging memory)**
- **Creating/using heuristics (general rule, mental map)**
- **Ability to work backward from goal**

5.10 Environmental Influences



Cognitive influencers

- Long-term stress (family, SES, events)
- Affects brain structure development
- Affects hormone balance brain/body
- Culture & gender
- Expectations mold cognitive functions

5.11 Expertise



**10,000 Hours = 10
years**

- **Expertise: know, apply, analyze, and synthesize**
- **Associated with middle adulthood → peak of knowledge/ability**
- **Good for promotion, mentoring, or entrepreneurship**

5.12 Wisdom



Wisdom of age?

- **Associated with late adulthood (but not all)**
- **Self-awareness, emotional stability, appropriate word/action**
- **Understanding and empathy**
- **From helping and leading others**

6. Language Development



**6.1 Vocalization and
Sound**

**6.2 Language and
Thought**

**6.3 Development of
Syntax**

6.4 Semantic Development

6.5 Pragmatics

6.6 Environmental, Cultural, and Genetic Influences

6.7 Bilingualism

6.1 Vocalization and Sound



Infant sounds

- **Cooing vowels, then add consonant**
- **4-6 months all possible language sounds**
- **Werker: phonemic discrimination by 12 mo.**
- **Recognizes/makes sounds for native language**

Infant sounds

- **Holophrasic speech 12-13 mo. (single words or partial words with several intentions)**
- **Using partial words in later years indicates difficulty with phonology (sequencing sounds)**

Theories of speech

- **Behaviorist: rewards for speech approximations**
- **Nativist: Language Acquisition Device (LAD)**
- **Specific brain areas adapted for language**
- **Social cognitive: imitation**

6.2 Language and Thought



Chicken or egg?

- **Language or thought first?**
- **Can you think an object or idea without a word for it?**
- **Evidence on both sides of argument**

Chicken or egg?

- **Piaget: schemata build as language develops**
- **Vygotsky: self-talk → thinking**

6.3 Development of Syntax



Creating sentences

- **Toddler's 2-word telegraphic speech**
- **Example: “More juice”**
- **Preschoolers speak in whole sentences**

Creating sentences

- **Overregularization:
apply rule instead of
exception**
- **Example: “We goed to a
movie.”**

6.4 Semantic Development



Word meanings

- **Carey: young vocabulary explosion uses “fast mapping” – associating new word with old schema**
- **Or do children just guess at word meaning, refine later?**
- **Young children literal, can't understand metaphor or figures of speech**

6.5 Pragmatics





Usage defined by context

- **Speech altered by where you are or who is listening**
- **Example: Use different words or phrases at home and at school**
- **Example: Switching between ethnic and “standard” speech**

6.6 Environmental, Cultural, and Genetic Influences





Language and culture

- **American: many first words
nouns (names of things)**
- **Chinese: many first words
verbs (actions and
relationships)**
- **Whorf: linguistic relativity**
- **Culture and environment
shape perception and
language**

6.7 Bilingualism



Bilingual children

- **Best to learn 2nd language in early childhood (sensitive period)**
- **Learning two languages simultaneously might cause temporary delays**
- **Research: more brain activity than monolingual children**

7. Intelligence Throughout the Life Span



7.1 Concepts of Intelligence and Creativity

7.2 Developmental Stability and Change

7.3 Heredity and Environment

7.4 Reaction Range

7.5 Intelligence Tests

7.6 Giftedness

7.1 Concepts of Intelligence and Creativity



Intelligence

- **Memory, understanding, communicating, planning, problem-solving**

Intelligence

- **3 components (Sternberg)**
 - **Processing/analytical**
 - **Contextual/practical**
 - **Experiential/creative**
- **Fluid vs. crystallized (Cattell)**

Intelligence categorized

- **Gardner's 8 dimensions**
 - **Linguistic**
 - **Logical/mathematical**
 - **Spatial**
 - **Musical**

- **Bodily/kinesthetic**
- **Interpersonal (between)**
- **Intrapersonal (within)**
- **Naturalistic**

Creativity factors

- **Uses 3 types of intelligence**
 - **Ability to analyze**
 - **Ability to synthesize**
 - **Ability to make practical applications and changes**
- **Needs divergent thinking to restructure problems or see multiple solutions**

7.2 Developmental Stability and Change



Intelligence

- **Measured intelligence fairly stable and predictive**
- **“*g* factor” concept of generalized intelligence**

Intelligence

- **Crystallized intelligence increases with age**
 - **Intelligence stable**
 - **Knowledge and ability to use knowledge changes**

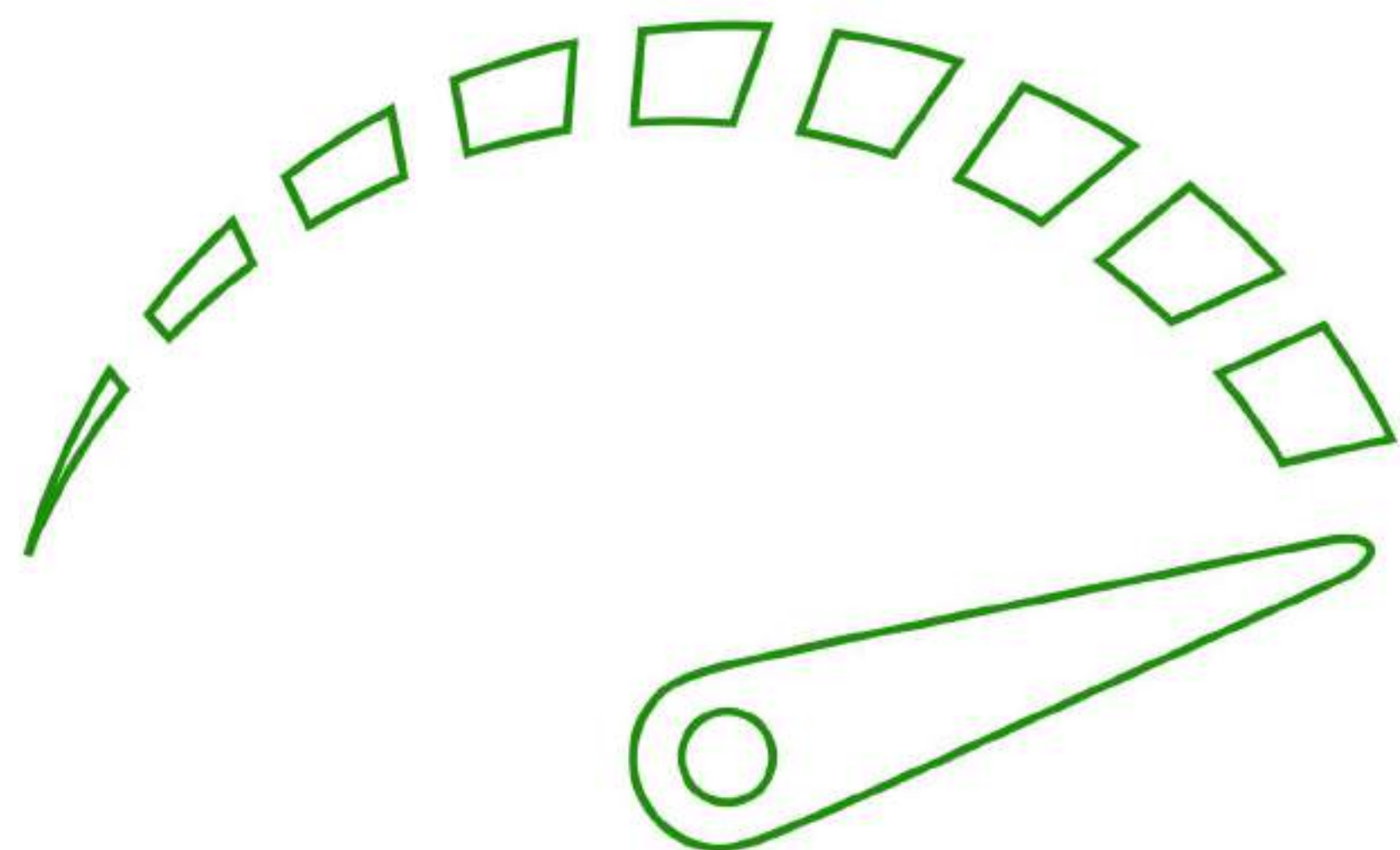
7.3 Heredity and Environment



Boosting intelligence?

- Can a person's intelligence be increased?
- Genetic material is fixed
- If environment/education improved
 - Increase IQ scores
 - Increase some abilities, not *g* factor

7.4 Reaction Range



Reaction range

- **Defines upper/lower limits of phenomenon**
- **Intelligence reaction = range of IQ set by genes, influenced by environment**
- **Explains IQ differences in twins raised apart**

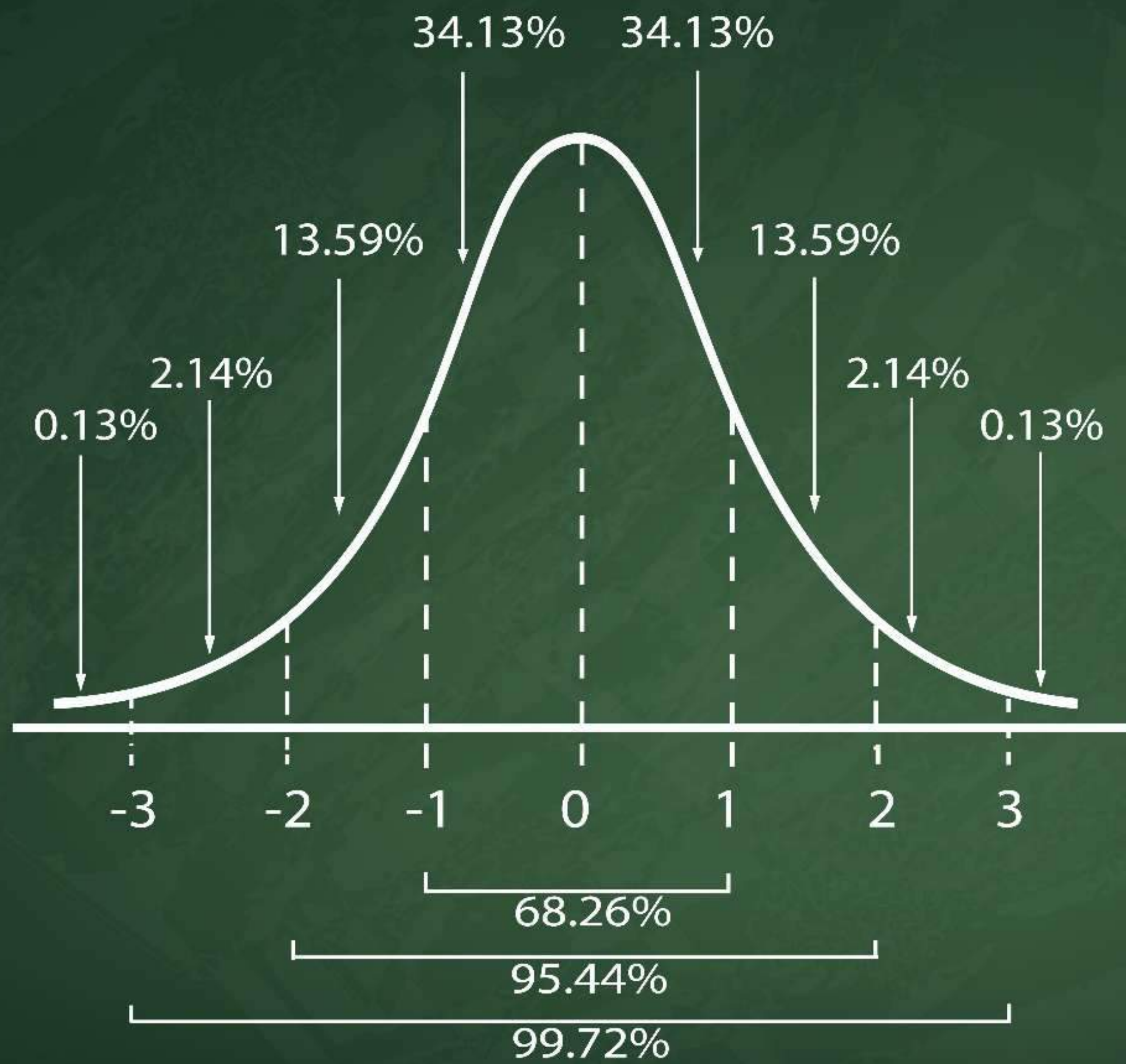
7.5 Intelligence Tests

Intelligence testing

- **Measures verbal and non-verbal abilities/ aptitude (functioning ability)**
- **Aptitude is predictive of future ability and success**

Intelligence testing

- “Normed” = 100 is average with 15 pts per marking (standard deviation)
- Bell-shaped curve



IQ categories

- **130+ very superior (2%)**
- **116-129 superior (13.5%)**
- **101-115 above avg. (34%)**
- **85-99 below avg. (34%)**
- **70-84 borderline (13.5%)**
- **69- mentally defective (2%)**

7.6 Giftedness



Giftedness

- **High IQ + 1 or more of these:**
 - **High achievement**
 - **Persistence on task**
 - **Creativity and/or artistry**
 - **Leadership ability**

- **Other possible traits:**
 - **Highly verbal/
imaginative**
 - **Prefer working alone**
 - **Emotional/social
difficulty**

8. Social Development throughout the Life Span





8.1 Attachment

8.2 Self

8.3 Social Cognition

**8.4 Social Learning
and Modeling**

8.5 Gender

**8.6 Interpersonal
Relationships**

**8.7 Moral
Development**

8.8 Prosocial Behavior

8.9 Risk and Resilience

8.10 Aggression

8.11 Wellness

8.1 Attachment



Infant bonding types

- Secure: feels safe, cries when handed off
- Insecure resistant: never assured; clings
- Insecure-Avoidant: not assured, not clinging
- Disorganized: not assured, reactions not consistent

Attachment findings

- **Harlow's monkeys:
infants least fear with
“contact comfort”
mother**
- **Childcare not harmful to
attachment unless poor
quality**

Attachment findings

- **Poor/lack of attachment
→ psychopathic
tendencies: dishonest,
lack of empathy, cruelty,
crime**

8.2 Self



Know self, then others

- **Self-awareness 15 mo.**
 - **“Separation anxiety”**
- **Sets stage for social emotions: guilt, shame, empathy, etc. in early childhood and beyond**

8.3 Social Cognition



Self meets world

- Social cognition:
schemata about others
- Toddler: “I want” and “Do myself” must balance
with others’ needs
- Early/middle childhood:
inclusion of adults and
authority outside family;
peer group rising

Self meets world

- **Adolescent: peers as measure and validation**
- **Young adult: new schemata as “junior” adult at work**
- **Middle adult: growing authority with others**
- **Late adult: relinquishing authority to others**

8.4 Social Learning and Modeling



Cognitive learning theory

- **Learning by observing behavior and consequences (of adults, peers, etc.)**
- **Early example: Social referencing = look to model to gauge how to feel/act**
- **Later example: teen or young adult emulating role model**

Bandura: vicarious learning

- **Direct modeling: adults and peers in environment**
- **Symbolic modeling: TV, movies, celebrities, ads**
- **Leads to skills, motivation, sense of self-efficacy**
- **Danger of self-deception or unrealistic expectations**

8.5 Gender



Identifying with gender

- **Gender as self-determined**

Identifying with gender

- **Kohlberg's stages of gender development**
- **Gender identity 2-3 years (ability to label, but fluid)**
- **Gender stability 3-4 years (sex will stay same)**
- **Gender constancy 4-7 (no matter appearance)**

Gender roles

- **Learned attitudes and expectations**
- **Colors, toys, activities, dress, speech**
- **From parents, school, media**
- **Culture-related**

8.6 Interpersonal Relationships



Interpersonal relations

- **Modeled by parents**
- **Begin early childhood**

Interpersonal relations

- **School age childhood
peer status (ratings)**
Popular Neglected
Rejected Controversial
- **Aggressive child rated
rejected, rebellious child
rated controversial**

Interpersonal relations

- **Teens more intense yet self-centered**
- **Danger of co-rumination into negative emotions**
- **Adult love (Sternberg)**
 - **Excitement/passion**
 - **Intimacy**
 - **Commitment**

8.7 Moral Development

A young boy with dark hair, wearing a brown and white striped shirt, is looking up at a signpost. He has his hand on his chin, appearing thoughtful. The signpost has six wooden arrows pointing to the right, each with a different destination written on it in black, distressed capital letters. The background shows a clear blue sky and the bare branches of trees.

COMPUTER GAME

SCHOOL

TOY STORE

FUTURE

AMUSEMENT

PLAYGROUND

Kohlberg: Developing moral reasoning

- **Stages related to Piaget's cognitive stages**
- **Stages based on cognitive development in relation to perceiving/solving moral dilemmas**
- **Warning: morals not always the same as ethics**

Kohlberg: Level 1 (Preconventional)

**Based on rules, rewards,
punishments**

- **Stage 1: Be good because
you get good things**
- **Stage 2: Follow the rules**

Kohlberg: Level 2 (Conventional)

**Based on expectation of
reciprocity and conformity**

- **Stage 3: Good behavior
pleases others, so
conform**
- **Stage 4: Social contract
and cohesion is important,
not always self-interest**

Kohlberg: Level 3 (Postconventional)

**Based on individual rights
and equality**

- **Stage 5: Relative (not absolute) standards and decisions**
- **Stage 6: Universal principles of justice, fairness, equity (i.e. ethics over morals)**

Kohlberg: Miscellaneous

- **Moving up levels: Foster by hearing discussion of moral issues/dilemmas by those on higher level**
- **Kohlberg's moral dilemma**

8.8 Prosocial Behavior



Empathetic behavior

- **Actions to benefit or comfort others**
- **Observed in infants
(give toy to parent)**
- **Reinforced by parents,
then peers, teachers**
- **Reinforced by media**

8.9 Risk and Resilience





**Risk: willingness to
take chances**

- **Varies per person and
per circumstance**

Risk: willingness to take chances

- **Factors and issues**
 - **Realistic or unrealistic?**
 - **Fear-based or objective assessment?**
 - **Clear or unclear consequences?**

Resilience: thriving under adversity

- **Upset but willing to adapt and change**
- **Not angry or defeated at circumstance**

Resilience: thriving under adversity

- **Positive/optimistic outlook**
- **Grit/perseverance to take on challenges**
- **Trait or learnable skills?**

8.10 Aggression





3 Types of aggression

- **Instrumental: to get objective, not to harm**
- **Example: Toddler grabs toy away from another**
- **Hostile: intended to harm, e.g. hitting, kicking, or threatening without provocation**

3 Types of aggression

- **Relational: hostile (verbal) aggression to damage relationships**
- **Social exclusion: "Go away! You can't be our friend anymore!"**
- **Rumor spreading: "Don't talk to him. He's a weirdo."**

8.11 Wellness



Body/mind health

- **Proactive choices of diet, exercise, attitude**
- **Associated with middle adulthood, but could begin earlier or later**
- **Can be solitary, but often in collaboration**

9. Family, Home, and Society Throughout the Life Span



9.1 Family Structures

9.2 Family Relations

9.3 Parenting Styles

**9.4 Bronfenbrenner's
Ecological
Perspective**

9.5 Multicultural Perspectives

9.6 Social and Class Influences

9.7 Abuse and Neglect

**9.8 Media and
Technology**

9.9 Death and Dying

9.1 Family Structures



Who heads the family?

- **Married heterosexual couple**
- **Single parent**
- **Parent + stepparent**

Who heads the family?

- **Multigenerational adults**
- **Unwed partners**
- **Same-sex couple**
- **Any of above with adoptees**

9.2 Family Relations



Interrelationships

- **Couple relationship**
- **Define quality/
atmosphere of family
life**
- **Marital satisfaction
lowest when children
very young**

Interrelationships

- **Sibling relationships**
- **Attachment, rivalry, etc.**
- **Influenced by culture**

9.3 Parenting Styles



Ways to parent

- **Authoritarian**: top-down rules and decisions; goal = compliance
- **Permissive**: friendly, allowing, forgiving; goal = harmony, creativity

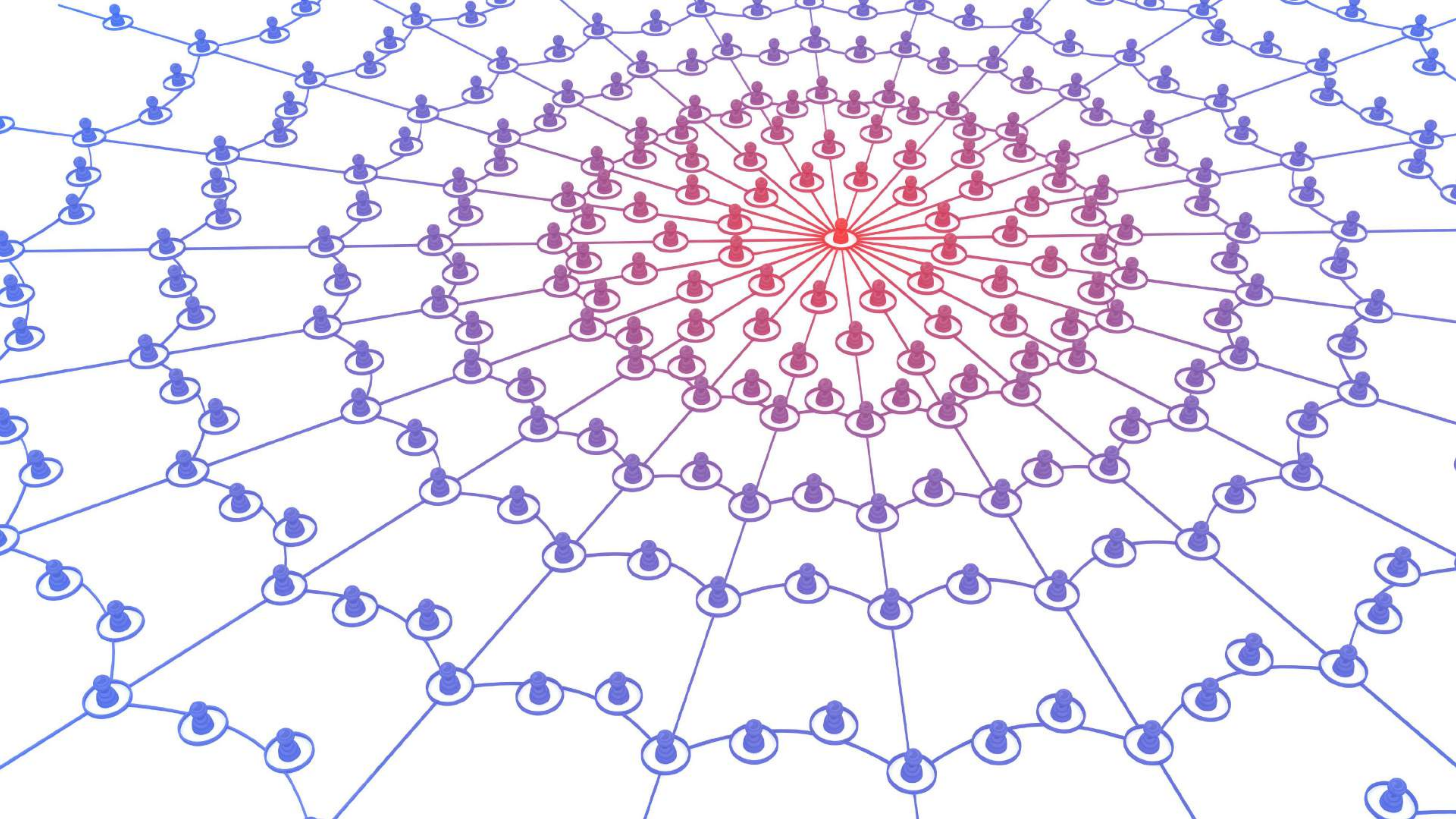
Ways to parent

- Authoritative =
discussion, explaining,
consequences; goal =
self-management

Consequences

- **Authoritarian → withdrawn/isolated or rebellious**
- **Permissive → social, academic, emotional adjustment problems**
- **Authoritative → success and popularity**

9.4 Bronfenbrenner's Ecological Perspective



Ecology of family

- **Widening circles of influence**
- **Relationships within family, extended family**
- **Neighborhood, culture, society**
- **Time, place, economics, politics**

9.5 Multicultural Perspectives

YOUR
CULTURE
IS YOUR
BRAND

Culture affects family

- **Determines dominant parenting style**
- **Defines gender roles**
- **Influences expectations, obligations toward siblings**

Culture affects family

- **Influences goals of child-rearing**
- **SES influences leisure time, disposable income, etc.**

Ethnic identity

- **Distinct from racial identity**
- **Related to self-concept and self-identity**
- **Begins in adolescence**
- **Related to cognitive gains, ability to think abstractly**

Ethnic identity

- **Think about relation to group**
 - **Think about group's relation to other groups**
 - **Solidifies in adulthood**
- Identification with ethnic group changes throughout life span**

9.6 Social and Class Influences





Influence of SES

- **Low SES stress on family:
economic, nutritional,
resources**
- **Early vocabulary affected
by low SES from differences
in verbal stimulation**
- **Malnutrition → stunted
growth and delayed
menarche**

Influence of SES

- **Low SES males especially at risk for social problems and school retention**
- **Downward spiral: low motivation, low achieving, behavior problems in/out of school**

9.7 Abuse and Neglect



Physical abuse

- **Force that can harm health, survival, development or dignity**
- **Hit, kick, shake, scratch, pinch, scald, burn forced positions or ingestion**

Physical abuse

→ Personality disorders, PTSD, depression, anxiety, aggression, substance abuse, and eating disorder

Sexual abuse

- **Pressure to engage in sexual activities, indecent exposure, display pornography, sexual/genital contact**

→ Guilt, PTSD, fears, sexual dysfunction, addictions, eating/personality disorders

Psychological abuse

- **Isolate, terrorize, deny emotional response, humiliate to convey worthlessness**
- **Self-blame, abnormal attachment, internalization, learned helplessness**

Neglect

- **Lack of care, nourishment, supervision**
 - **Absenteeism, clothing lack, medical and dental needs, poor hygiene**
- Physical delays, poor social and relational skills, poor executive function**

9.8 Media and Technology



Technology: child

- **Screen time**
- **How much at each age?**
- **Instead of play/interaction**
- **Learning**
 - **Pro: “edutainment”**
 - **Con: Bandura’s clown aggression study**

Technology: adolescent

- **Connection**
- **Collaborative learning**
- **Social media to connect for friendship, activism**
- **Alienation**
- **Social media to bully**
- **Instead of social skills**

9.9 Death and Dying



End-of-life choices

- **Dying at home**
- **In hospital with medical care**
- **Advance care directive and DNR**
- **In hospice with palliative care**
- **Euthanasia?**

Grieving

- **Kubler-Ross stages**
- **Denial**
- **Anger**
- **Bargaining**
- **Depression**
- **Acceptance**

Grieving

- **Criticism: some do not go through stages in order**

10. Personality and Emotions



10.1 Temperament

**10.2 Development of
Emotions**

**10.3 Emotional
Expression and
Regulation**

10.4 Emotional Intelligence

10.5 Freud's Psychodynamic Theory

10.6 Erikson's Psychosocial Theory

10.7 Stability and Change

10.8 Attribution Styles

10.1 Temperament



Infant temperament

- **Thomas & Chess (early)**
- **Sanguine (active)**
- **Melancholic (quiet)**
- **Choleric (irritable)**

Infant temperament

- **Later categories**
- **Easy: adaptable**
- **Difficult: irritable; linked to antisocial**
- **Slow-to-warm: low energy; tend to withdraw**

10.2 Development of Emotions



First emotions

- **Newborns' first
(negative) emotion:
distress**

First emotions

- **Basic emotions (Ekman):**
 - **Anger**
 - **Disgust**
 - **Fear**
 - **Happiness**
 - **Sadness**
 - **Surprise**

Secondary emotions

- **Shades and combinations of basic emotions**
- **Hurt = sad+angry**
- **Worried = sad+fear**
- **Curious = happy+surprise**
- **Startled = surprise+fear**

Secondary emotions

- **Social emotions, e.g.
embarrassment,
empathy**

10.3 Emotional Expression and Regulation



Regulating emotions

- **Infants: self-soothing, find support when afraid**
- **Toddlers: self-soothing actions, retreat from stimuli**
- **Children: conscious social emotions and strategies for discomfort**
- **Teens: complex social awareness, strategies**

10.4 Emotional Intelligence





Start: impulse control

- **Marshmallow test
predicts happiness and
success**
- **Golman: EQ, not just IQ**

Start: impulse control

- **Attributes of EI**
- **Self-awareness**
- **Self-regulation**
- **Social Skill**
- **Empathy**
- **Motivation**

10.5 Freud's Psychodynamic Theory

CONSCIOUS MIND



UNCONSCIOUS MIND

Unconscious motives

- **Unconscious coping mechanisms from early childhood experiences**

Unconscious motives

- **Personality layers**
 - **Id: animal urges**
 - **Ego: sense of self**
 - **Superego: authority**
- **Interplay determines function and dysfunction**

10.6 Erikson's Psychosocial Theory



Eight stages of life

- **From Freud's unconscious coping mechanisms**
- **Cognitive, social, and emotional development**

Eight stages of life

- **Innate urges to complete challenges/tasks at each stage of life**
- **Stage success → fulfillment, readiness for next stage**



Erikson: Stage I (0-1)

- Trust vs. mistrust
- Infant wants sense of security in the world
- Trust comes from experience with caregivers
- Success → optimism and hopefulness about life

Erikson: Stage II (1-3)

- **Autonomy vs. shame**
- **Toddler wants sense of self-mastery while adults are monitoring and limiting everything**

Erikson: Stage II (1-3)

- **Related to walking, speech, toilet training, experimenting**
- **Success → competence and independence**



Erikson: Stage III (3-6)

- **Initiative vs. guilt**
- **Young child wants sense of independence and self-expression**

Erikson: Stage III (3-6)

- **Related to early school experience, time with new people away from family**
- **Success → confidence and willingness to try new things**



Erikson: Stage IV (6-12)

- **Industry vs. inferiority**
- **Older child wants sense of competence and realism about abilities**

Erikson: Stage IV (6-12)

- **Related to school subjects, peer relations, interactions with teachers and coaches**
- **Success → self-worth, self-esteem, self-motivation**



Erikson: Stage V (Adolescence)

- **Identity vs. role confusion**
- **Teen wants sense of own personal values and sexual orientation**

Erikson: Stage V (Adolescence)

- **Related to development of sex organs and urges, social issues, cognitive changes**
- **Success → “Who I am”**

Marcia: Identity status

- NOT stage theory
- Categories based on progress toward stable identity
- Foreclosure = early decision
- Diffusion = confused
- Moratorium = experimenting
- Achievement = settled



Erikson: Stage VI (Early adulthood)

- **Intimacy vs. isolation**
- **Young adult wants to form close relations**

Erikson: Stage VI (Early adulthood)

- **Related to one-to-one relations, social contacts, first employment**
- **Success → Ability to love and commit**

Erikson: Stage VII (Middle adulthood)

- **Generativity vs. stagnation**
- **Adult wants to create, contribute, expand**
- **Related to family (young & old), career, community**
- **Success → Purpose and generosity**

Erikson: Stage VIII (Older adulthood)

- **Integrity vs. despair**
- **Wants to find satisfaction and/or resolution with past**
- **Accept decline of cognitive processing skills**

Erikson: Stage VIII (Older adulthood)

- **Related to review of family, work, priorities**
- **Success → Insight and self-wisdom**

10.7 Stability and Change



Is personality stable across the life span?

- **Some aspects seem to
stay the same**
- **Some aspects seem to
be fluid**

Case for stability

Holland's personality types matched to employment

- **Realistic: animals, tools**
- **Investigative: sell, persuade**
- **Artistic: create**
- **Social: helping**
- **Enterprising: lead, sell**
- **Conventional: order, plan**

Case for change

Socioemotional theory (Carstensen)

- **With aging, people invest in emotionally meaningful goals and activities**
- **Shifts in motivation**
- **Shifts in cognitive processing**
- **Shift toward positivity**

Case for both?

Big Five model

- **Aggressiveness**
- **Extraversion**
- **Neuroticism**
- **Openness**
- **Conscientiousness (but this one tends to increase over time)**

10.8 Attribution Styles



Why do things happen?

2 Types of attribution

- **External: People behave because of what happens and how things relate**
- **Internal: People behave because of what is in them and what they want**

Why do things happen?

- **Related to cultural bias**

Collectivist → external

Individualist → internal

11. Schooling, Work, and Interventions



**11.1 Day Care and
Preschool**

**11.2 Applications of
Developmental
Principles**

**11.3 Operant
Conditioning**

11.4 Learning Styles

**11.5 Intervention
Programs and
Services**

**11.6 Facilitation of Role
Transitions**

**11.7 Occupational
Development**

11.8 Retirement

11.9 Elder Care

11.1 Day Care and Preschool





Daycare

- **For infants? Toddlers?**
- **First exposure to other adults and peers**
- **“High quality” = good ratios, interaction, activities**
- **Can boost social skills and vocabulary**
- **Can boost aggression**

Preschool

- **Typically after toilet training**
- **Curriculum and learning**
 - **Social/emotional**
 - **Language/literacy**
 - **Math awareness**
 - **Physical**
 - **Self-help**

11.2 Applications of Developmental Principles



Early childhood learning

- **Piagetian principles**
- **“Discovery learning”:
active, hands-on
exploring/experimenting**
- **“Constructivism”**

Early childhood learning

- **Vygotskian principles**
- **Teachers scaffolding learning tasks in increments**

Promoting achievement

- In middle childhood and beyond
- Appeal to intrinsic motivation: “Keep up your efforts” (not rewards)
- Lessen anxiety:
Achievement not hampered by anxiety if kept moderate

11.3 Operant Conditioning



School behavior management

Promote wanted behavior

- **Reward with praise**
- **Reward with objects,
privileges**
- **“Ripple Effect” bonus?**

School behavior management

Extinguish unwanted behavior

- **Ignore: withdraw reinforcement**
- **Punish: give unpleasant**
- **Time out: remove social contact**
- **Take away privilege**

11.4 Learning Styles



Learning preferences based on modality

- **Visual: pictures, shapes, graphs, text**
- **Auditory: listening, rhythm, singing**
- **Kinesthetic/tactile: object manipulation, body movement, rhythm**

11.5 Intervention Programs and Services

Helping development

- **Early childhood screening for disabilities, autism, ADHD, school readiness**
→ **Intervention programs**
- **Mandated programs: intervention/support in schools, e.g. Title I**
- **Job training programs for disabled (non-profit)**

11.6 Occupational Development



Career ladder

- **Child: career awareness**
- **Teen: tracking**
- **Young adult: internship;
entry-level position**

Career ladder

- **Middle adult: expertise; promotion; entrepreneurship**
- **Older adult: career peak; “pass baton”**

11.7 Facilitation of Role Transitions





Coping with role change

- **Transition to student:
impulse control, routines,
time management**
- **Transition to adult worker:
schedule, personal finance,
balance work/family**
- **Transition to retirement:
mentoring, alternate
routines/activities**

11.8 Retirement



**If chosen, easier
transition and more
prepared than if
forced**

**Decision based on
health, finances,
outside interests**

**Time for avocations,
education,
volunteering, activism**

Downsizing?

11.9 Elder Care



Levels of care

- **Age in place: live at home with occasional support**
- **Assisted living: facility with range of services for support and recreation**
- **Nursing home: custodial and medical services**
- **Danger of elder abuse**

12. Developmental Psychopathology

12.1 Chronic Illnesses and Physical Disabilities

12.2 Intellectual Disability

12.3 Cognitive Disorders, Including Dementia

12.4 Trauma-Based Syndromes

12.5 Autism Spectrum Disorders

12.6 Attention Deficit/ Hyperactivity Disorders

12.7 Learning Disabilities

12.8 Asocial Behavior, Phobias, and Obsessions

12.9 Antisocial Behavior

12.10 Anxiety and Mood Disorders

12.1 Chronic Illnesses and Physical Disabilities



Chronic illness

- **Long-term condition affecting development**
- **Asthma**
- **Arthritis**
- **Diabetes**
- **Cardiovascular disease**
- **Cancers**

Chronic illness

- **Influenced by lifestyle, SES, genetics**

Physical disability

Long-term impairment

- **Prenatal (teratogens, etc.)**
- **Perinatal (complications at birth, premature delivery)**
- **Post-natal (accident, infection, illness)**

Types of impairments

- **Visual**
- **Hearing**
- **Mobility**
- **Physical defects**
- **Organ/structural damage**

12.2 Intellectual Disability



Cognitive component

- **IQ under 70**

Adaptive component

- **Daily function problems**

Early symptoms

- **Delays in motor skills**
- **Delays in speech**
- **Self-help difficulties**

12.3 Cognitive Disorders, Including Dementia



Cognitive dysfunction

- **Prenatal or brain injury**
- **Types**
 - **Memory processing**
 - **Perception (e.g. dyslexia)**
 - **Problem solving**
 - **Language**

Cognitive dysfunction

- **Oliver Sacks: “The Man Who Mistook His Wife for a Hat”**

Dementia

- **Progressive memory loss, usually late adulthood**

Dementia

- **Special case: Alzheimer's starts with dementia, progresses to**
- **Loss of self-identity and relationships**
- **Wandering**
- **Memory loss of object names and functions**

12.4 Trauma-Based Syndromes



Psychological trauma

- **Natural disaster victims**
- **Victims of hate,
violence, war, abuse**

Psychological trauma

- **Symptoms of PTSD**
 - **Re-experience by trigger**
 - **Anxiety/panics**
 - **Nightmares/insomnia**
 - **Detachment/”numbing”**
 - **Depression**

12.5 Autism Spectrum Disorders



Autism

- **Range mild to severe**
- **Unresponsive to people and social cues**
- **Difficulty making eye contact**

Autism

- **Other symptoms:**
- **Obsessive interests**
- **Compulsive repetitive behaviors**

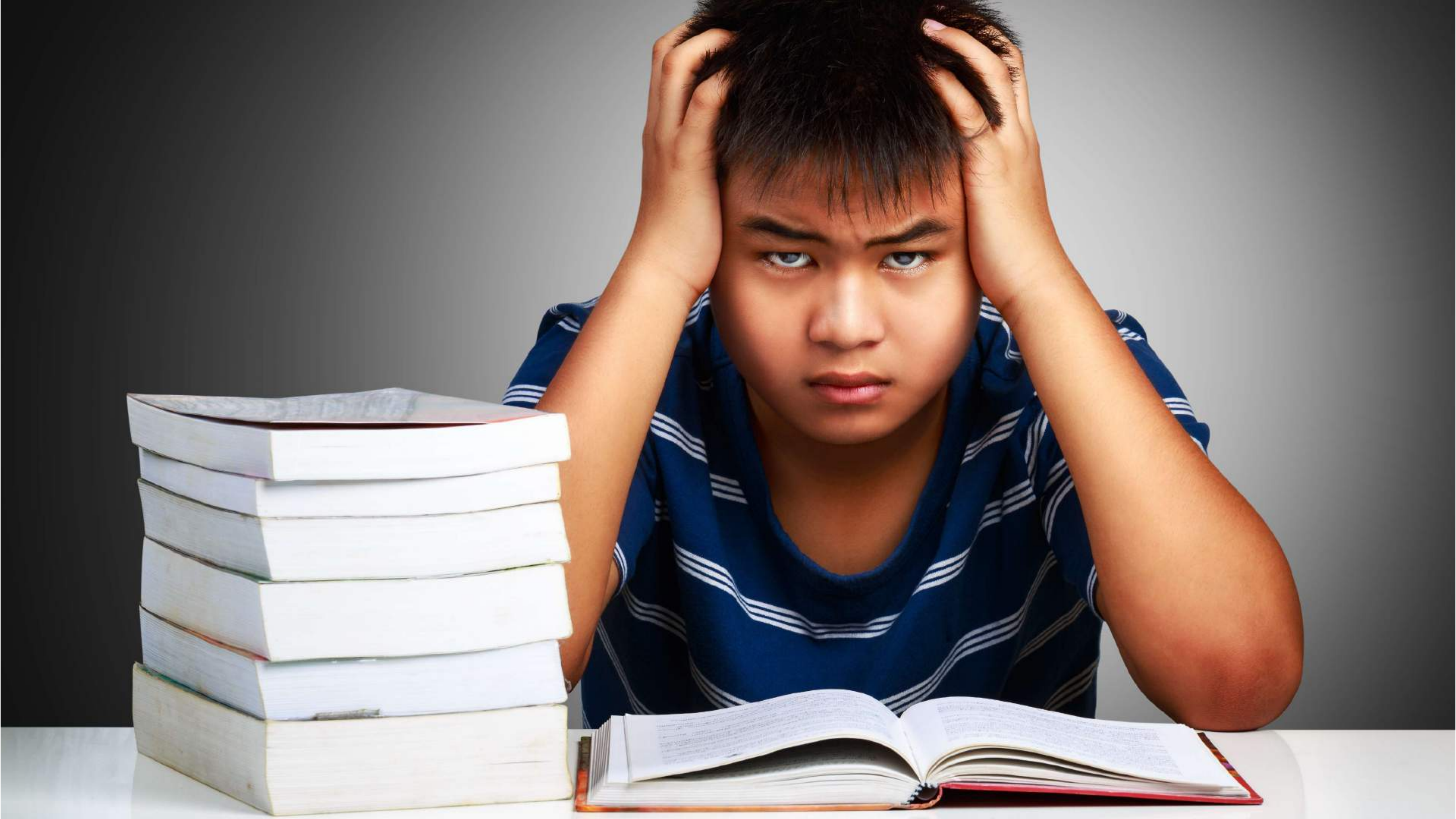
12.6 Attention Deficit/Hyperactivity Disorders



Attention-deficit/ hyperactivity (ADHD)

- **Distractible → focus difficulty**
- **Impulsive → behavior difficulty**
- **Fidgety → needs to move**
- **May show 1-2 symptoms**
- **Learning disabilities likely**

12.7 Learning Disabilities



Learning disabilities

- **Discovered in elementary grades**
- **Subject-area difficulties**
 - **Reading/language**
 - **Writing/communication**
 - **Math (computing/solving)**

Learning disabilities

- **Emotional problems likely**
- **Coping/compensation, not cure**

12.8 Asocial Behavior, Phobias, and Obsessions



Can't/won't relate

- **Mild: introversion**
- **Enjoy own mental self**
- **Prefer solitude, not shy or lonely**
- **Extreme: schizophrenia**
- **Caught in delusions, not able to relate consistently**

Can't/won't relate

- **In-between: personality disorders**
- **May avoid social contact**
- **May be uncomfortable in social settings**
- **May be secretive or “cold”**

Phobias

- **Fear that overwhelms**
- **May cause panics (e.g. agoraphobia)**
- **May cause fainting (e.g. blood phobia)**
- **Begin middle childhood or adolescence**
- **Females more affected**

Obsessions (OCD)

- **Obsession: thoughts that don't go away**
- **Compulsion: behaviors that can't be stopped**
- **Example: “I am dirty” → excessive handwashing**
- **Example: “I am being watched” → excessive checking doors, windows**

12.9 Antisocial Behavior



Mad at the world

- **Aggression, vandalism, racism, sexism**
- **Oppositional Defiant Disorder (ODD)**
- **Angry, resentful**
- **Argumentative, defy rules/authority**
- **Blames others**

12.10 Anxiety and Mood Disorders





Anxiety

- **Feeling of worry, dread, expecting something bad**
- **Physical symptoms: tightness, fatigue**

Anxiety

- **Types**
 - **Existential/crisis**
 - **Performance/test**
 - **Social/stranger**
 - **Choice/decision**

Mood disorders

- **Depression: sadness, sleep excess, comfort eating, feel rejected**
- **Bipolar disorder: cycles of high and low mood/energy**
- **Substance-induced, e.g. stimulants, alcohol leading to depression**