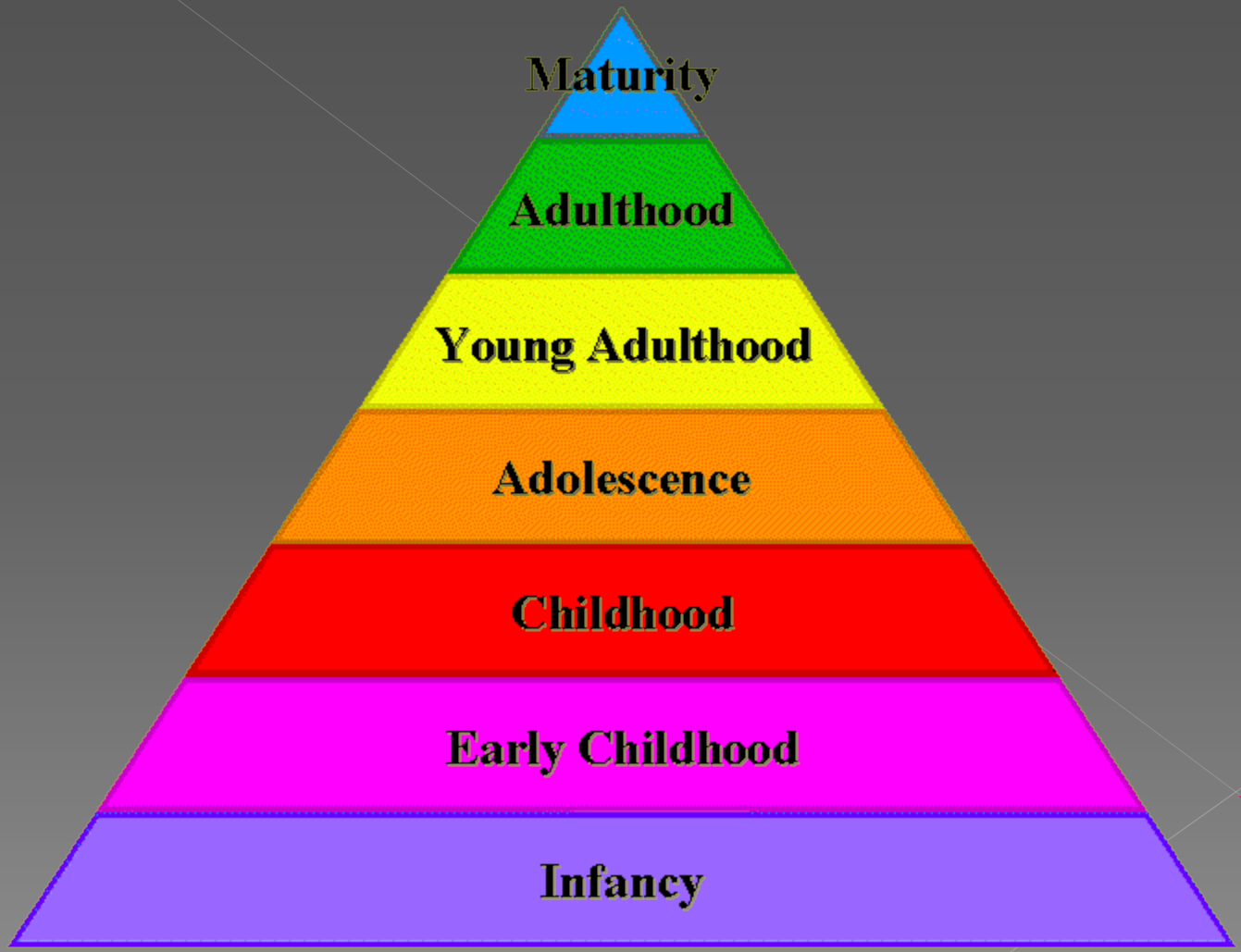
Developmental Psychology



AP EXAM

Developmental Psychology (7–9%)

Developmental psychology deals with the behavior of organisms from conception to death and examines the processes that contribute to behavioral change throughout the life span. The major areas of emphasis in the course are prenatal development, motor development, socialization, cognitive development, adolescence, and adulthood.

AP students in psychology should be able to do the following:

- Discuss the interaction of nature and nurture (including cultural variations) in the determination of behavior.
- Explain the process of conception and gestation, including factors that influence successful fetal development (e.g., nutrition, illness, substance abuse).
- Discuss maturation of motor skills.
- Describe the influence of temperament and other social factors on attachment and appropriate socialization.
- Explain the maturation of cognitive abilities (e.g., Piaget's stages, information processing).
- Compare and contrast models of moral development (e.g., Kohlberg, Gilligan).
- Discuss maturational challenges in adolescence, including related family conflicts.
- Explain how parenting styles influence development.
- Characterize the development of decisions related to intimacy as people mature.
- Predict the physical and cognitive changes that emerge as people age, including steps that can be taken to maximize function.
- Describe how sex and gender influence socialization and other aspects of development.
- Identify key contributors in developmental psychology (e.g., Mary Ainsworth, Albert Bandura, Diana Baumrind, Erik Erikson, Sigmund Freud, Carol Gilligan, Harry Harlow, Lawrence Kohlberg, Konrad Lorenz, Jean Piaget, Lev Vygotsky).

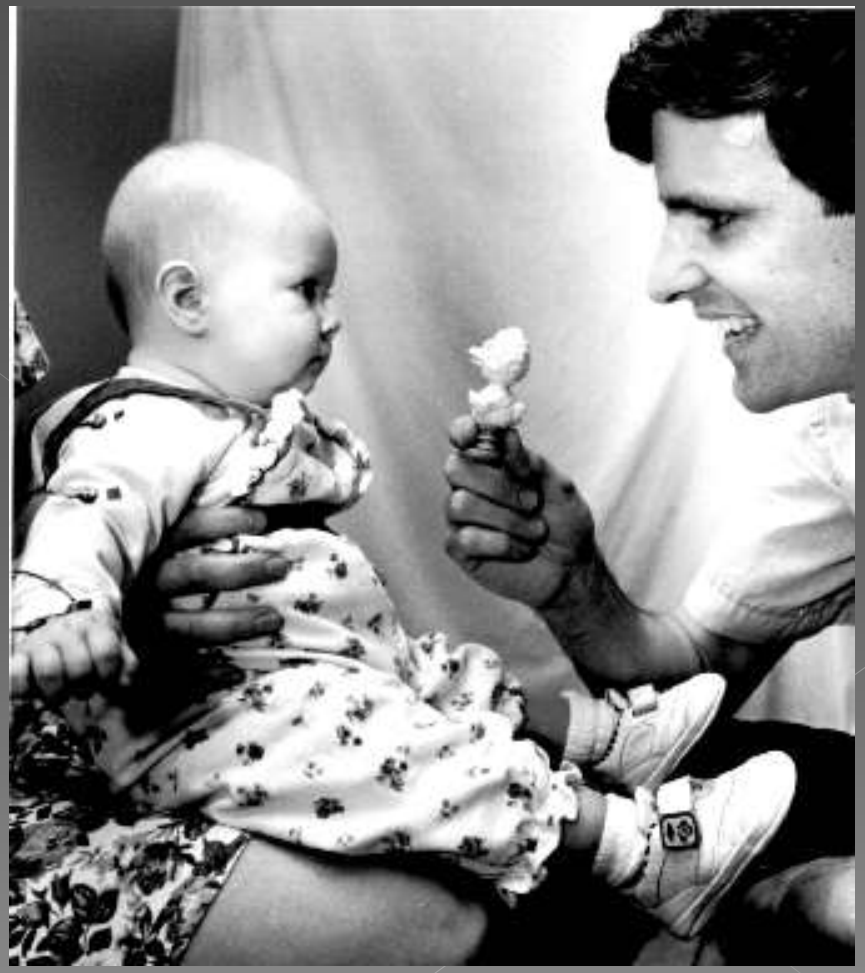
The Developing Person

- Developmental Psychology
  - a branch of psychology that studies physical, cognitive and social change throughout the life span
- Development – sequence of age-related changes that occur as a person progresses from conception to death

Developmental Psychology

- Developmental psychology looks at how thinking, feeling, and behavior change throughout a person's life.

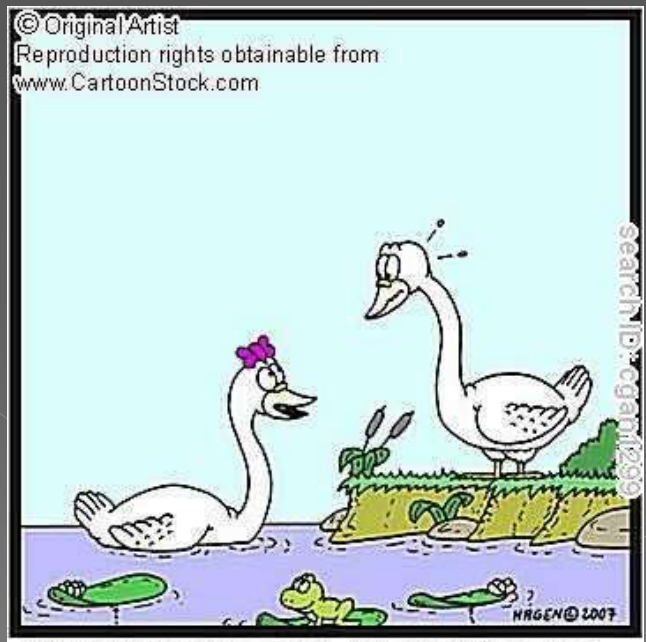
- It looks at three debates:
  - Nature vs. Nurture
  - Continuity vs. Discontinuity
  - Stability vs. Change



Nature vs. Nurture Issue

- Developmental psychology seeks to answer two big questions about heredity and environment:
  - How much weight does each wield?
  - How do they interact?

- Nature refers to the effects of heredity and nurture to the influence of environment.



How to Study the Nature-Nurture Interaction

- There are two effective ways to study nature–nurture.
  - *Twin studies:* Identical twins have the same genotype, and fraternal twins have an average of 50% of their genes in common.
  - *Adoption studies:* Similarities with the biological family support nature, while similarities with the adoptive family support nurture.

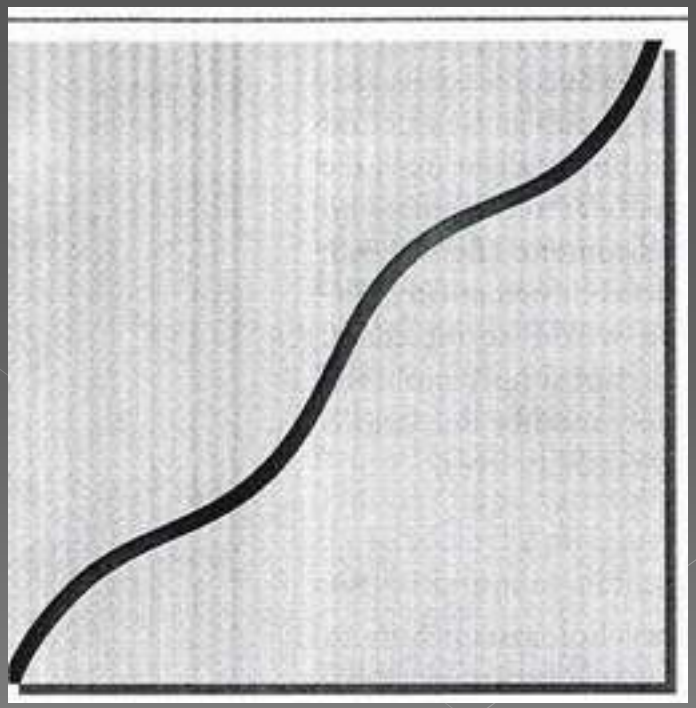
Gradual vs. Abrupt Change

- Think about how children become adults. Is there a predictable pattern they follow regarding thought and language and social development?

- Do children go through gradual changes or are they abrupt changes?

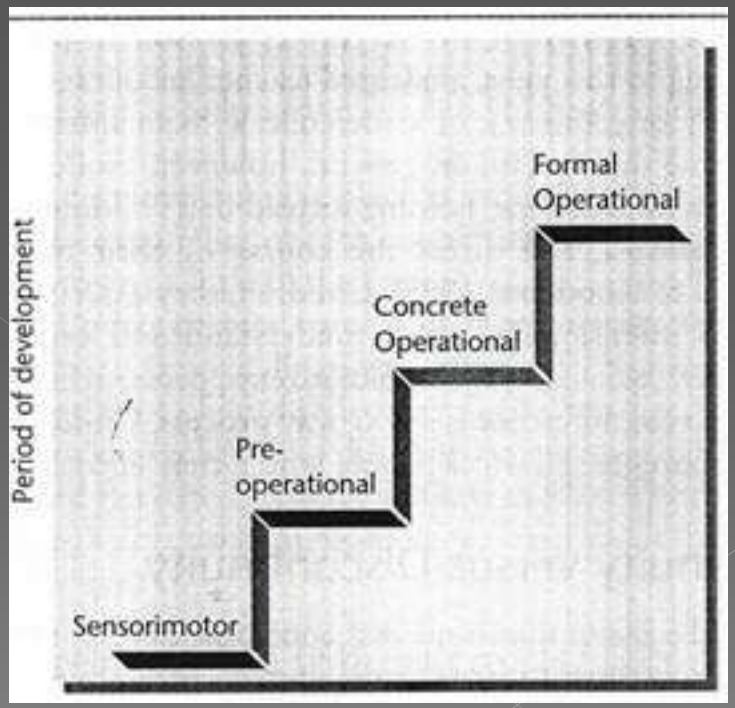
Continuity View

- The *continuity view* says that change is gradual.
  - Children become more skillful in thinking, talking or acting much the same way as they get taller.
- We know that skilled behaviors often happen in this way as with the trial and error method of learning to walk or eat with a spoon. (Observable skills･･･what about mental processes?)



Discontinuity View

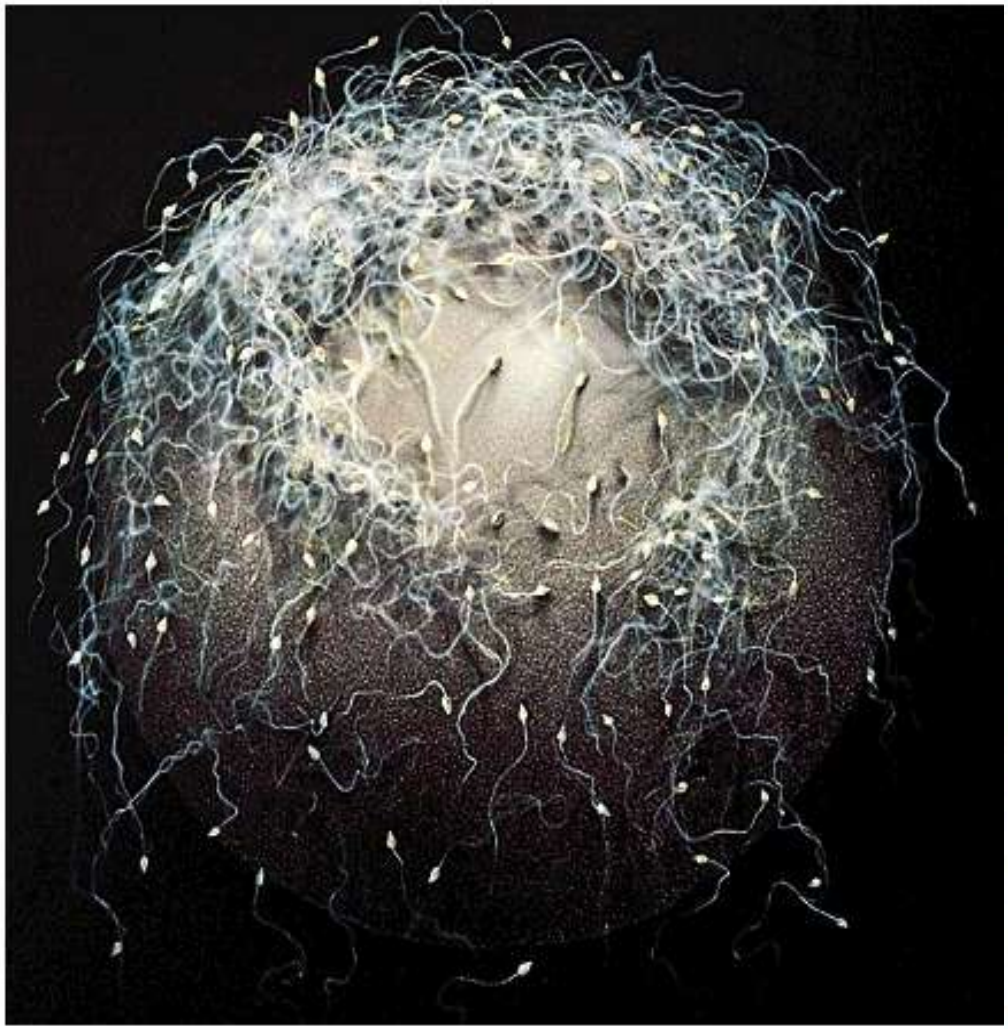
- The *discontinuity view* sees development as more abrupt—a succession of changes that produce different behaviors in different age-specific life periods called stages.
  - This is evident in beginning readers who suddenly discover the connection between letters and sounds.



Discontinuity View

- We often hear people taking about children going through "stages" in life (i.e. "terrible twos.")
- These are called *developmental stages*—periods of life initiated by distinct transitions in physical or psychological functioning
- Psychologists of the discontinuity view believe that people go through the same stages, in the same order, but not necessarily at the same rate.
- However, if a person misses a stage, it can have lasting consequences.

Union of Egg and Sperm



Developmental Periods to Know

- Prenatal Period: The developmental period before birth.
- Neonatal Period: Birth-1 month.
- Infancy: 1 month-18/24 months.

Three Developmental Periods

- Prenatal Period: 9 month developmental period before birth.
  - During this time, the genetic plan determines how all of the organs that will be formed later begin to form.
  - Here we get differentiation (cells forming specific organs). Before we differentiation, cells are "stem cells" and are capable of forming into any organ in the body.
  - One concern during this time are *teratogens*, or substances from the environment that can damage the developing baby.

Prenatal Development

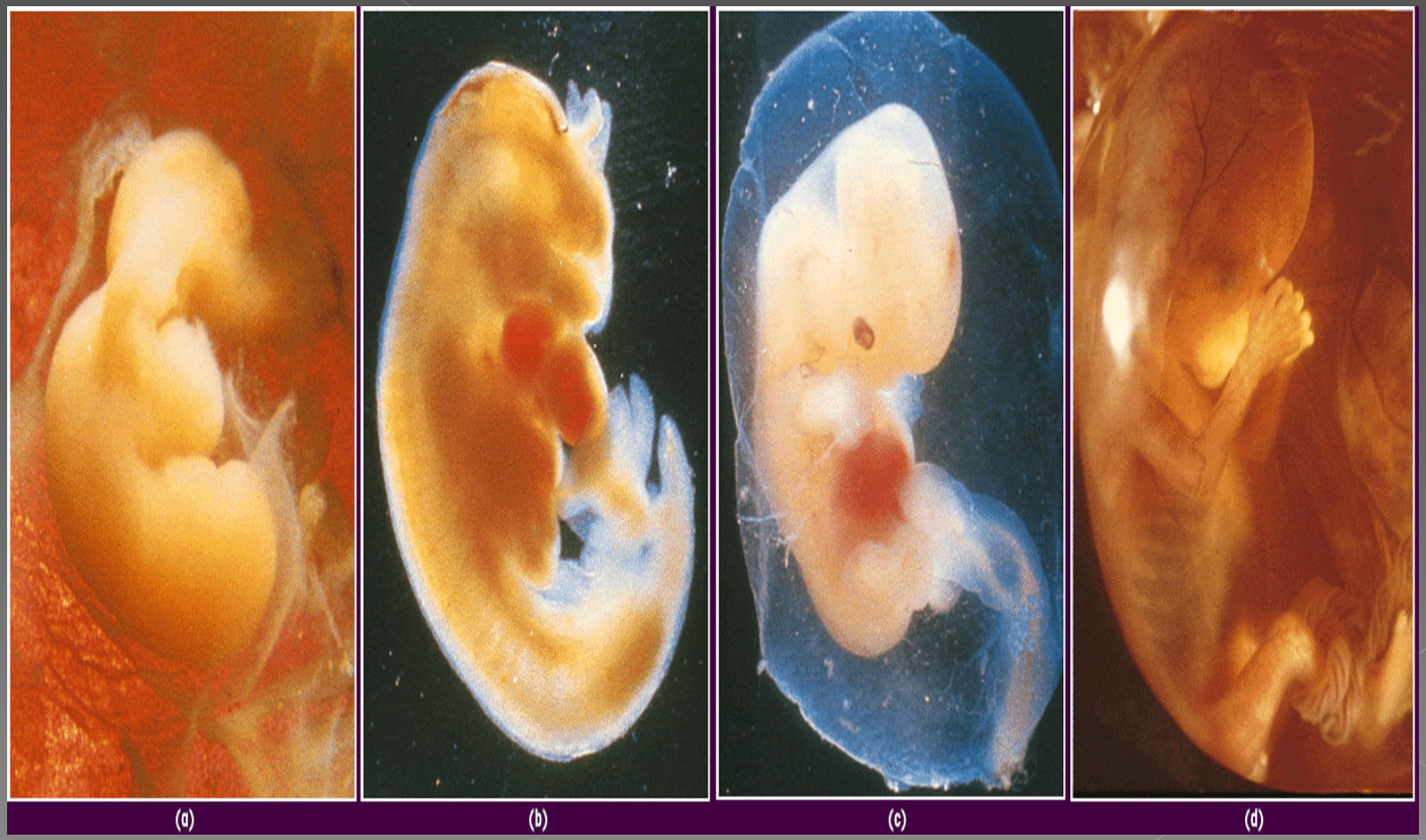
- Zygote
  - the fertilized egg by sperm
  - One celled organism (Contains chromosomes & genes with genetic info)
  - enters a 2 week period of rapid cell division
  - develops into an embryo
- Prenatal Period - from conception to birth
  - Divided into 3 phases
    - Germinal Stage (1st 2 weeks)
    - Embryonic Stage (2 weeks – 2 months)
    - Fetal Stage (2 months – birth)

Prenatal Development (Cont'd)

- Germinal Stage
  - 1st phase
  - First 2 weeks after conception
  - 7 days, zygote attaches to uterine wall
- Placenta
  - Structure that allows oxygen & nutrients to pass into fetus from mother's bloodstream & bodily waste to pass out to the mother
- Embryo
  - the developing human organism from 2 weeks through 2nd month
  - Many vital organs form
- Fetus
  - the developing human organism from 9 weeks after conception to birth
- Age of Viability
  - Age at which baby can survive premature birth

Prenatal Development

- 40 days 45 days 2 months 4 months



Maternal Drug Use

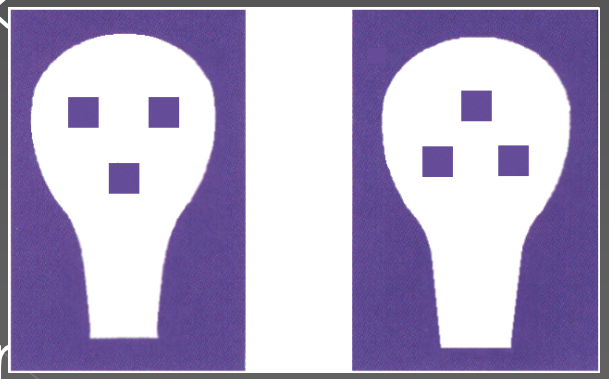
- Most drugs consumed by pregnant women can pass through placenta!
- Teratogens (REVIEW TERM!)
  - agents, such as chemicals and viruses, that can reach the embryo or fetus during prenatal development and cause harm
- Fetal Alcohol Syndrome (FAS)
  - physical and cognitive abnormalities in children caused by a pregnant woman's heavy drinking.
  - symptoms include facial disproportions
- Smoking
  - Miscarriage, stillbirth, prematurity, or complications
  - Increases risk of Sudden Infant Death Syndrome

A Tough Discussion

- Thirteen states can terminate parental rights if evidence of substance abuse exists during pregnancy. Eight states require doctors to report if evidence of parental substance abuse exists.
  - How do you think the criminal justice system should deal with mothers who abuse drugs during pregnancy?
  - If states pursue offenders of this crime, how do you think society, in general would be affected?

The Newborn

- Rooting Reflex
  - tendency to open mouth, and search for nipple when touched on the cheek
- Preferences
  - human voices and faces
    - facelike images-->



- smell and sound of mother
- Habituation
  - decreasing responsiveness with repeated stimulation
  - newborns become bored with a repeated stimulus, but renew their attention to a slightly different stimulus

Capabilities of Newborns

- People used to think that newborns began life as a “blank slate”–an empty brain and no abilities.
  - Tabula rasa

- Studies have shown that newborns have innate abilities to find nourishment, interact with others and avoid harmful situations.

Three Developmental Periods

- Neonatal Period: Birth to one month old.
  - During this stage babies are capable of responding to stimulation from all of their senses.

- Infancy Period: 1 mo. to 24 mo.
  - This is a period of rapid development, but is still heavily reliant on reflexive behavior.
    - Part of the reason we remember very little between birth and age 3 ½ is that our brain circuits are not fully developed

Childhood

- Motor Development
  - Progression of muscular coordination required for physical activities
  - Basic motor skills
    - Grasping or reaching for objects
    - Manipulating objects
    - Sitting up
    - Crawling
    - Walking
    - Running

Infancy and Childhood

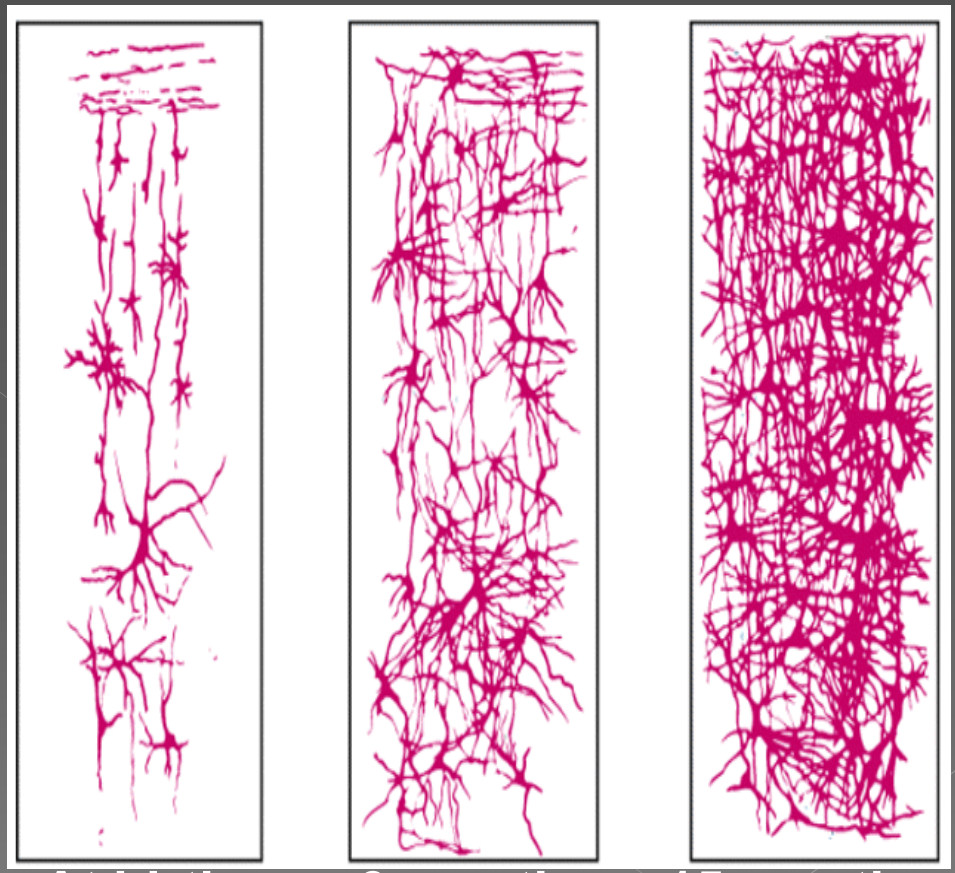
- Babies only 3 months old can learn that kicking moves a mobile- and can retain that learning for a month (Rovee-Collier, 1989).

Motor Development Principles

- Cephalocaudal Trend
  - head to foot direction of motor development
  - Gaining control of upper part of body first
- Proximodistal Trend
  - center-outward direction of motor development
  - Gain control of torso before extremities
- Infants grow quadruple birth weight in 1st year
- Episodic growth spurts vs. continuous growth

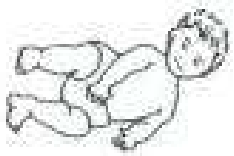
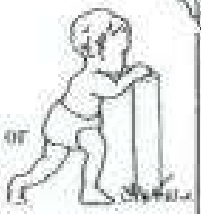
Physical Development

- Maturation
  - biological growth processes that enable orderly changes in behavior
  - relatively uninfluenced by experience
  - sets the course for development while experience adjusts it



Cortical Neurons

DEVELOPMENT CHART: Movement

	Stage 1: Birth to 6 months	Stage 2: 6 to 12 months	Stage 3: 12 to 24 months	Stage 4: 2 to 3 years
Head and Body Control Rolling	 •Lies on stomach and holds head up •Pushes up on hands  •Rolls from stomach to back	 •Rolls from back to stomach •Rolls to side and gets into sitting		
Sitting	 •Sits only with support  •Sits leaning on hands	 •Sits alone •Twists and reaches  •Catches self if pushed	 •Moves into and out of sitting  •Balances self if tilted	
Moving from Place to Place	 •Stands with support	 •May crawl or shuffle on bottom   •Pulls to stand	  •Squats to play •Walks alone or with one hand held	 •Kicks a ball  •Balances on one foot •Jumps

Learning in Development

- During infancy, youngsters begin to exploit their abilities for learning.
  - Crying, cooing, smiling, etc.

- Classical conditioning in newborns.
  - Stroking forehead and giving sweets: Newborns who were stroked on the forehead were classically conditioned to turn their head toward the side where the sweetened water was provided, even if the bottle of water wasn't present.

Social Abilities

- During infancy we also see babies engage in a lot of social interaction.

- *Synchronicity:* close coordination between the gazing, vocalizing, touching and smiling of mothers and infants.
  - Babies are preprogrammed to their mother's voice
  - Babies are preprogrammed to recognize faces

- This is so strong that we will see infants engage in the same behavior as their mother.
  - Laugh when she laughs/cry when she displays negative emotion.

Mimicking

- The idea that babies will mimic is not something that is unique to human babies.

Makak Neonatal Imitation

Attachment

- During early development we also see *attachment*, or the enduring social–emotional relationship between a child and parent or caregiver.

- Attachment occurs instinctively in many species. One example in birds is called *imprinting* where a powerful attraction occurs between infants and the first moving object or individual they spend time with.

"The Strange Situation"

- Mary Ainsworth –Displays attachment
  - Secure Attachment (Ideal) – 60%
    - Children show some distress when parent leaves, seek contact at the reunion, explore when parent gone, play and greet when parent present.
  - Insecure Attachments lack 1 or more of these traits

- Behaviorists: What should the parent do in this scenario (assuming its real)?

Social Development

- Stranger Anxiety
  - fear of strangers that infants commonly display
  - beginning by about 8 months of age
- Separation Anxiety
  - Distress the infant shows when object of attachment leaves
  - Peaks between 14 and 18 months

Origins of Attachment

- Critical Period
  - an optimal period shortly after birth when an organism's exposure to certain stimuli or experiences produces proper development
- Imprinting – Konrad Lorenz
  - the process by which certain anima

  form attachments during a critical period very early in life

Imprinting

- *Example:* A baby chick is hatched by a mother duck. The chick will follow the duck around and even try to get into the pond with the mother duck and her ducklings.

Imprinting with Human Babies

- While human babies are not as capable to move around at an early age, they will develop a strong connection to anyone who responds regularly to their signals—crying, cooing, smiling...etc.

Just how Strong is Imprinting?

- One study found that when mothers left the room, 2–4 month old babies' skin temperature dropped, a sign of emotional distress. In these youngsters, skin temperature dropped even more when the mother was replaced by a stranger.
  - In contrast, skin temperature remained constant steady if the mother stayed in the room–even if the stranger was present.
  - Monkeys raised by artificial mothers were terror–stricken when placed in strange situations without their surrogate mothers.

Lasting Effects

- Despite the strength of attachment and imprinting, individuals who lack healthy attachments in infancy are not necessarily doomed for life.

- While attachment problems are good predictors of later problems with social relationships, many people do succeed in overcoming early attachment issues.

Contact Comfort

- Why do infants become attached to parents?

- Evolutionary psychology explains attachment as a way to safeguard an infants survival by providing support and protection.

- Through natural selection, individuals with genetic tendencies to “attach” will survive, thrive and pass along those tendencies.

Cupboard Theory

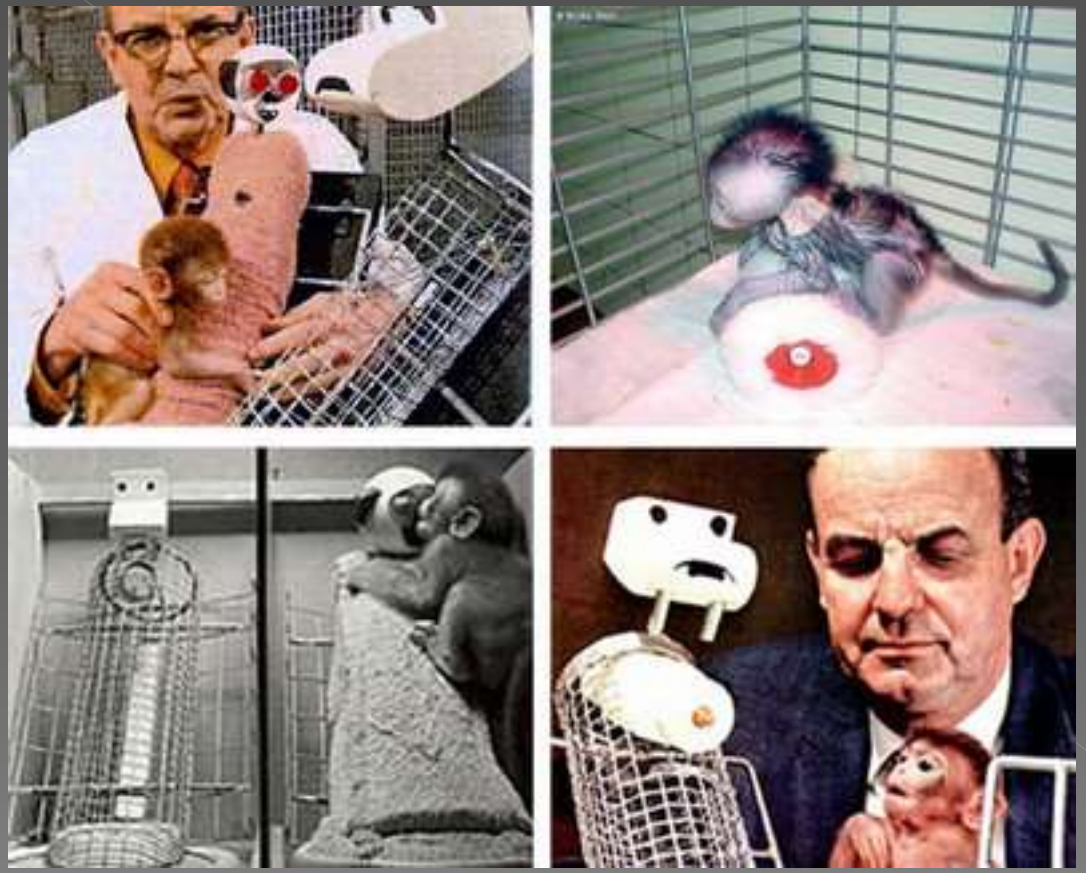
- Freud had convinced most doctors that young infants and children were so mentally underdeveloped that the only thing of real importance to infants was the breast or the bottle.
  - *Cupboard Theory:* Infants become attached to those who provide the "cupboard" containing the food supply.

Disproving Freud

- Harry and Margaret Harlow thought physical contact was important to child development.
- They conducted an experiment that used infant monkeys who had been separated from their mothers at birth.
- The monkeys had the choice between a wire monkey that provided milk (a cupboard), and a cloth covered monkey that provided only stimulation from the soft

Harry Harlow and a test subject

Harlow's Monkeys



Harlow's Findings

- Infants need more than food, they need contact comfort too. *A lack of close, loving relationships in infancy even effects physical growth.*

- A study of children in emotionally detached family environments showed slower growth and bone development. When removed from such a situation they may grow again. If, however they are placed back in the poor environment, their growth is stunted once again.
  - This phenomenon is known as *psychological dwarfism.*

Maturation

- Maturation is the orderly sequence of biological growth by which an organism develops over time, both physically and mentally.
  - Studies have shown that, when raised under adequate environment, maturation follows a predictable pattern.
- Maturation sets the basic course of development, experience adjusts it.
  - Nature and nurture at work.

Cognitive Development: Piaget's Theory

- Jean Piaget developed a theory about development called the Cognitive Theory of Development.

- Piaget's theory was a *discontinuous stage model* of development which said children will undergo a revolutionary change in *thought* at each stage.

Cognitive Development Piaget's Theory

- Piaget's theory was based on three key ideas:
  - Schemas
  - Assimilation and accommodation
  - Stages of cognitive development

- *Schemas* are mental structures that guide thinking.
  - According to Piaget, they are also the building blocks of development.
  - Schemas form and change as we develop and organize our knowledge to deal with new experiences and predict future events.

Cognitive Development: Piaget's Theory

- *Assimilation:* process that modifies new information to fit with existing schemas or with what is already known.
  - Babies suck on anything put in front of them as if it was a bottle.
- *Accommodation:* process of restructuring or modifying schemas to incorporate new information.
  - When a child learns that a butterfly is not a "bird."

  - *Assimilation makes new information fit our existing view of the world. Accommodation changes our views to fit new information.*

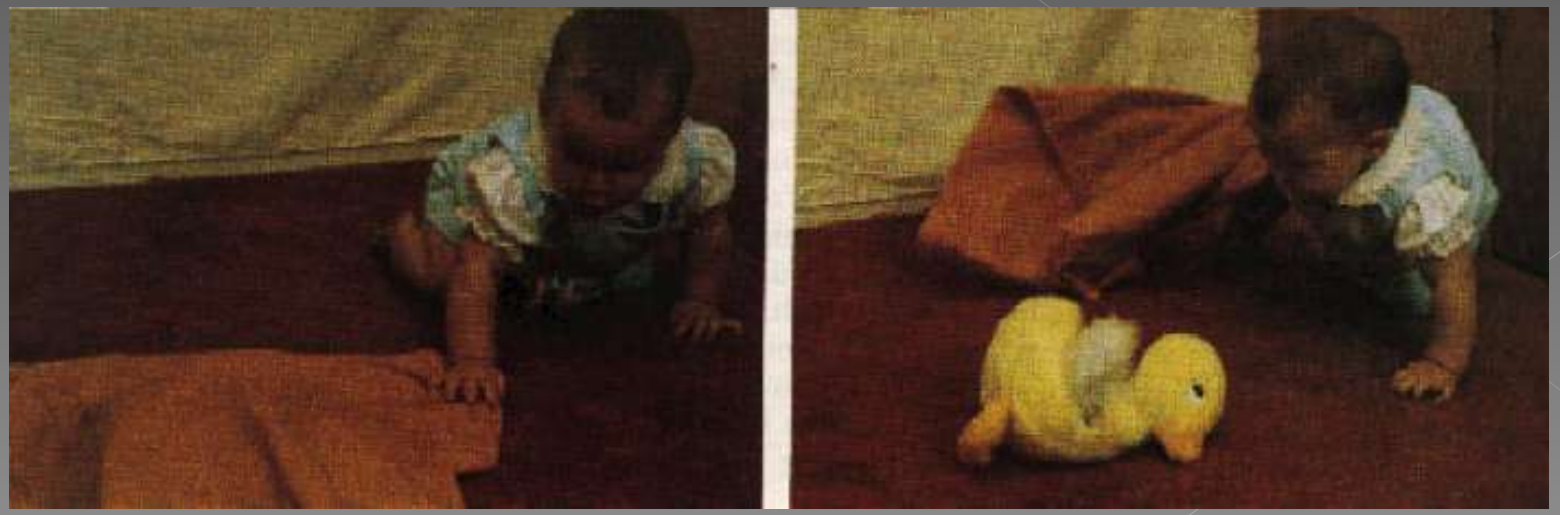
Piaget's Stages: Sensorimotor Stage

- *Sensorimotor Stage (Birth to age 2):* children mostly give reflexive responses with very little thinking involved.
  - Stranger Anxiety, or fear of strangers, is very common during this period (8 months).
  - A major step in thinking happens by year two, the ability to make mental images of objects, called *mental representation.*
    - This is the foundation of being able to problem solve

Piaget's Stages: Sensorimotor Stage

- Another key feature of this stage is object permanence, or the knowledge that objects exist independently of one's own actions or awareness.

- Video: http://www.youtube.com/watch?v=DmggsuJvxuI

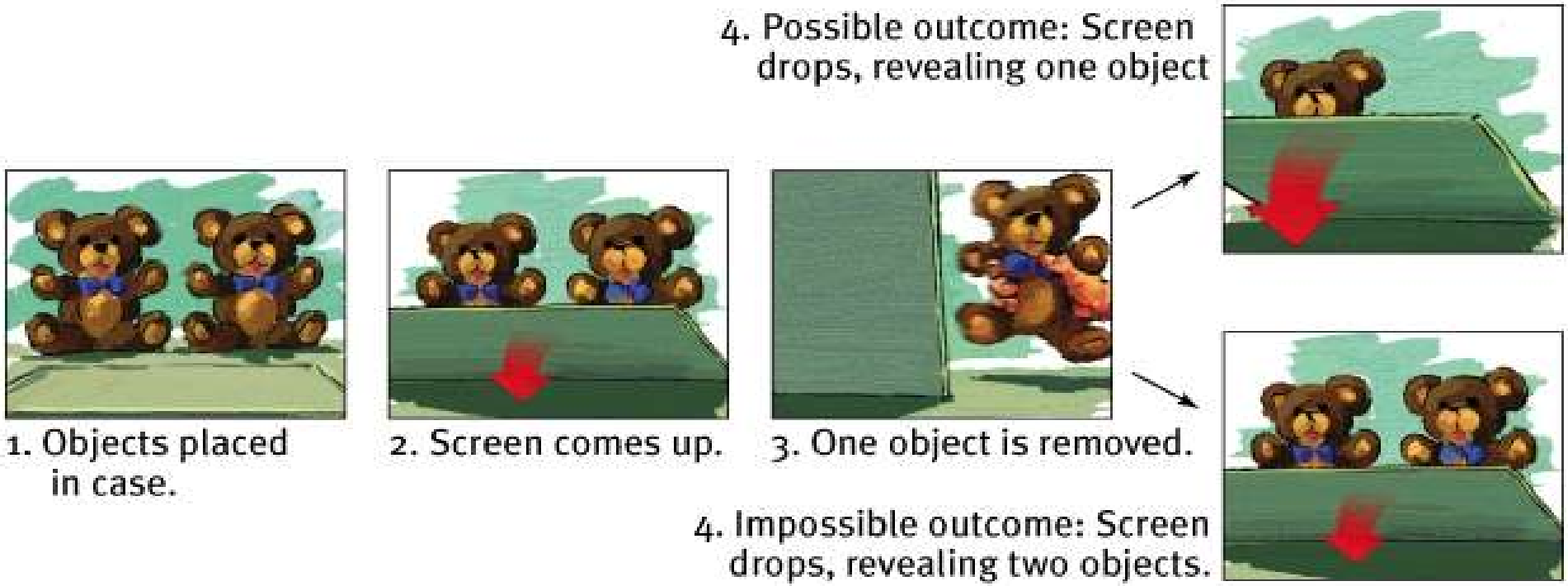


Piaget's Stages: Preoperational Stage

- *Preoperational Stage (2 to 6/7 yeas of age):* A stage marked by well-developed mental representation and the use of language.
  - Despite these increased abilities, however, children still cannot solve problems requiring logical thought, but they can recognize when something is not right.
  - Video: http://www.youtube.com/watch?v=TRF27F2bn-A

Cognitive Development

- Baby Mathematics
  - Shown a numerically impossible outcome, infants stare longer (Wynn, 1992)

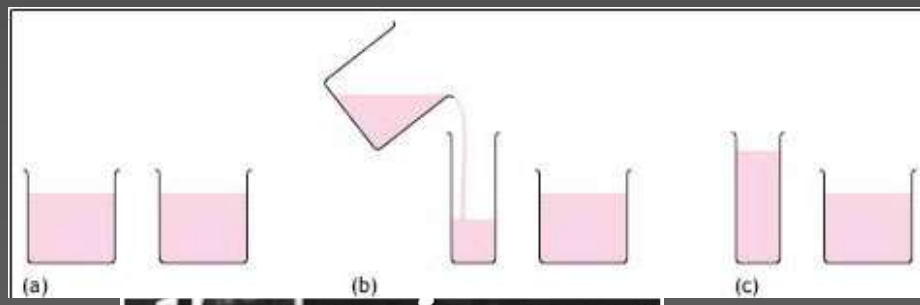


Piaget's Stages: Preoperational Stage

- Piaget developed other key features of the preoperational stage, including:
  - *Egocentrism:* a self centered focus that causes children to see the world only in their own terms.
    - Talking to child on phone
  - *Animistic thinking:* believing inanimate objects have life and mental processes.
    - "Bad table"
  - *Centration:* an inability to understand an event because the child focuses their attention too narrowly.
    - Moving objects closer together—now more or fewer items?
  - *Irreversibility:* an inability to think through a series of events or steps and then reverse course.
  - Artificialism: believing all objects are made by people.

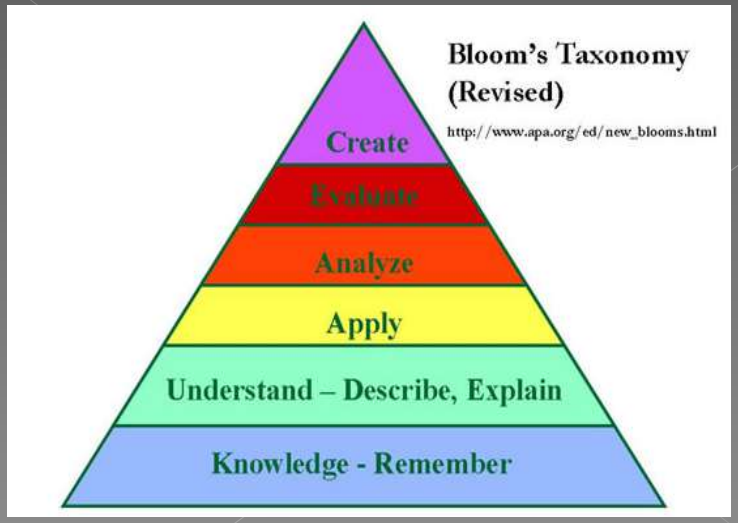
Piaget's Stages: Concrete Operational Stage

- *Concrete Operational Stage (7 to 11 years):* child develops the abilities of irreversibility, conservation and mental operations.
  - *Conservation:* the principle that quantity remains the same despite changes in shape.
  - *Mental operations:* the ability to solve problems by manipulating images in one's own mind.



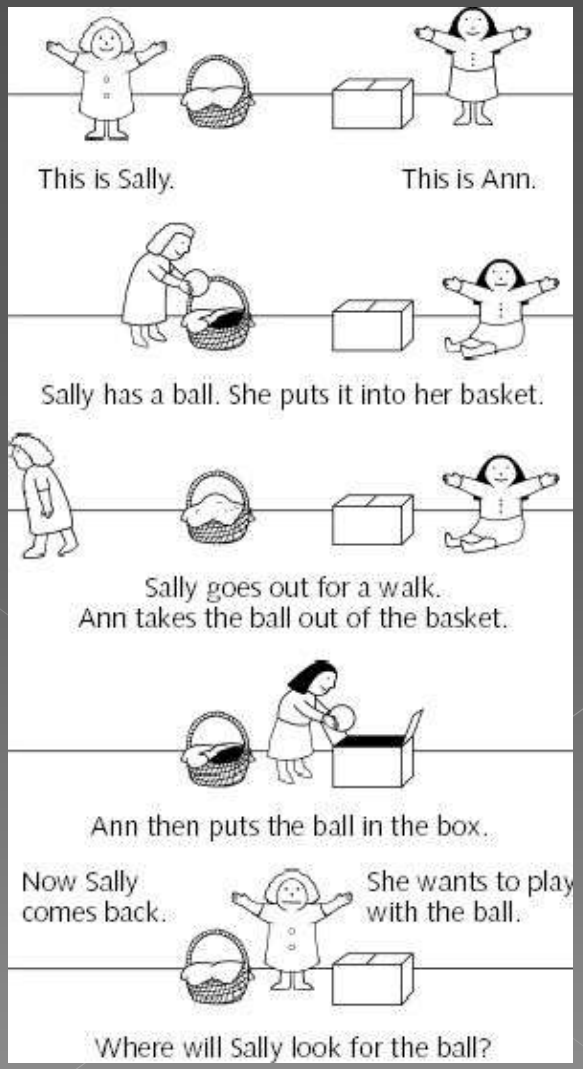
Piaget's Stages: Formal Operational

- In Piaget's final stage, *formal operational stage*, he says people begin to think about issues like being more accepted by peers, and abstract issues like love, fairness and our reason for existence.
  - Consists of 4 unique structural properties:
    - Hypothetical reasoning
    - Analogical/Abstract reasoning
    - Deductive reasoning
    - Reflective abilities



Theory of Mind

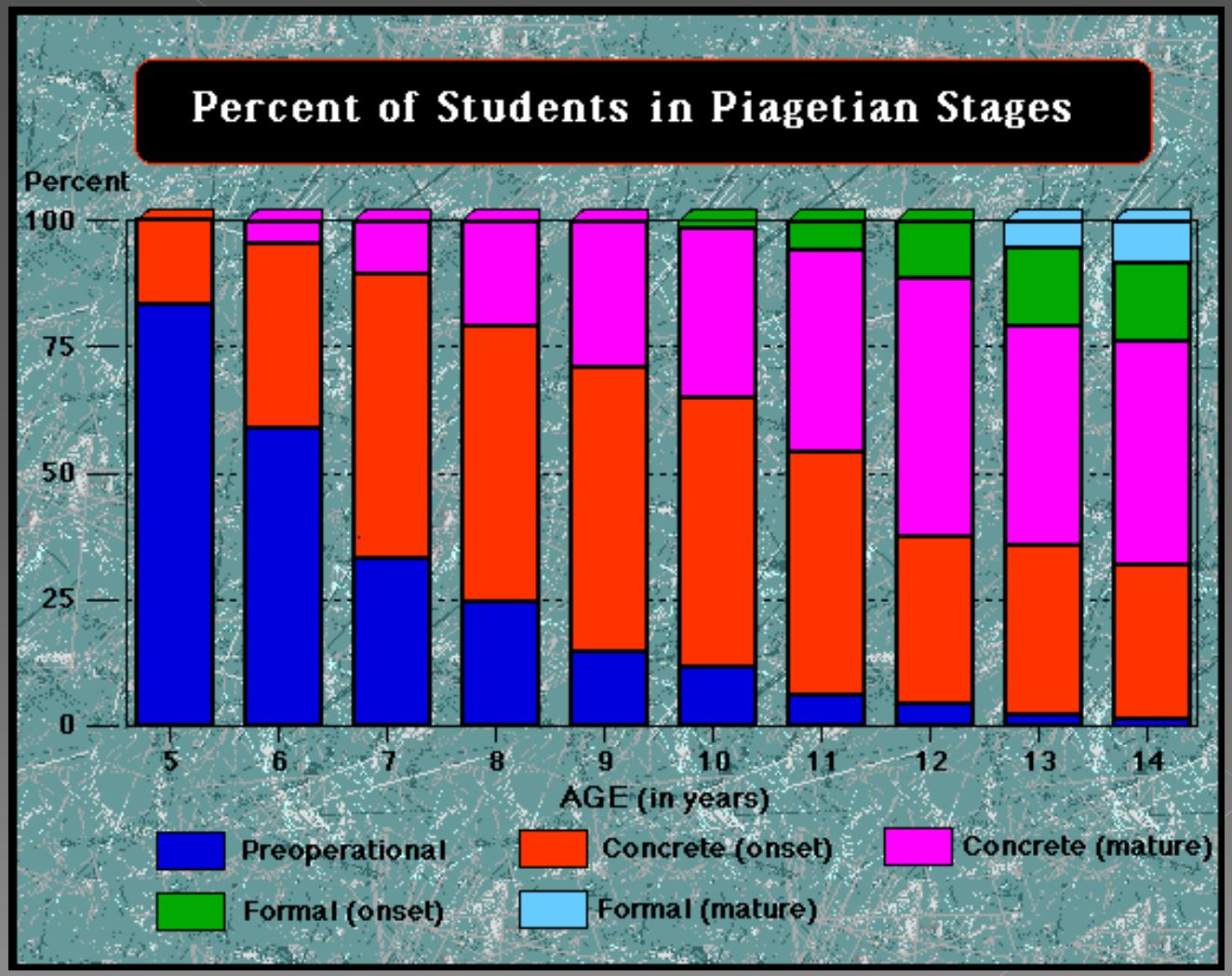
- Theory of mind is the ability to infer (understand) other's mental states, and know they may be different than our own.
  - Piaget thought this did not happen until around age 8, but studies suggest this actually happens as young as age 4 or 5.



Testing Your Theory of Mind

- Draw a capital letter E on your forehead.
- Did you draw it to look like an E from your point of view, or an E from the point of view of someone looking at you?
  - Most people will be egocentric and draw it from their own perspective, rather than that of someone looking at them, if they were made to feel

Piaget's Theory Graphically



Piaget's Stages of Cognitive Development

Typical Age Range	Description of Stage	Developmental Phenomena
Birth to nearly 2 years	*Sensorimotor* Experiencing the world through senses and actions (looking, touching, mouthing)	•Object permanence •Stranger anxiety
About 2 to 6 years	*Preoperational* Representing things with words and images but lacking logical reasoning	•Pretend play •Egocentrism •Language development
About 7 to 11 years	*Concrete operational* Thinking logically about concrete events; grasping concrete analogies and performing arithmetical operations	•Conservation •Mathematical transformations
About 12 through adulthood	*Formal operational* Abstract reasoning	•Abstract logic •Potential for moral reasoning

Reflecting on Piaget

- Piaget remains one of the most significant psychologists in the history of the science. While he may have been a little off on the ages for his stages, his emphasis was more on the sequence (order) of specific milestones.
  - Studies from around the world have confirmed that human cognition unfolds basically in the sequence that Piaget described.

Jean Piaget
1896-1980

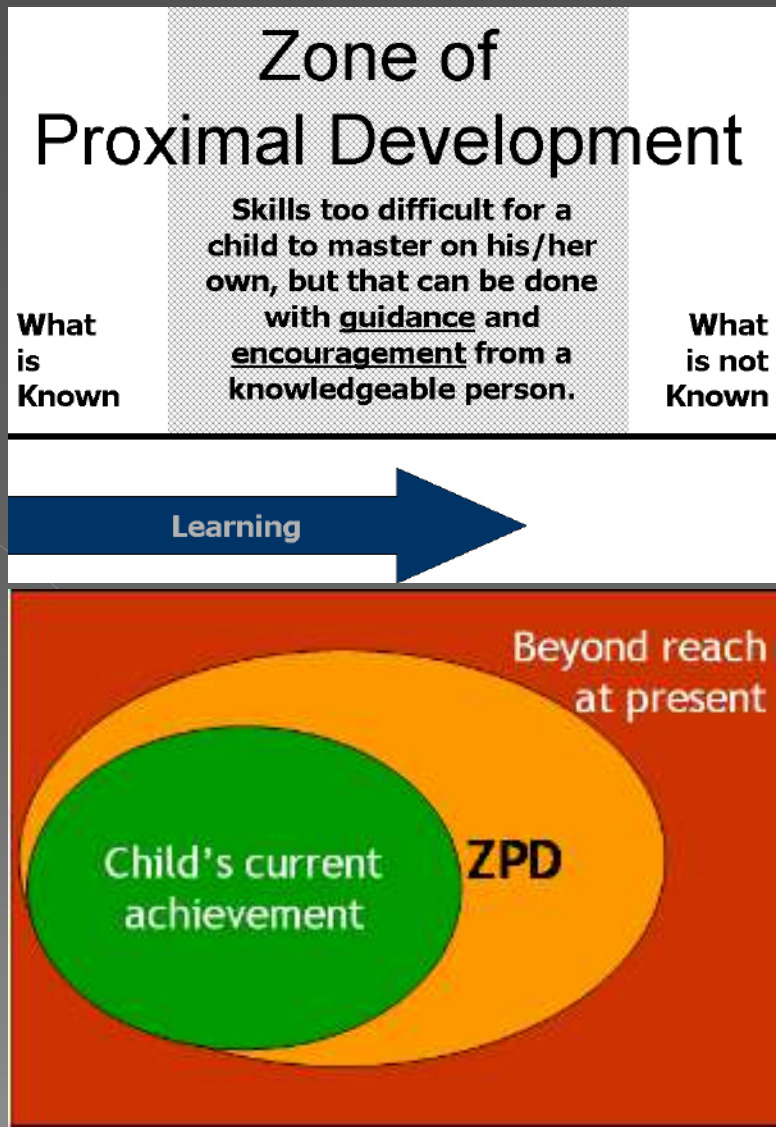
Lev Vygotsky

- Piaget's emphasis on how the child's mind grows through interaction with the physical environment is complemented by Vygotsky's emphasis on how the child's mind grows through interaction with the social environment.
  - Language is an important ingredient in social mentoring that provides the building blocks for thinking.

Lev Vygotsky
1896-1934

Zone of Proximal Development

- Vygotsky stated that a child follows an adult's example and gradually develops the ability to do certain tasks without help or assistance.
  - Zone of proximal development presents it as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers"



Erikson's Theory of Psychosocial Development

- Erik Erikson saw human development as a sequence of psychosocial stages, defined by common problems that emerge throughout life.

- Erikson identified 8 stages, with each bringing a new challenge. To move onto the next stage of life, the problem of the previous stage must successfully be coped with.

Age/Period (approx)	Principal Challenge	Adequate Resolution	Inadequate Resolution
0-1 ½ years	Trust vs. Mistrust: Babies learn either to trust or to mistrust that others will care for their basic needs, including nourishment, sucking, warmth, cleanliness, and physical contact.	Basic sense of safety; ability to rely on forces outside oneself	Insecurity, anxiety
1 ½- 3 years	Autonomy vs. Self-doubt: Children learn either to be self-sufficient in many activities, including toileting, feeding, walking, and talking, or to doubt their own abilities.	Perception of self as agent; capable of controlling one's own body	Feelings of inadequacy about self control, control of events
3-6 years	Initiative vs. Guilt: Children want to undertake many adult-like activities, sometimes overstepping the limits set by parents and feeling guilty.	Confidence in oneself as being able to initiate, create	Feeling of lack of self worth
6-puberty	Competence vs. Inferiority: Children busily learn to be competent and productive or feel inferior and unable to do anything well.	Adequacy in basic social and intellectual skills; acceptance by peers	Lack of self-confidence; feeling of failure
Adolescence	Identity vs. Role Confusion: Adolescents try to figure out, "Who am I?" They establish sexual, ethnic, and career identities, or are confused about what future roles to play.	Comfortable sense of self as a person, both unique and socially accepted	Sense of self as fragmented, shifting, unclear sense of self
Early Adulthood	Intimacy vs. Isolation: Young adults seek companionship and love with another person or become isolated from others.	Capacity for closeness and commitment to another	Feeling of aloneness, loneliness, separation; denial of intimacy
Middle Adulthood	Generativity vs. Stagnation: Middle-age adults are productive, performing meaningful work and raising a family, or become stagnant and inactive.	Focus of concern beyond oneself, to family, society, future generations	Self-indulgent concerns; lack of future orientation
Late Adulthood	Ego-identity vs. Despair: Older adults try to make sense out of their lives, either seeing life as a meaningful whole or despairing at goals never reached and questions never answered.	Sense of wholeness; basic satisfaction with life	Feelings of futility, disappointment

Erikson's Stages of Psychosocial Development

Approximate age	Stage	Description of Task
Infancy (1st year)	Trust vs. mistrust	If needs are dependably met, infants develop a sense of basic trust.
Toddler (2nd year)	Autonomy vs. shame and doubt	Toddlers learn to exercise will and do things for themselves, or they doubt their abilities.
Preschooler (3-5 years)	Initiative vs. guilt	Preschoolers learn to initiate tasks and carry out plans, or they feel guilty about efforts to be independent.
Elementary (6 years-puberty)	Competence vs. inferiority	Children learn the pleasure of applying themselves to tasks, or they feel inferior.

Erikson's Stages of Psychosocial Development

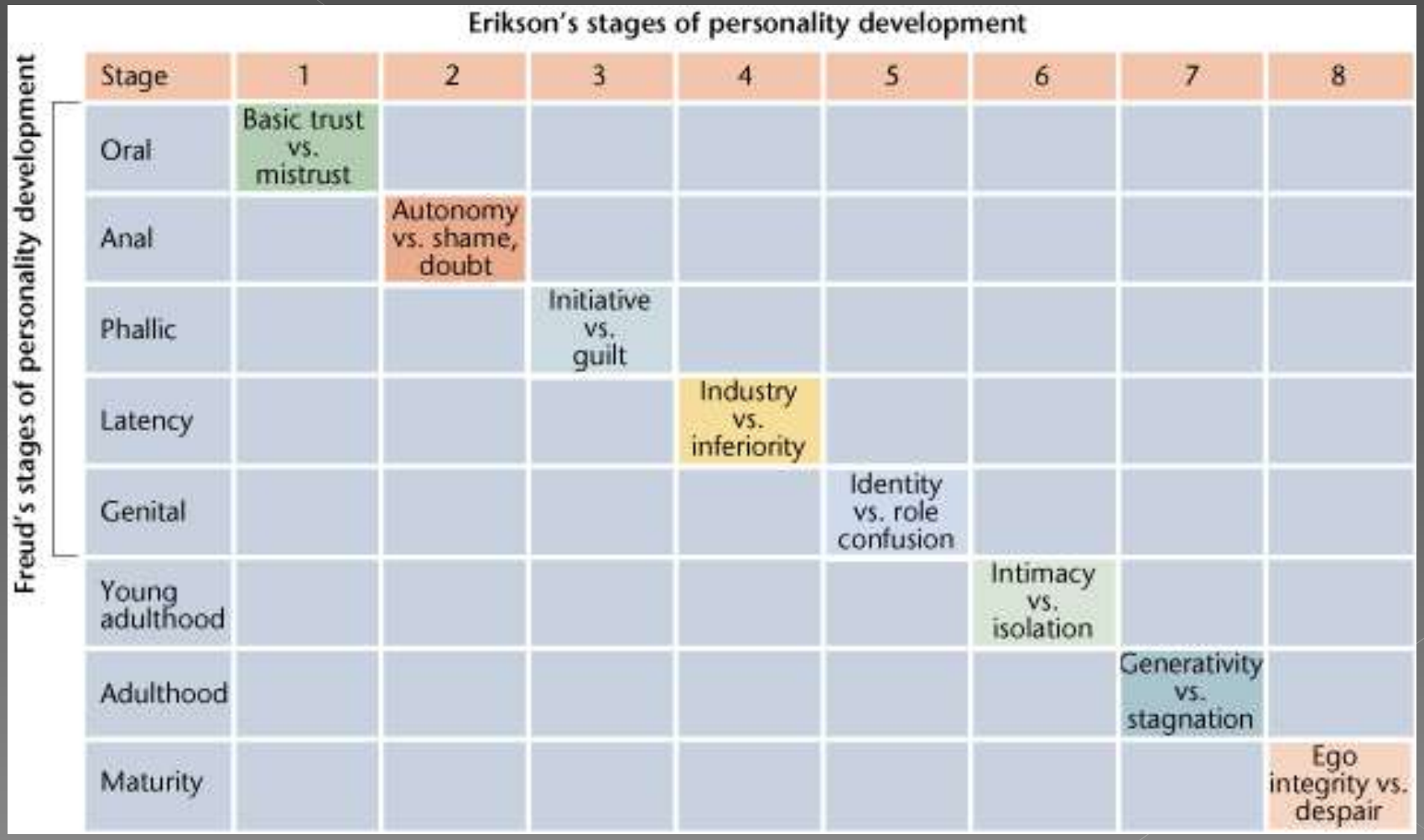
Approximate age	Stage	Description of Task
Adolescence (teens into 20's)	Identity vs. role confusion	Teenagers work at refining a sense of self by testing roles and then integrating them to form a single identity, or they become confused about who they are.
Young Adult (20's to early 40's)	Intimacy vs. isolation	Young adults struggle to form close relationships and to gain the capacity for intimate love, or they feel socially isolated.
Middle Adult (40's to 60's)	Generativity vs. stagnation	The middle-aged discover a sense of contributing to the world, usually through family and work, or they may feel a lack of purpose.
Late Adult (late 60's and up)	Integrity vs. despair	When reflecting on his or her life, the older adult may feel a sense of satisfaction or failure.

Erikson and Freud

- Like Freud and many others, Erik Erikson maintained that personality develops in a predetermined order. Instead of focusing on sexual development, however, he was interested in how children socialize and how this affects their sense of self.

- He saw personality as developing throughout the lifetime and looked at identity crises at the focal point for each stage of human development.

Erikson and Freud



Erikson Summarized

- His model was a lifespan model of development, taking in 5 stages up to the age of 18 years and three in adulthood.
  - There is still plenty of room for continued growth and development throughout one's life.
- According to the theory, successful completion of each stage results in a healthy personality and successful interactions with others.
- Failure to complete a stage can result in a reduced ability to complete further stages and resulting in an unhealthy personality and sense of self.
  - Stages can be resolved successfully at a later time.

Criticisms of Erikson

- Critics of Erikson said his “research” was based on clinical observations and lacked rigorous scientific method.
- Also, critics said it did not do enough to adequately capture the problems faced by girls and women.
  - Can you think of “problems” females face that do not have a place in Erikson’s stages?

Erikson's Theory of Young Adulthood

- The big challenge Erikson singles out for young adults is establishing close relationships with other adults.
- The individual must resolve the conflict between wanting to establish closeness to another and fearing the vulnerability and risks such closeness can bring.
- Making intimate commitments requires compromising personal preferences, accepting responsibilities and yielding some privacy and independence.

Erikson's Deep Thought

- Anything that isolates us from sources of social support–from a reliable network of friends and family–puts us at risk for a host of physical ills, mental problems, and even social pathologies.

- We are social creatures and we need each others help to and support to be effective and healthy.

Erikson on Relationships

- We are social creatures and we need each others help to and support to be effective and healthy.

- Erikson said you must know who you are before you can begin to love someone else and share your life with that person.

Parenting

- Most styles of parenting fall into one of four distinct styles that psychologists have found all around the world.
  - Authoritative
  - Authoritarian
  - Permissive
  - Uninvolved

Parenting Styles (page 383)

Style	Emotional Involvement	Authority	Autonomy
Authoritative	Parent is warm, attentive and sensitive to child's needs and interests	Parent makes reasonable demands for the child's maturity level; explains/ enforces rules	Parent permits child to make decisions in accord with developmental readiness
Authoritarian	Parent is cold and rejecting; frequently degrades the child	Parent is highly demanding; may use coercion by yelling commanding, criticizing and reliance on punishment	Parent makes most decisions for the child; rarely listens to child's viewpoint
Permissive	Parent is warm but may spoil the child	Parent makes few or no demands-often out of misplaced concern for child's self esteem	Parent permits child to make decisions before the child is ready
Uninvolved	Parent is emotionally detached, withdrawn and inattentive	Parent makes few of no demands-often lacking in interest or expectations for the child	Parent is indifferent to child's decisions and point of view.

Results of Parenting

- Does the type of parent you are matter?
  - Research suggests that children or parents who were authoritative tend to be confident, self–reliant, enthusiastic and overall happier.
  - Children with authoritarian parents tend to be anxious and insecure while those with permissive parents tend to be immature, impulsive, dependant and demanding.

Daycare: Bad or Good?

- Day cares are growing in size and number in our country. There has also been a growing feeling that daycares might have averse effects on children.

- Research has shown that most children thrive in day care, especially socially. However, a poor–quality daycare experience can influence children to be aggressive, depressed or otherwise maladjusted.

Leisure Time

- U.S. children have more free time than children in any other country.
- In nonindustrialized societies, children average 6 hours of a day working at some sort of chores or labor.
- The typical American child spends less than ½ hour doing chores.

Effects of Chores

- While long hard work may teach discipline, responsibility and appreciation, there is little evidence that it produces positive changes in cognitive development.

- American children also spend less time doing school work than children in other developed countries (though more than American children did in the past).

Leisure Time

- A good portion of American children's time is spent watching TV, talking on the phone, surfing the internet, or "hanging out."
- Many children spend the majority of their free time in structured activities like clubs or sports teams.
- Are our children spending their time productively?

Gender Differences

- It is clear that gender differences exist in children. The sexes tend to segregate themselves, which is a pattern that holds true across cultures.

- Girls tend to organize themselves in small, cooperative groups. Boys often form larger groups that have a hierarchical structure.

Explanations for Differences

- Evolutionary psychologists believe these gender differences have an innate basis, which may be related, in part to gender differences in testosterone levels.

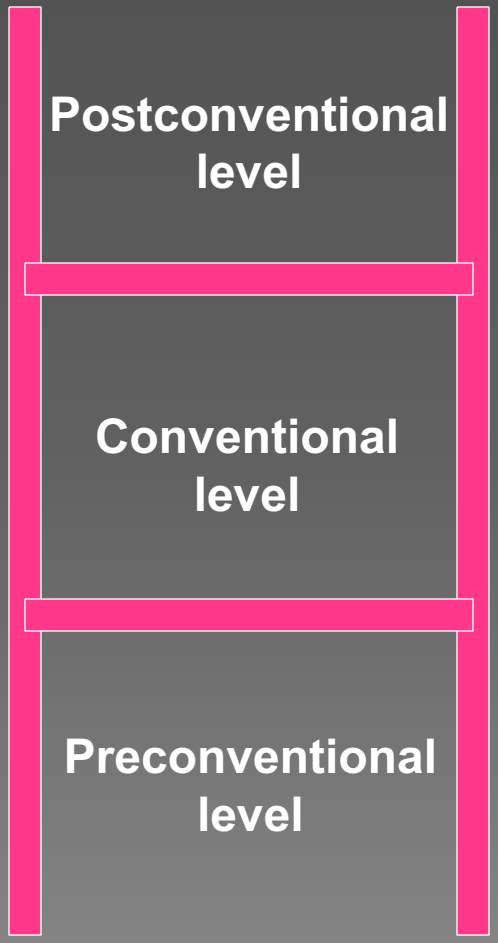
- Social-cognitive psychologists believe children also learn gender roles and gender related behaviors such as aggressiveness, competitiveness or cooperation.

Differences Between Then and Now

- While most psychologists support Erikson's thoughts on adult development, they realize that young adults today face different situations than they have in the past.

- Today, many young adults live together before they are married. While this may be better in the long run, individuals may struggle with identity issues at the same time they are trying to deal with intimacy issues.

Kohlberg's Moral Ladder



- As moral development progresses, the focus of concern moves from the self to the wider social world.

Kohlberg's Stage Theory

- Explain why we learn right & wrong
- Stage 1 – Punishment Orientation (Preconventional Level)
  - Determined by what is punished
- Stage 2 – Naïve Reward Orientation (Preconvential Level)
  - Determined by what is rewarded
- Stage 3 – Good Boy/Good Girl Orientation (Conventional Level)
  - Determined by close others' approval or disapproval

Kohlberg's Stage Theory

- Stage 4 – Authority Orientation (Conventional Level)
  - Determined by society's rules & laws, which should be obeyed rigidly
- Stage 5 – Social Contract Orientation (Postconventional Level)
  - Determined by society's rules which rules which are viewed as fallible rather than absolute
- Stage 6 – Individual Principles & Conscious Orientation (Postconventional Level)
  - Determined by abstract ethical principles that emphasize equity & justice

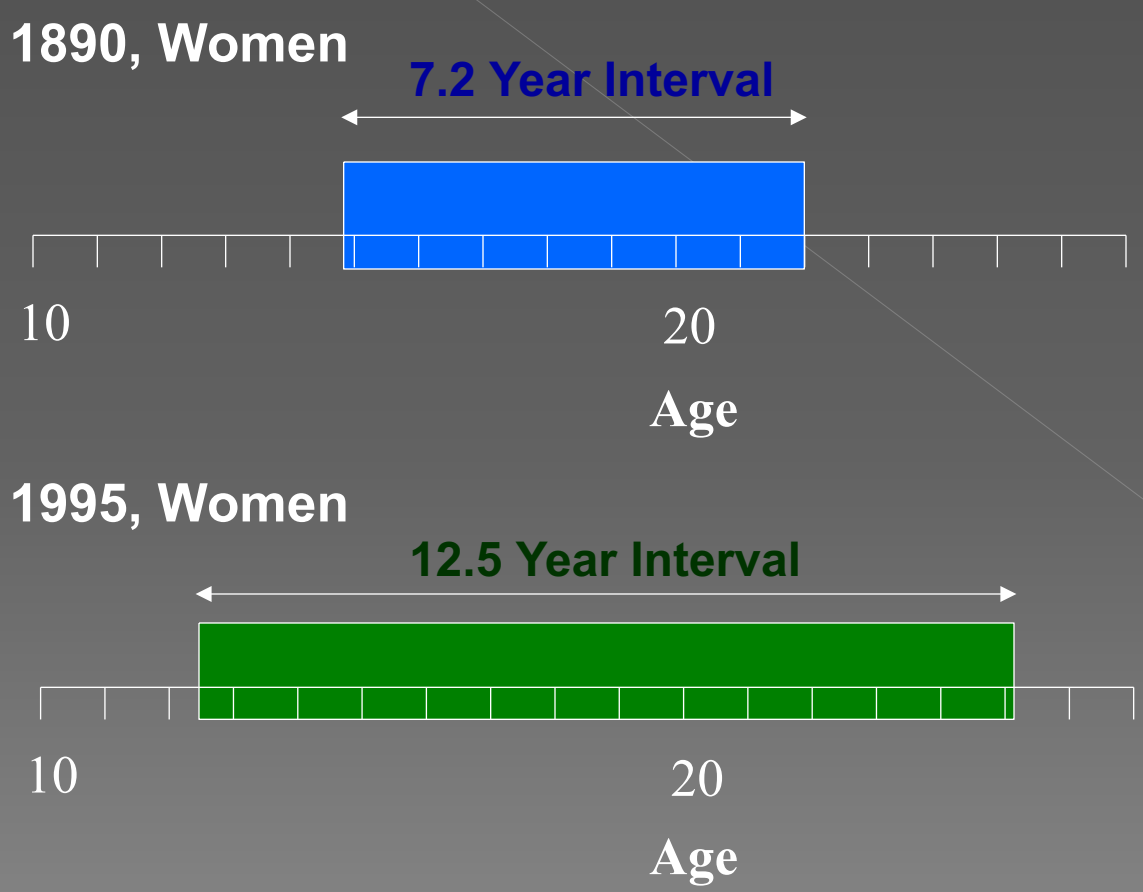
Adolescence

- Adolescence
  - the transition period from childhood to adulthood
  - extending from puberty to independence
- Puberty
  - the period of sexual maturation
  - when one first becomes capable of reproduction

Adolescence

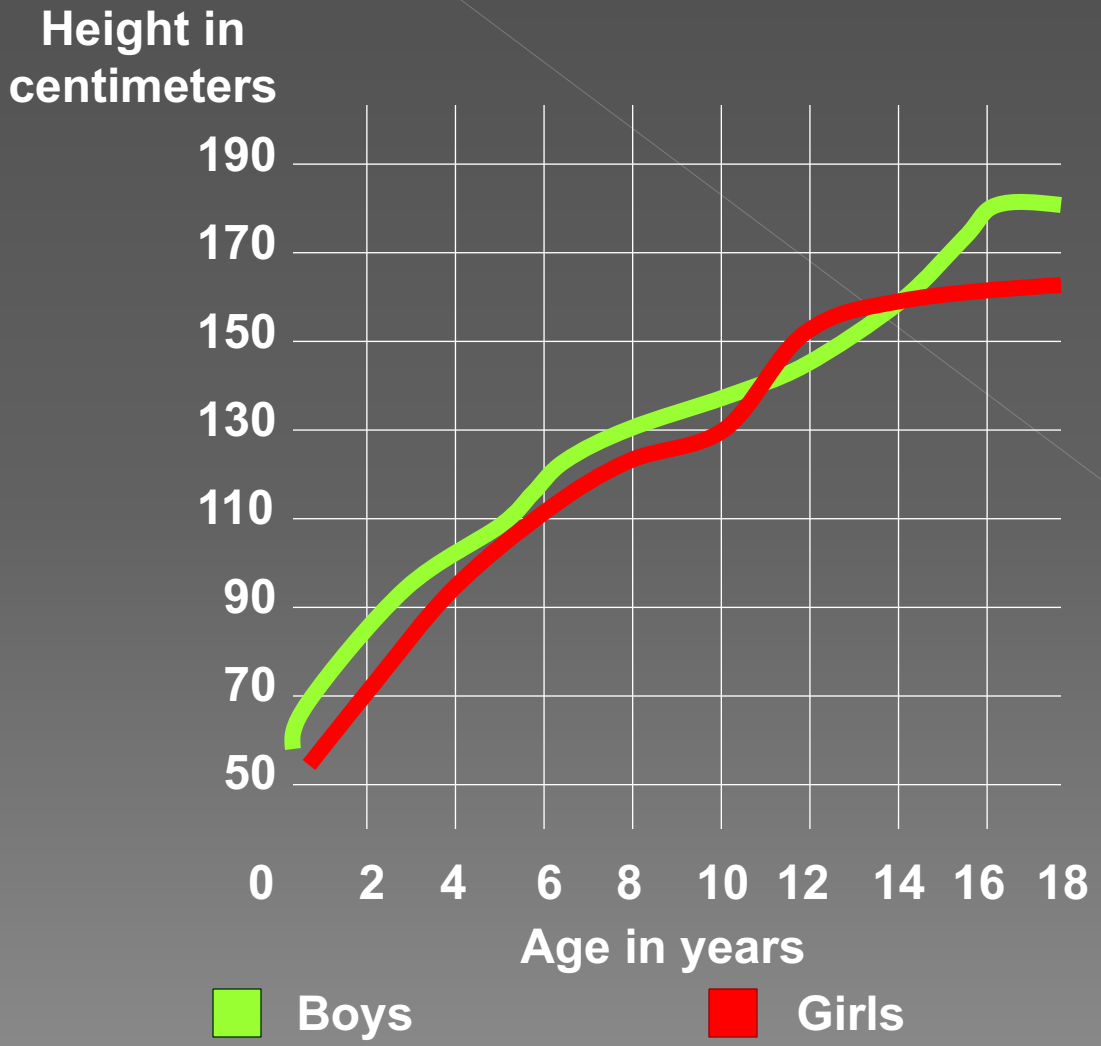
- Primary Sex Characteristics
  - body structures that make sexual reproduction possible
    - ovaries- female
    - testes- male
    - external genitalia
- Secondary Sex Characteristics
  - nonreproductive sexual characteristics
    - female- enlarged breast, hips
    - male- voice quality, body hair
- Menarche (meh-NAR-key)
  - first menstrual period

Adolescence and Adulthood



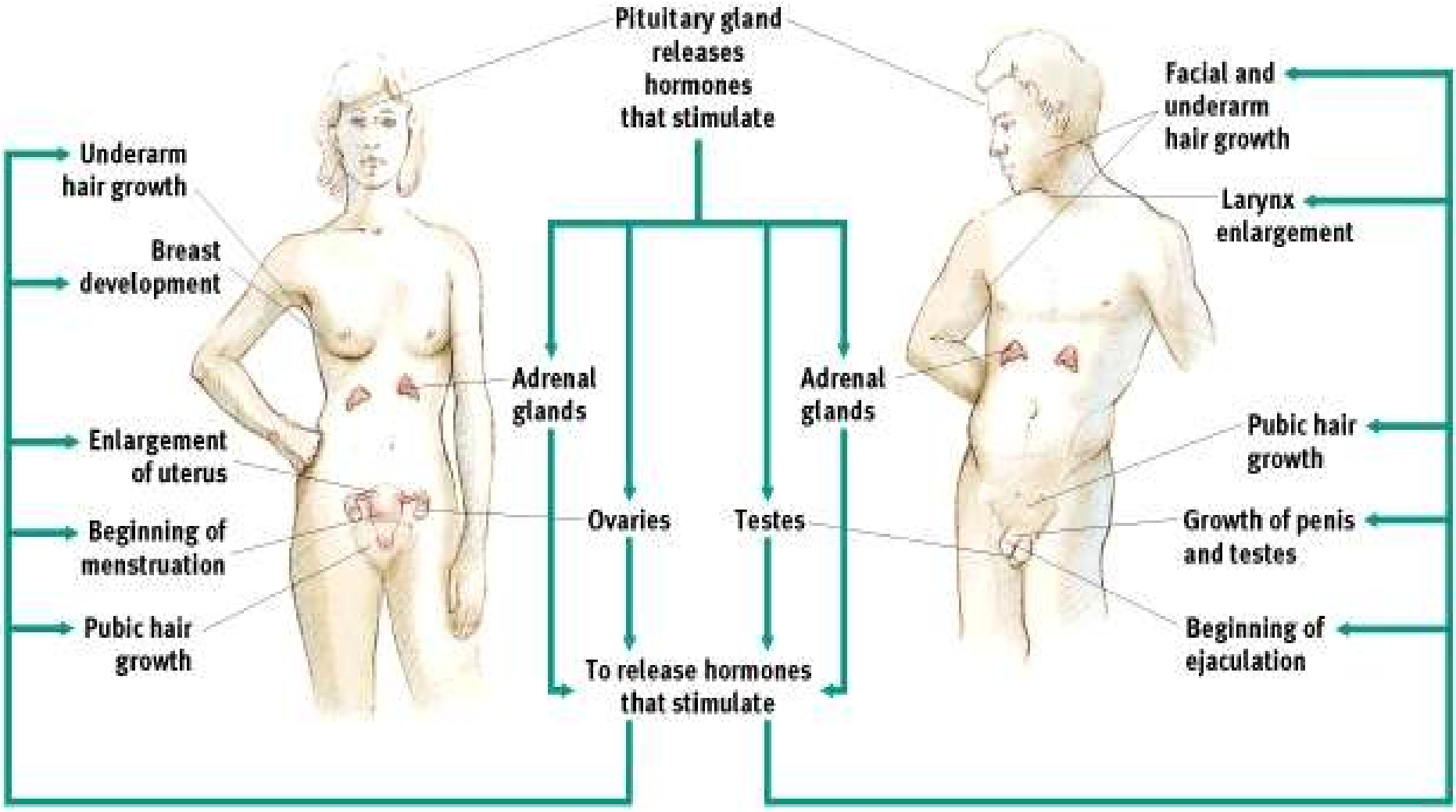
- In the 1890's the average interval between a woman's menarche and marriage was about 7 years; now it is over 12 years.

Adolescence and Adulthood



- Throughout childhood, boys and girls are similar in height. At puberty, girls surge ahead briefly, but then boys overtake them at about age 14.

Body Changes at Puberty

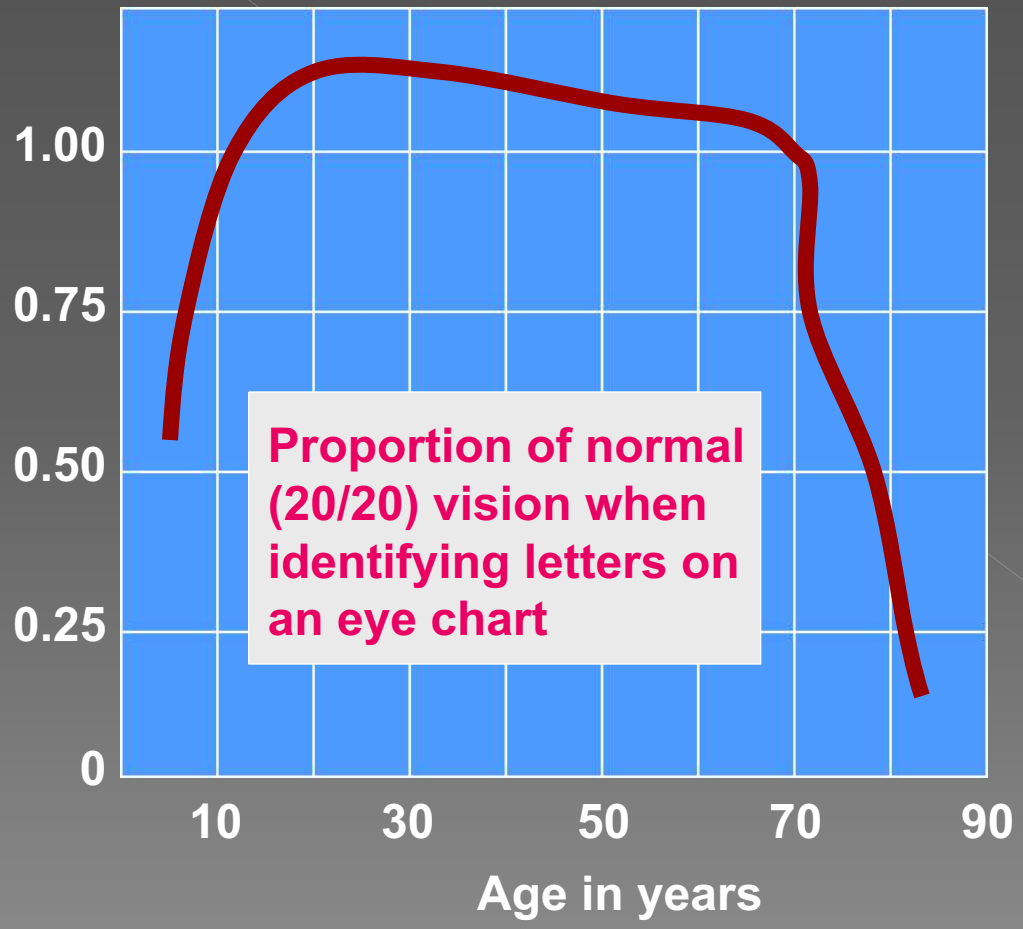


Adulthood- Physical Changes

- Menopause
  - the time of natural cessation of menstruation
  - also refers to the biological changes a woman experiences as her ability to reproduce declines
- Alzheimer's Disease
  - a progressive and irreversible brain disorder
  - characterized by a gradual deterioration of memory, reasoning, language, and finally, physical functioning

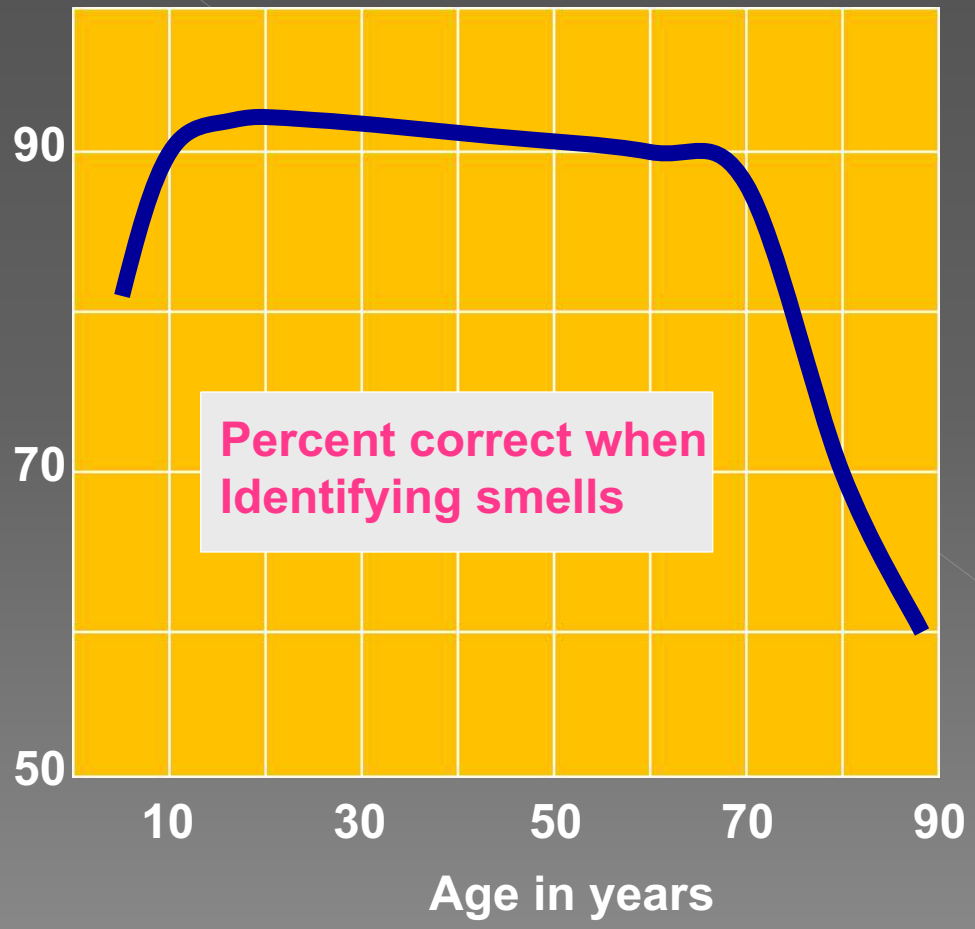
Adulthood- Physical Changes

- The Aging Senses



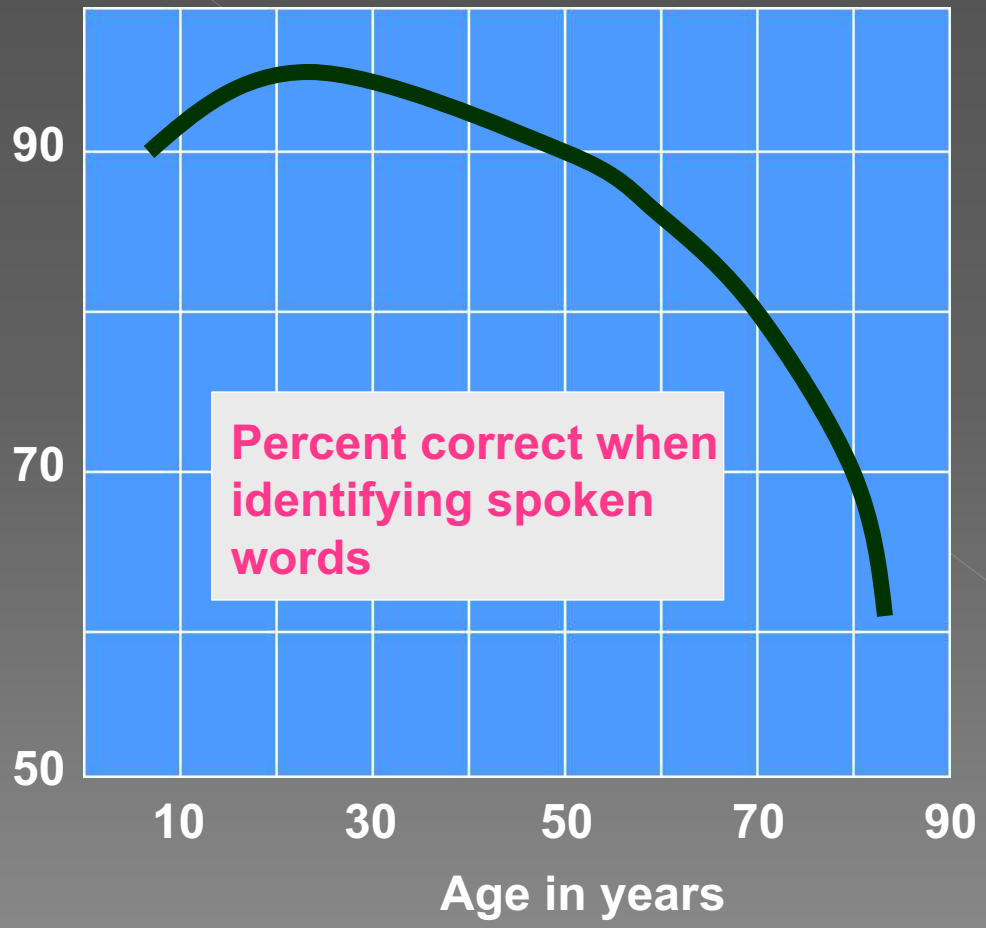
Adulthood- Physical Changes

- The Aging Senses

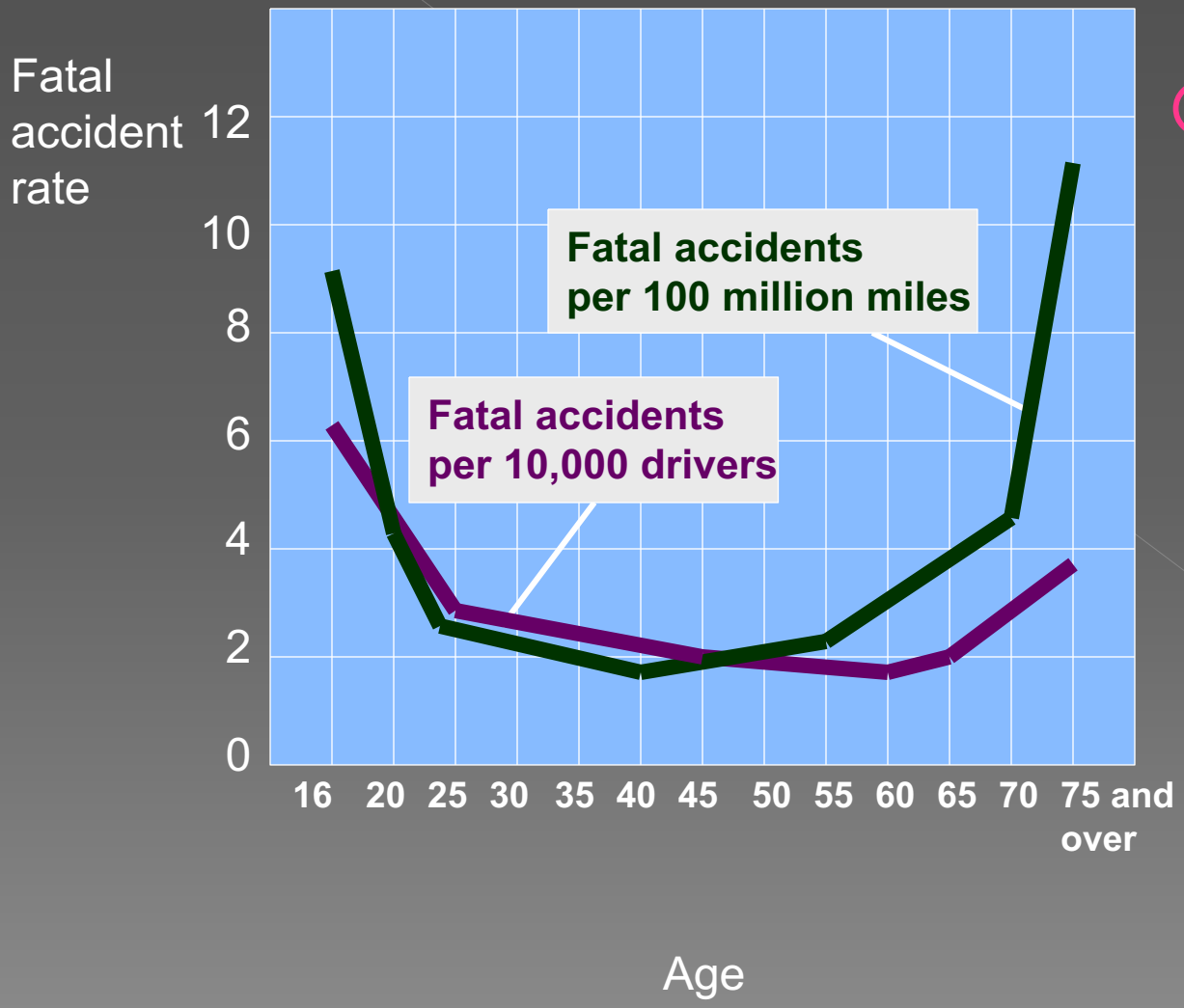


Adulthood- Physical Changes

- The Aging Senses



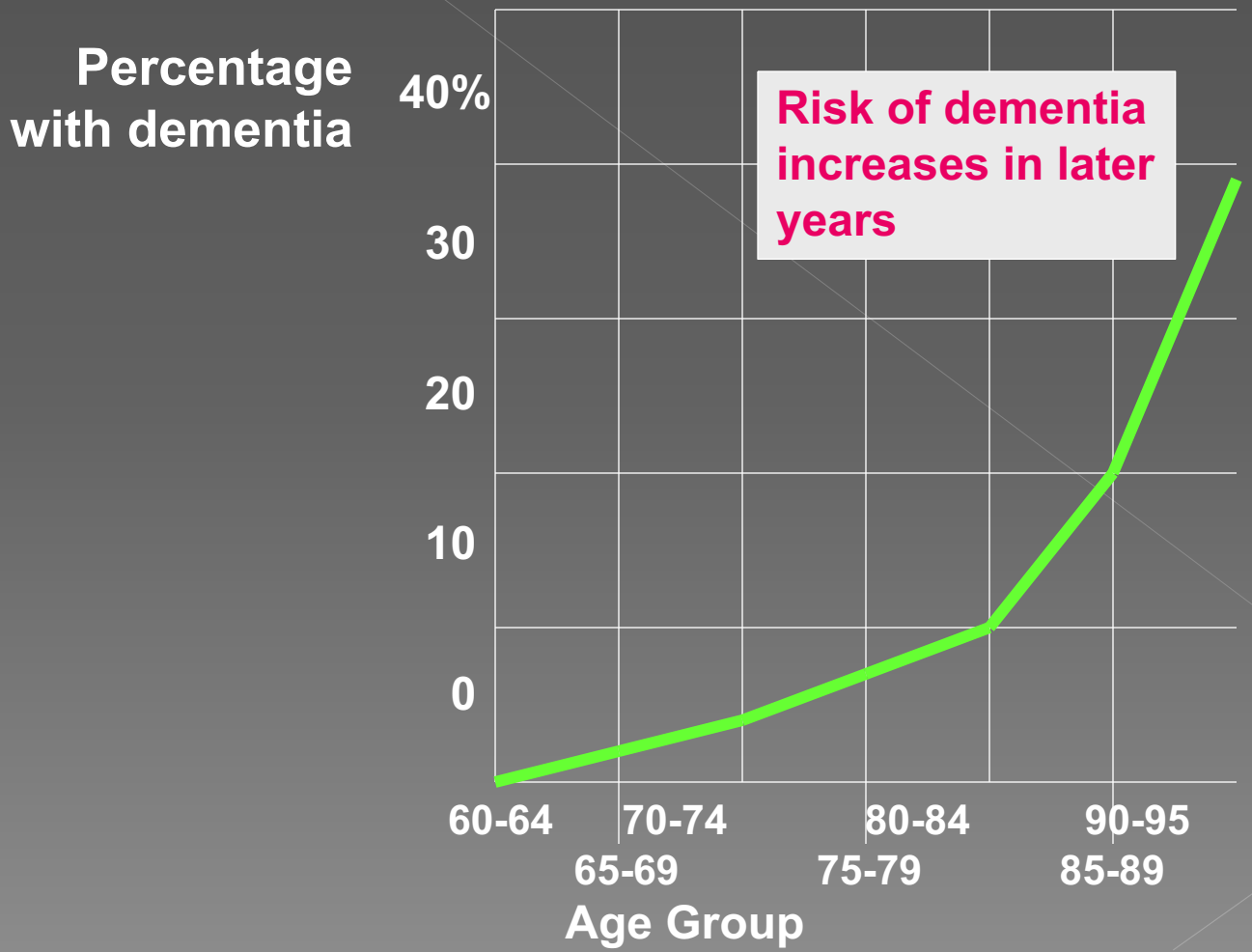
Adulthood- Physical Changes



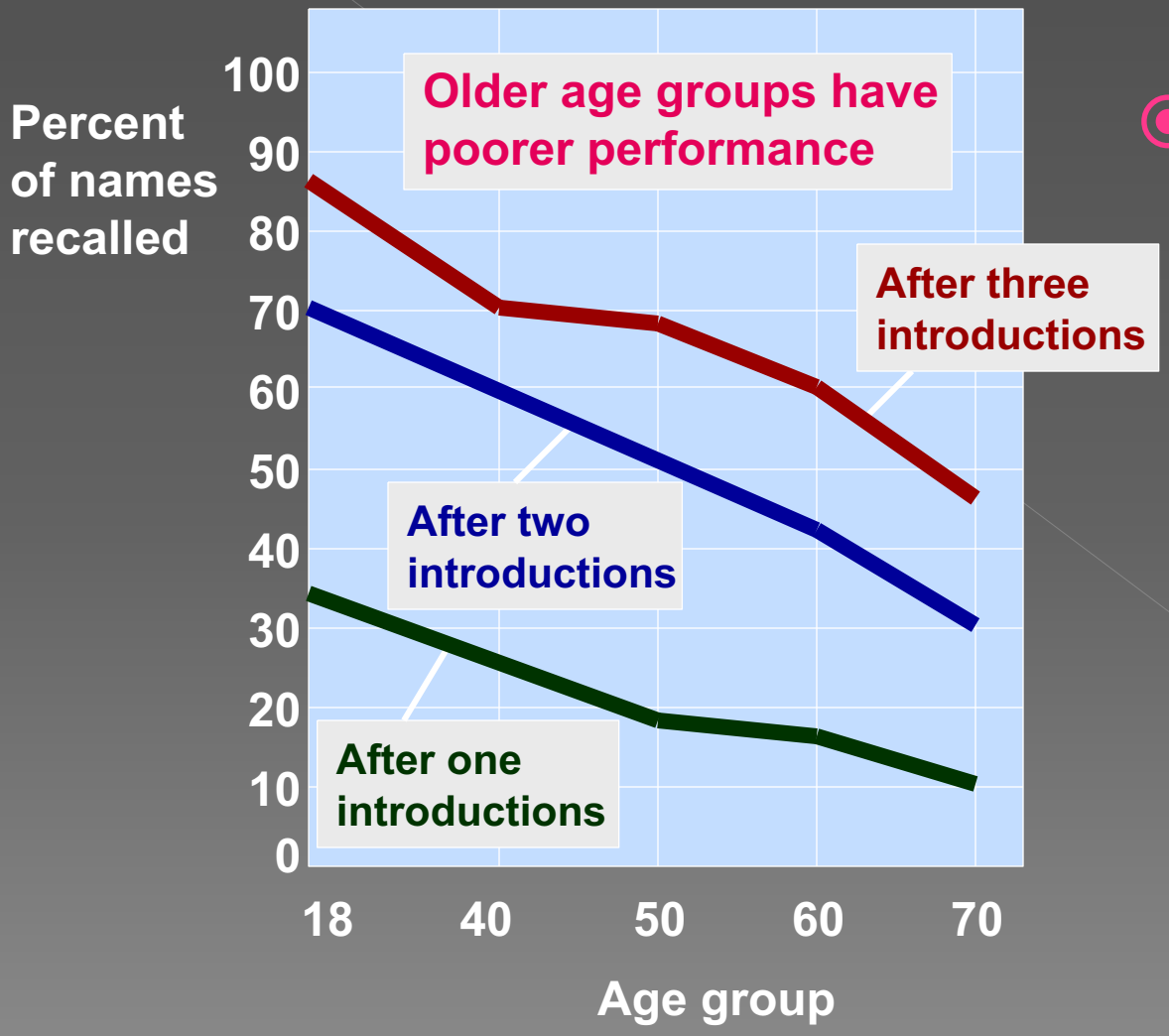
- Slowing reactions contribute to increased accident risks among those 75 and older.

Adulthood- Physical Changes

- Incidence of Dementia by Age

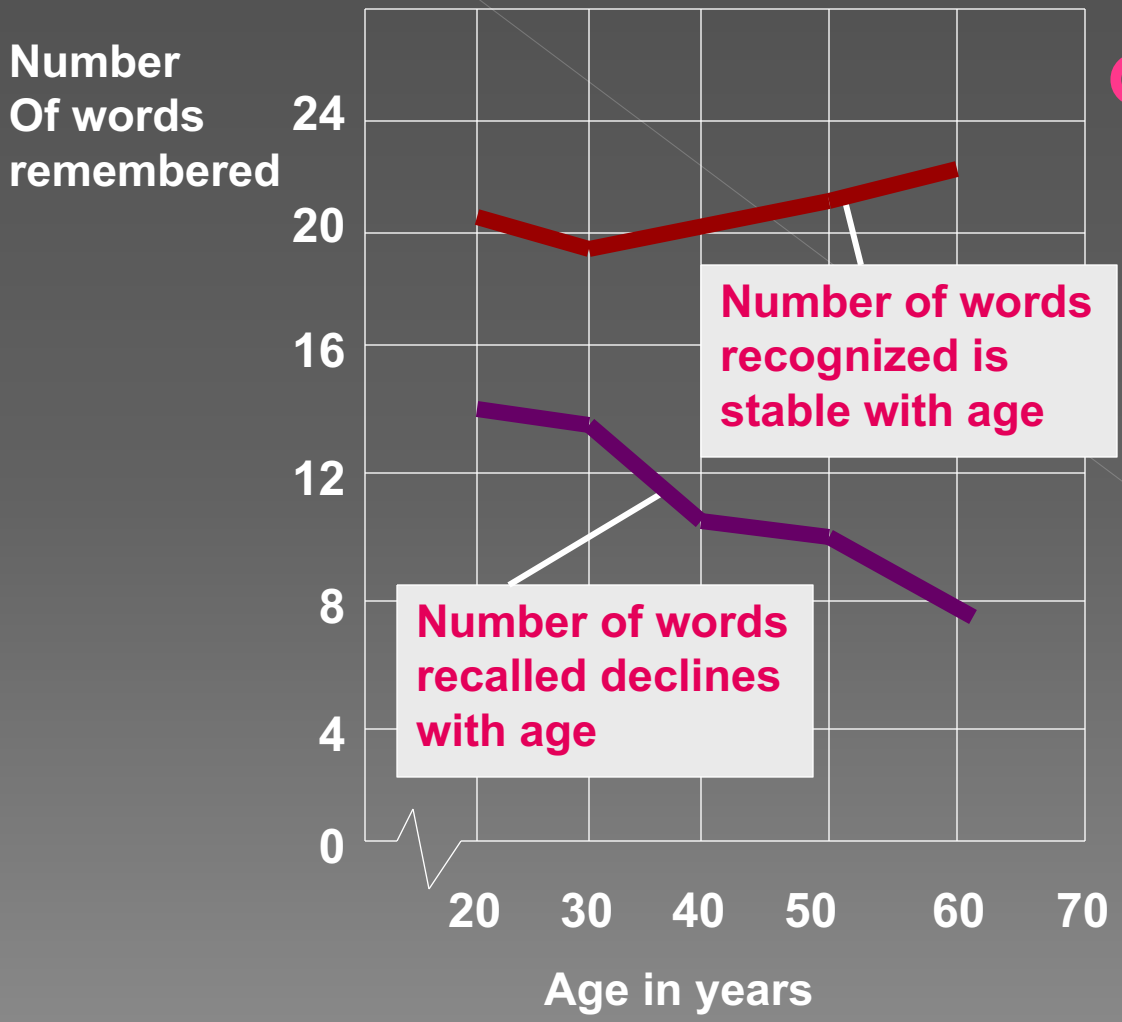


Adulthood- Cognitive Changes



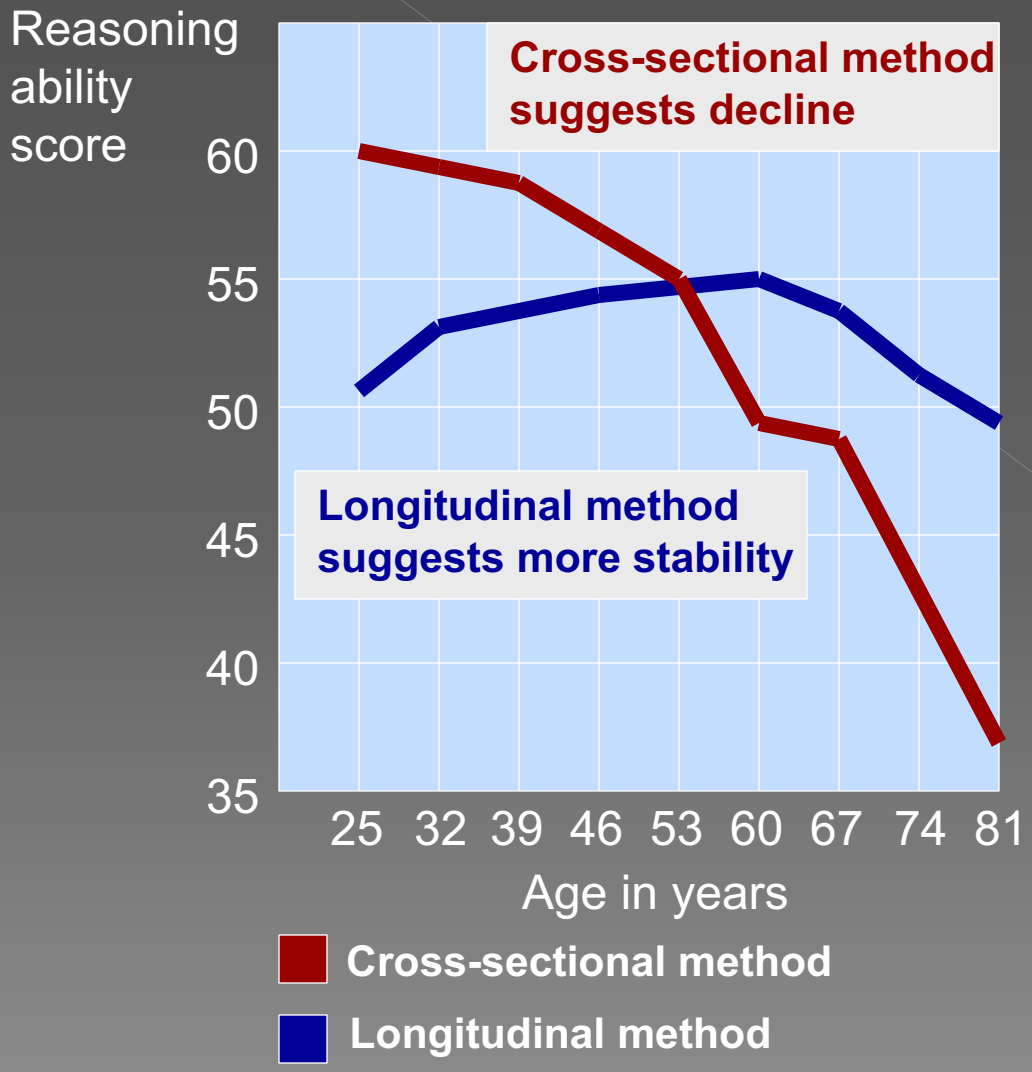
- Recalling new names introduced once, twice or three times is easier for younger adults than for older ones (Crook & West, 1990).

Adulthood- Cognitive Changes



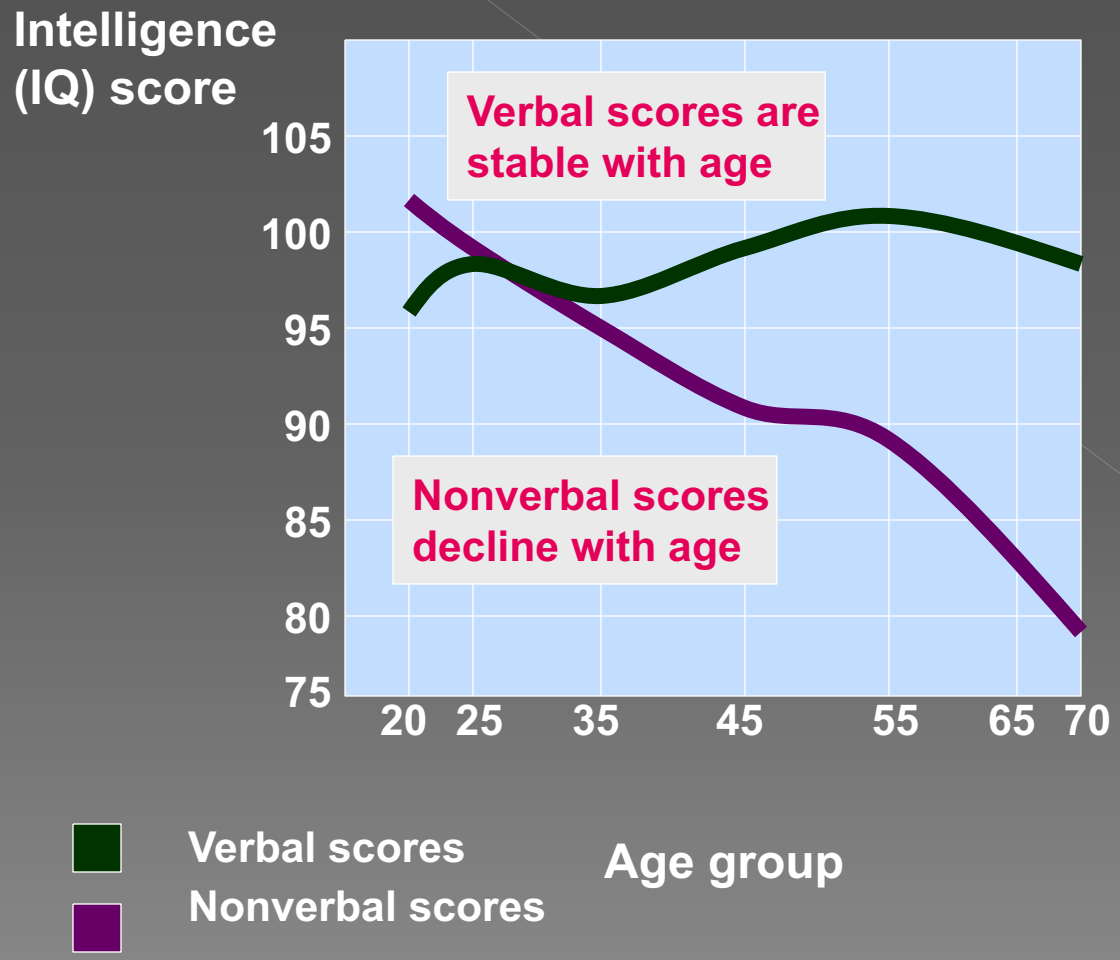
- In a study by Schonfield & Robertson (1966), the ability to recall new information declined during early and middle adulthood, but the ability to recognize new information did not.

Adulthood- Cognitive Changes



- 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

Adulthood- Cognitive Changes



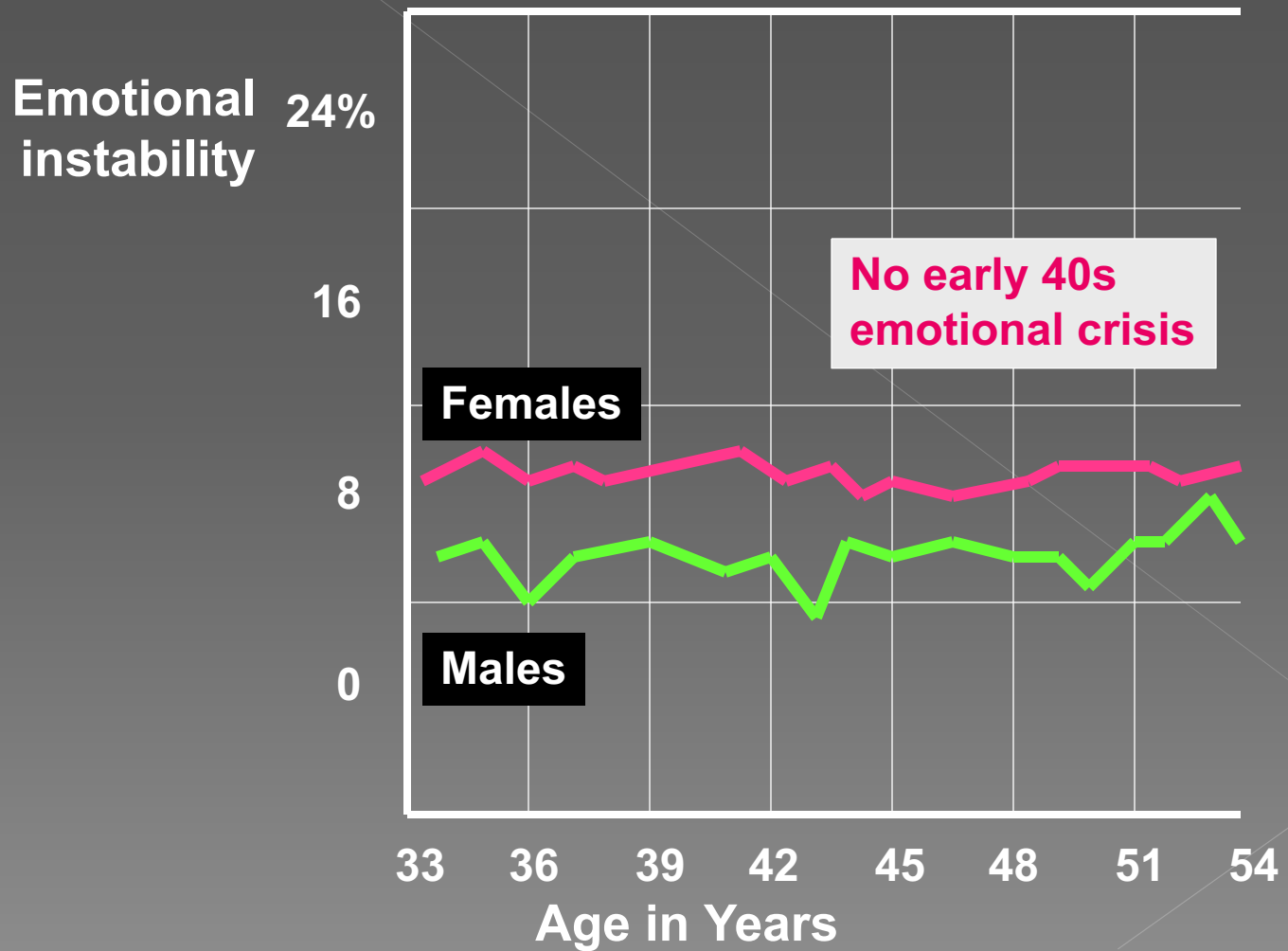
- Verbal intelligence scores hold steady with age, while nonverbal intelligence scores decline (adapted from Kaufman & others, 1989).

Adulthood- Cognitive Changes

- Crystallized Intelligence
  - one's accumulated knowledge and verbal skills
  - tends to increase with age
- Fluid Intelligence
  - ones ability to reason speedily and abstractly
  - tends to decrease during late adulthood

Adulthood- Social Changes

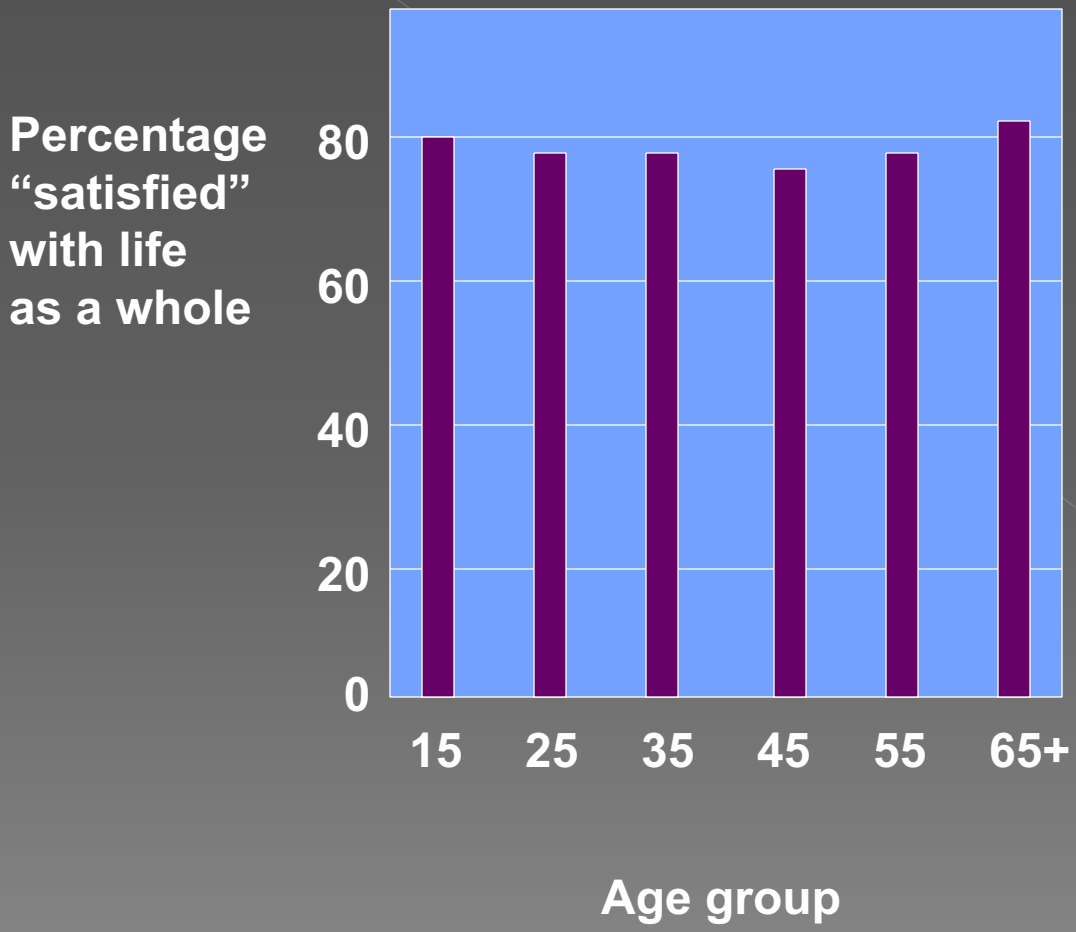
- Early-forties midlife crisis?



Adulthood- Social Changes

- Social Clock
  - the culturally preferred timing of social events
    - marriage
    - parenthood
    - retirement

Adulthood- Social Changes



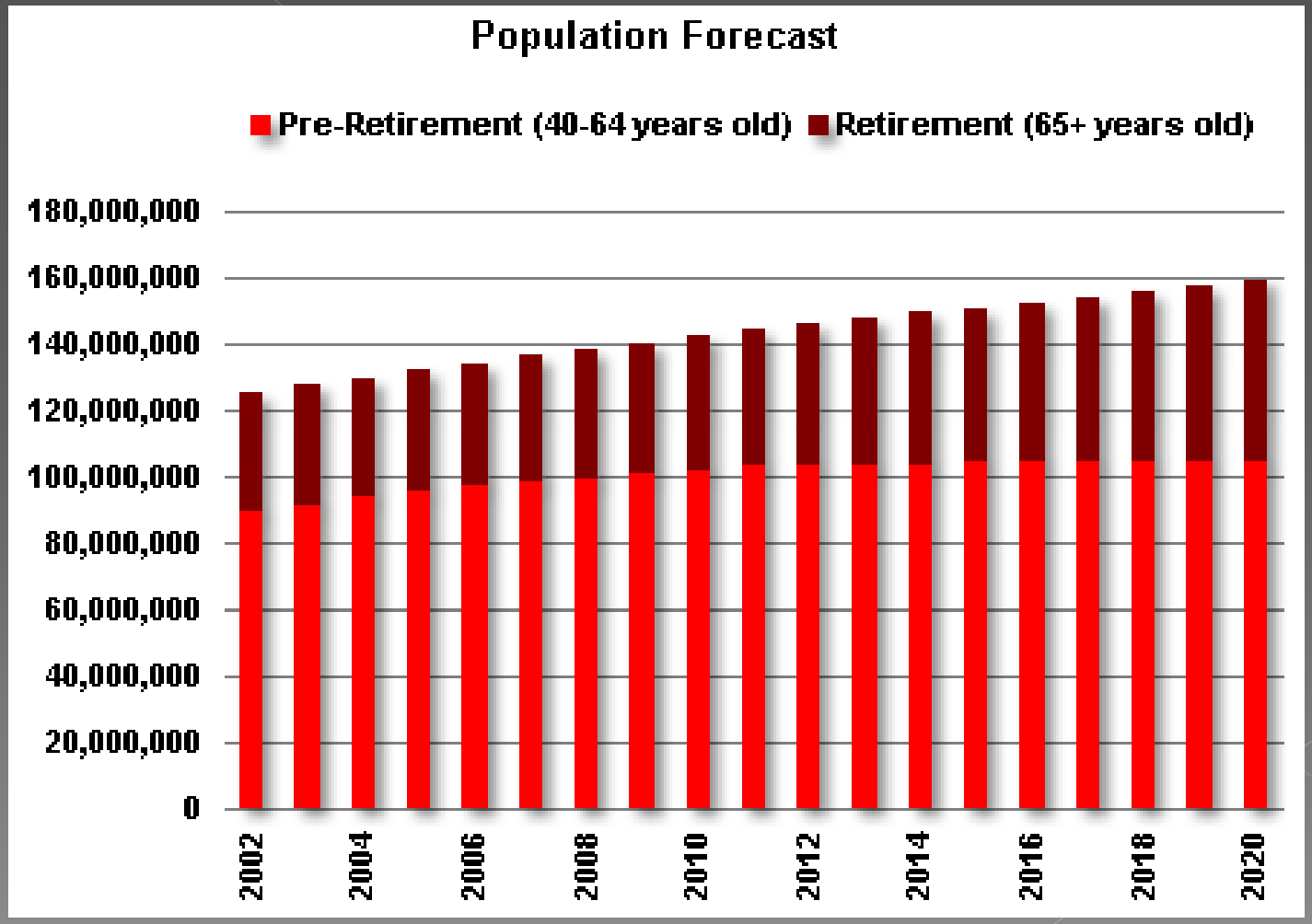
- Multinational surveys show that age differences in life satisfaction are trivial (Inglehart, 1990).

Psychology Beyond Adulthood

- Until the last few years, there was little psychological research done on young adults, and almost none on people past their mid 20s.

- Within the next 10 years, a big part of our population will be made up of baby boomers who are living longer and encountering more issues physically and psychologically than any group before them.

Aging Boomers



Challenges Facing Adults

- The transition from adolescence to young adulthood is marked by decisions about advanced education, career and intimate relationships.

- Freud thought adult development is driven by two basic needs: love and work. Abraham Maslow described these needs as love and belongingness.
  - Other psychologists: social acceptance, achievement and power as the basic needs of adult development.

Challenges of Midlife

- Erikson singled out generitivity, as the big challenge facing middle aged adults.
- Generitivity is the process of making a commitment beyond oneself to family, work, society or future generations.
- This is a crucial challenge of adults in their 30s, 40s and 50s.
- The good news is that most people do not actually undergo a true midlife crisis or upheaval.

Erikson's Last Stage

- The last stage of Erikson's model deals with elderly people.
- The big challenge in this stage is *ego–integrity vs. despair.* Erikson describes this as the challenge to have a life we can look back on and have no regrets about and to enjoy a sense of wholeness.

In the End

- Death is inevitable. It is something we will all go through. But, do we go through it the same way?

- According to Elisabeth Kubler-Ross, we do, in five stages. While we each experience the stages differently, we will all go through the following:
  - Denial
  - Anger
  - Bargaining
  - Depression
  - Acceptance

The Stages

- Denial- Refusing to believe the individual is sick.
- Anger- Displays anger that individual is sick.
- Bargaining- Making a deal, in return for a cure, they will fulfill a promise.
- Depression- General depression affecting sleeping and eating patterns.
- Acceptance-The realization that death is inevitable.

Stages of Loss

- Giraffe in Quicksand video
  - http://www.youtube.com/watch?v=G_Z3ImidmrY