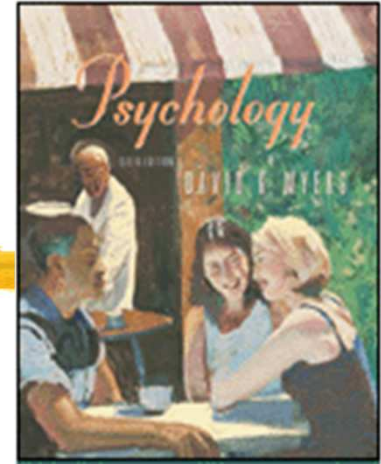


# **Myers' PSYCHOLOGY**

(6th Ed)



## **Chapter 4**

# The Developing Person

James A. McCubbin, PhD

Clemson University

Worth Publishers

# ***The Developing Person***

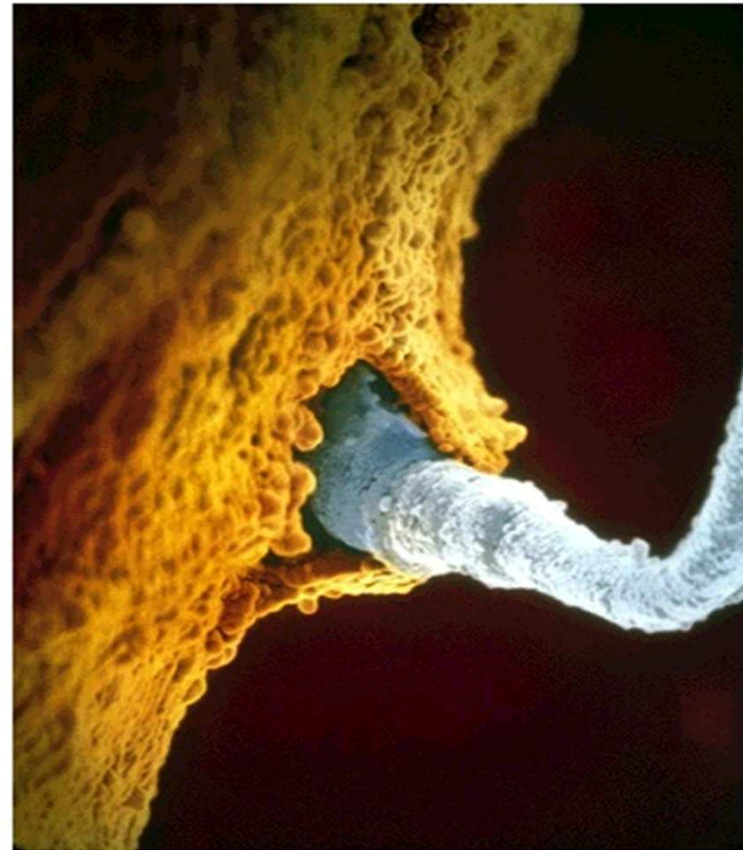
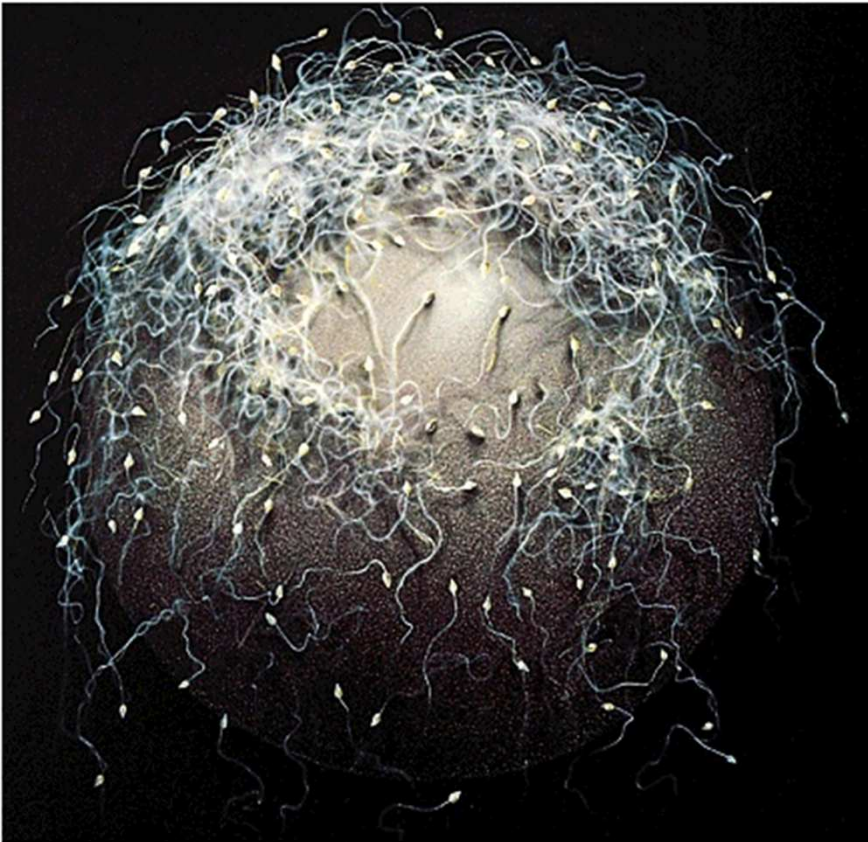
## ⌘ Developmental Psychology

- ☒ a branch of psychology that studies physical, cognitive and social change throughout the life span



# ***Union of Egg and Sperm***

---



# ***Prenatal Development***



## ⌘ Zygote

- ☑ the fertilized egg
- ☑ enters a 2 week period of rapid cell division
- ☑ develops into an embryo

## ⌘ Embryo

- ☑ the developing human organism from 2 weeks through 2nd month

## ⌘ Fetus

- ☑ the developing human organism from 9 weeks after conception to birth

# ***Prenatal Development***

⌘ 40 days

45 days

2 months

4 months



# ***Prenatal Development***



## ⌘ Teratogens

☒ 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 misproportions

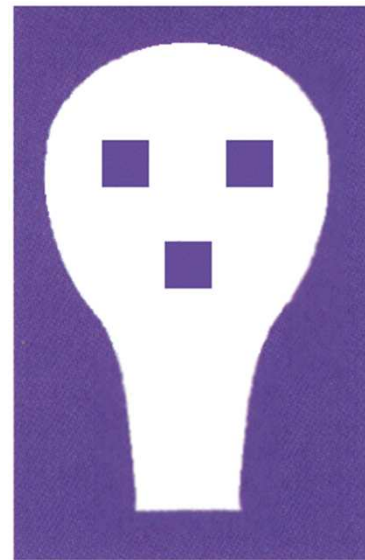
# *The Newborn*

## ⌘ Rooting Reflex

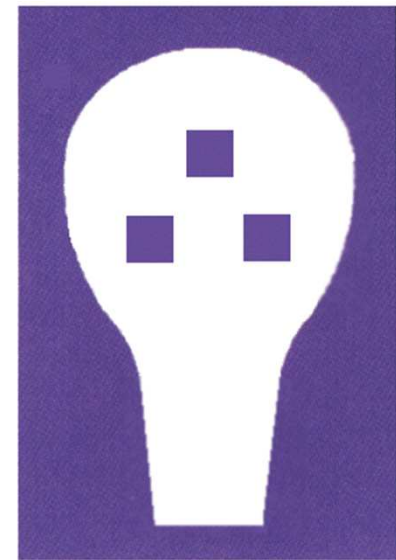
- ☑ tendency to open mouth, and search for nipple when touched on the cheek

## ⌘ Preferences

- ☑ human voices and faces
  - ☒ facelike images-->
- ☑ smell and sound of mother



preferred



# ***The Newborn***

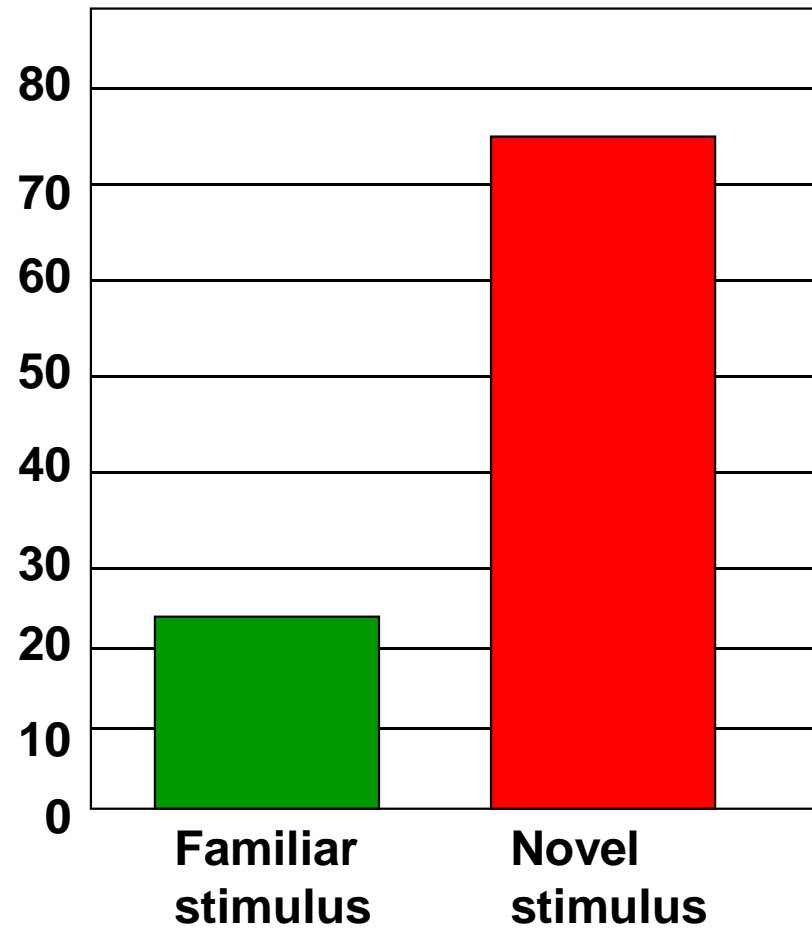


## ⌘ Habituation

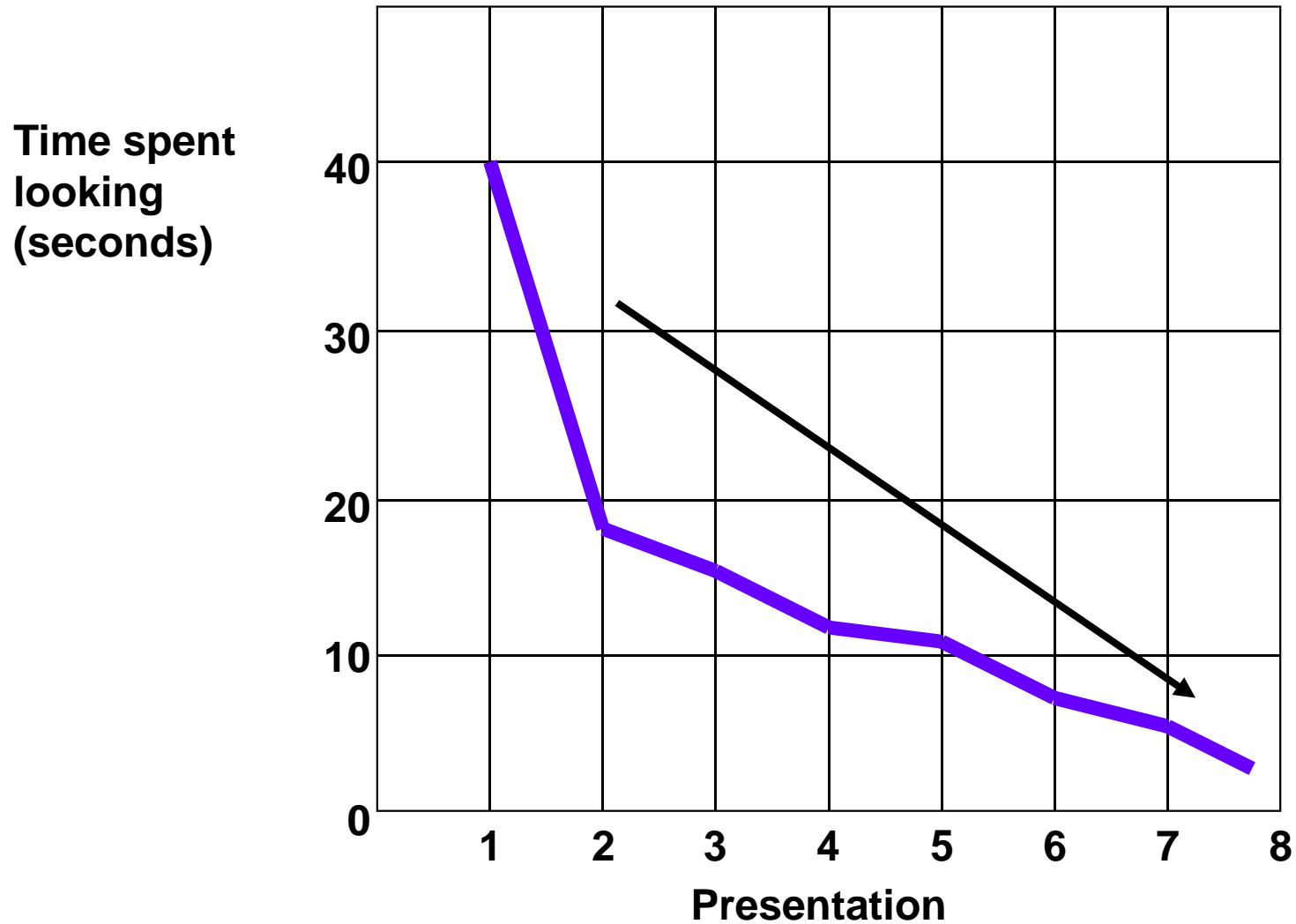
- ☒ decreasing responsiveness with repeated stimulation
- ☒ newborns become bored with a repeated stimulus, but renew their attention to a slightly different stimulus

# *The Newborn*

Percentage of  
time spent  
looking



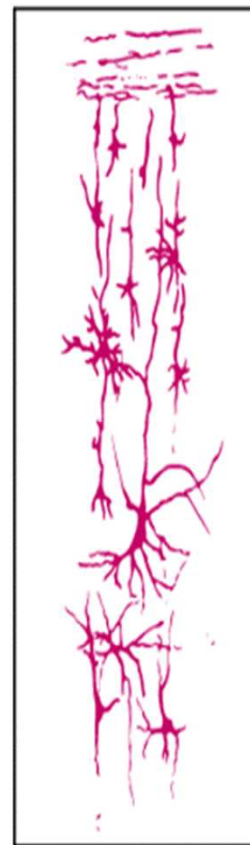
# *The Newborn*



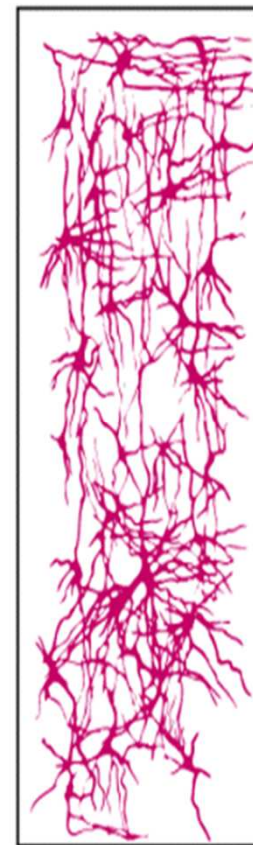
# Physical Development

## ⌘ Maturation

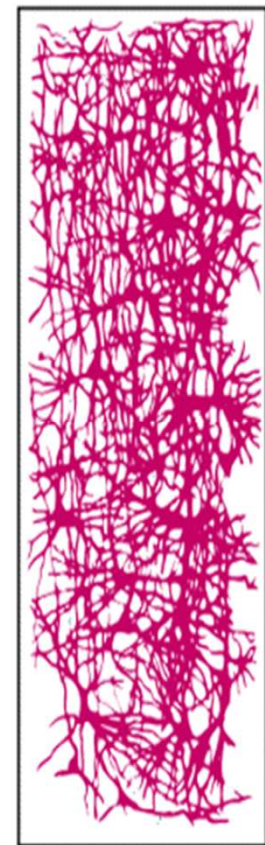
- ☑ biological growth processes that enable orderly changes in behavior
- ☑ relatively uninfluenced by experience
- ☑ sets the course for development while experience adjusts it



At birth



3 months



15 months

Cortical Neurons

# *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).

# ***Cognitive Development***



## ⌘ Cognition

☒ mental activities associated with thinking, knowing, and remembering

## ⌘ Schema

☒ a concept or framework that organizes and interprets information

# ***Cognitive Development***



## ⌘ Assimilation

- ☑ interpreting one's new experience in terms of one's existing schemas

## ⌘ Accommodation

- ☑ adapting one's current understandings (schemas) to incorporate new information

# Piaget's Stages of Cognitive Development

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

# ***Cognitive Development***



## ⌘ Object Permanence

- ☑ the awareness that things continue to exist even when not perceived

## ⌘ Conservation

- ☑ the principle that properties such as mass, volume, and number remain the same despite changes in the forms of objects
- ☑ part of Piaget's concrete operational reasoning

# Cognitive Development

## ⌘ Baby Mathematics

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



1. Objects placed in case.

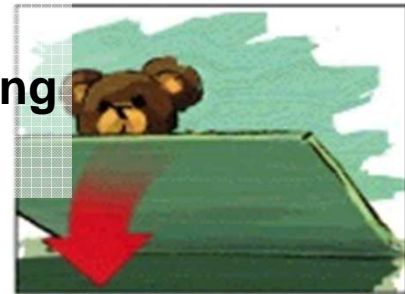


2. Screen comes up.

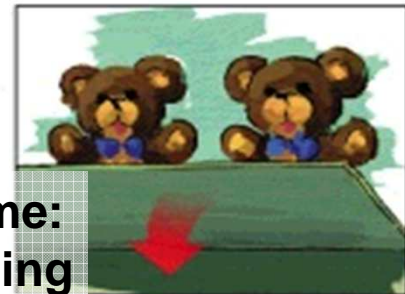


3. Object is removed.

4. Possible outcome:  
Screen drops, revealing one object.



4. Impossible outcome:  
Screen drops, revealing two objects.



# ***Cognitive Development***



## ⌘ Egocentrism

- ☒ the inability of the preoperational child to take another's point of view

## ⌘ Theory of Mind

- ☒ people's ideas about their own and others' mental states- about their feelings, perceptions, and thoughts and the behavior these might predict

# ***Social Development***



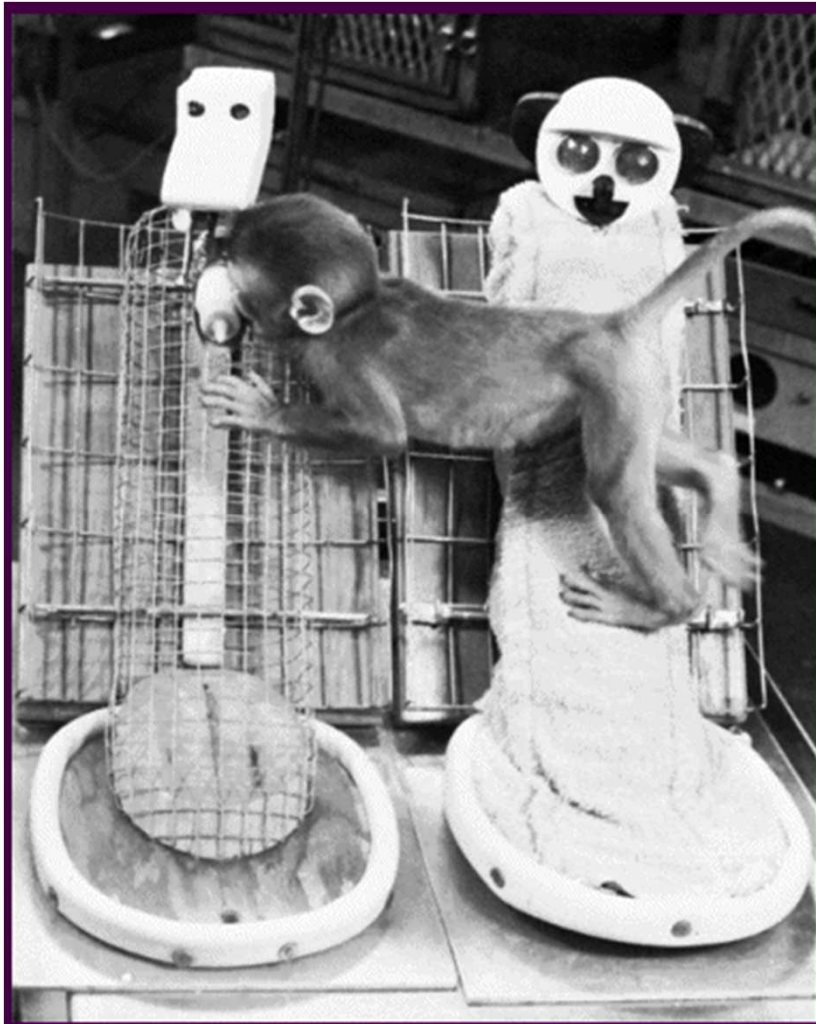
## ⌘ Stranger Anxiety

- ☑ fear of strangers that infants commonly display
- ☑ beginning by about 8 months of age

## ⌘ Attachment

- ☑ an emotional tie with another person
- ☑ shown in young children by seeking closeness to the caregiver and showing distress on separation

# ***Social Development***



## ⌘ Harlow's Surrogate Mother Experiments

- ☑ Monkeys preferred contact with the comfortable cloth mother, even while feeding from the nourishing wire mother

# ***Social Development***



## ⌘ Critical Period

- ☒ an optimal period shortly after birth when an organism's exposure to certain stimuli or experiences produces proper development

## ⌘ Imprinting

- ☒ the process by which certain animals form attachments during a critical period very early in life

## ⌘ Temperament

- ☒ a person's characteristic emotional reactivity and intensity

# ***Social Development***



- ⌘ Monkeys raised by artificial mothers were terror-stricken when placed in strange situations without their surrogate mothers.

# ***Social Development***



## ⌘ Basic Trust (Erik Erikson)

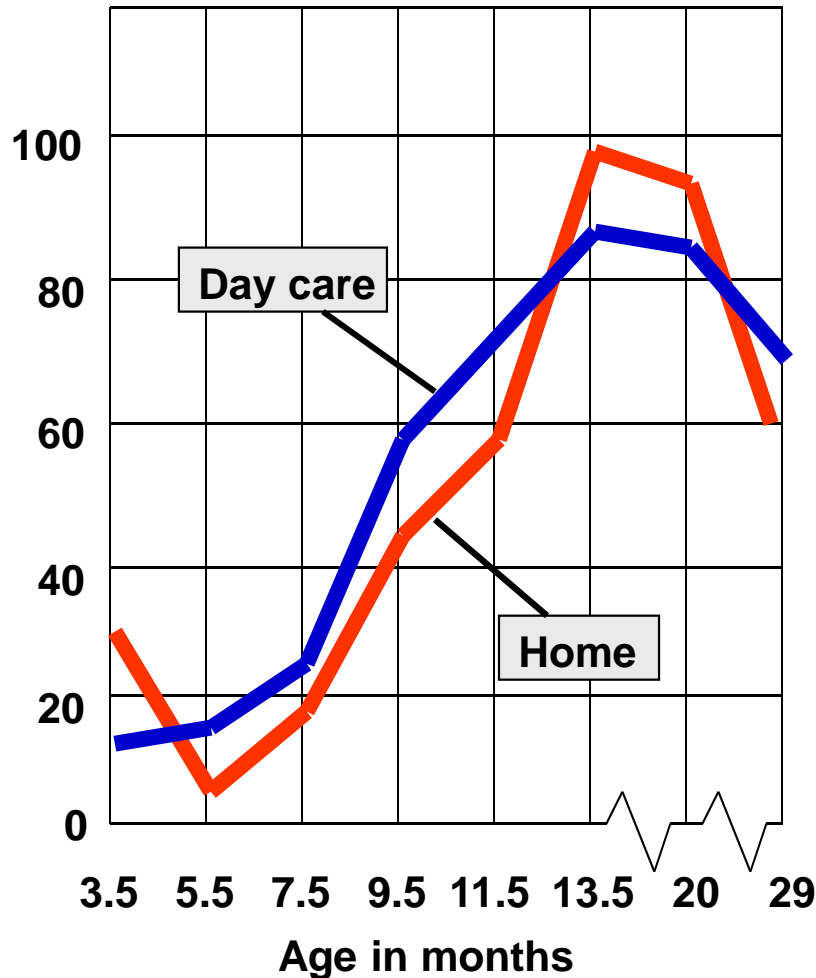
- ☑ a sense that the world is predictable and trustworthy
- ☑ said to be formed during infancy by appropriate experiences with responsive caregivers

## ⌘ Self-Concept

- ☑ a sense of one's identity and personal worth

# Social Development

Percentage of infants who cried when their mothers left



⌘ Groups of infants who had and had not experienced day care were left by their mothers in a unfamiliar room.

# ***Social Development- Child-Rearing Practices***



## ⌘ Authoritarian

- ☑ parents impose rules and expect obedience
- ☑ "Don't interrupt"
- ☑ "Why? Because I said so."

## ⌘ Authoritative

- ☑ parents are both demanding and responsive
- ☑ set rules, but explain reasons
- ☑ encourage discussion

# ***Social Development- Child-Rearing Practices***



## ⌘ Permissive

- ☑ submit to children's desires
- ☑ make few demands
- ☑ use little punishment

## ⌘ Rejecting-neglecting

- ☑ disengaged
- ☑ expect little
- ☑ invest little

# Social Development- Child-Rearing Practices

⌘ Three explanations for correlation between authoritative parenting and social competence

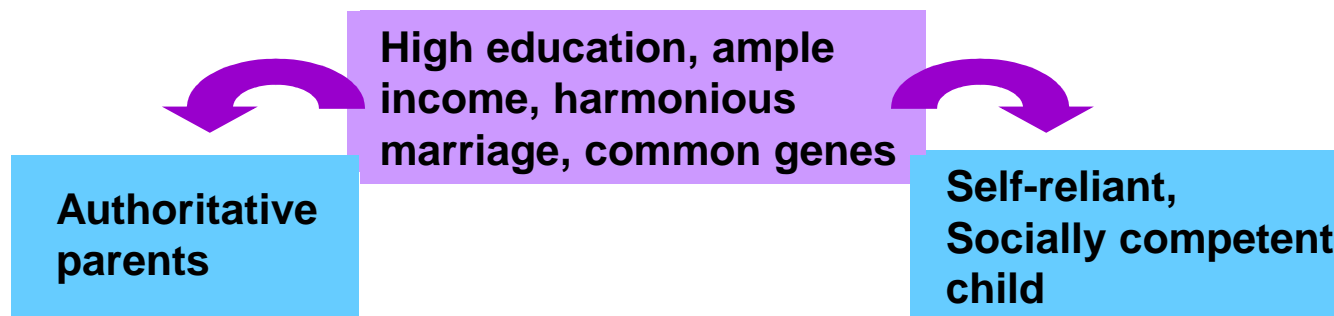
(1) Parent's behavior may be influencing child.



(2) Child's behavior may be influencing parents.



(3) Some third factor may be influencing both parents and child.



# 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

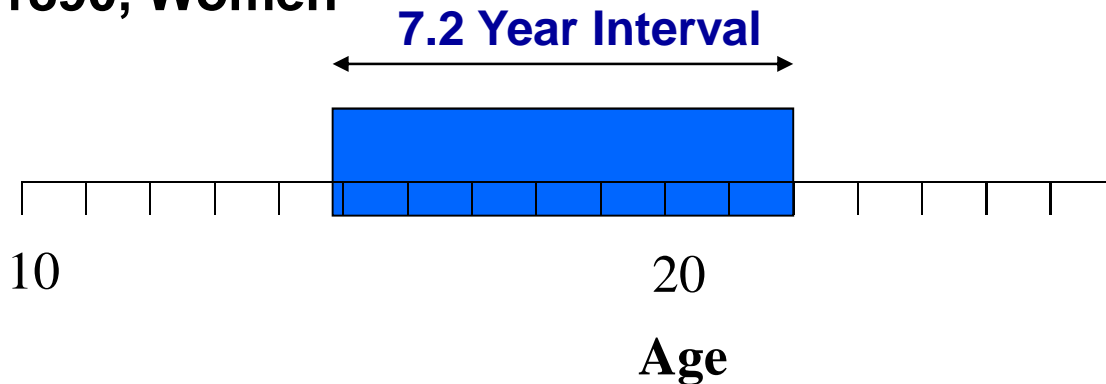
- ☑ nonreproductive sexual characteristics
  - ☒ female- enlarged breast, hips
  - ☒ male- voice quality, body hair

## ⌘ Menarche (meh-NAR-key)

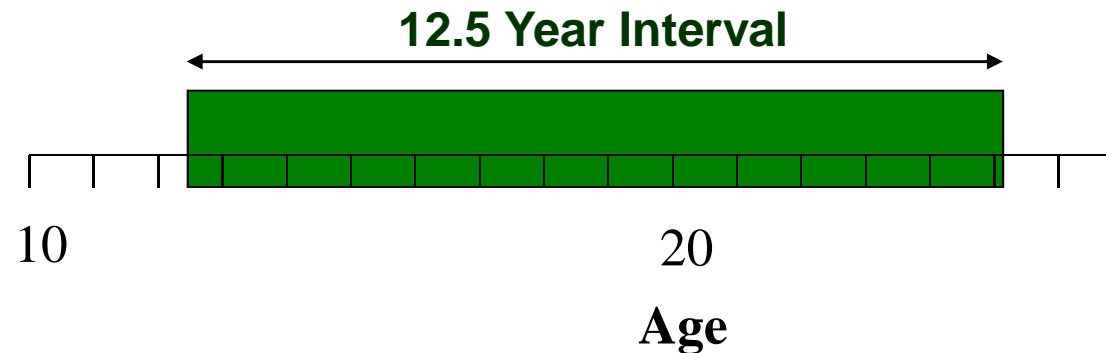
- ☑ first menstrual period

# Adolescence and Adulthood

1890, Women

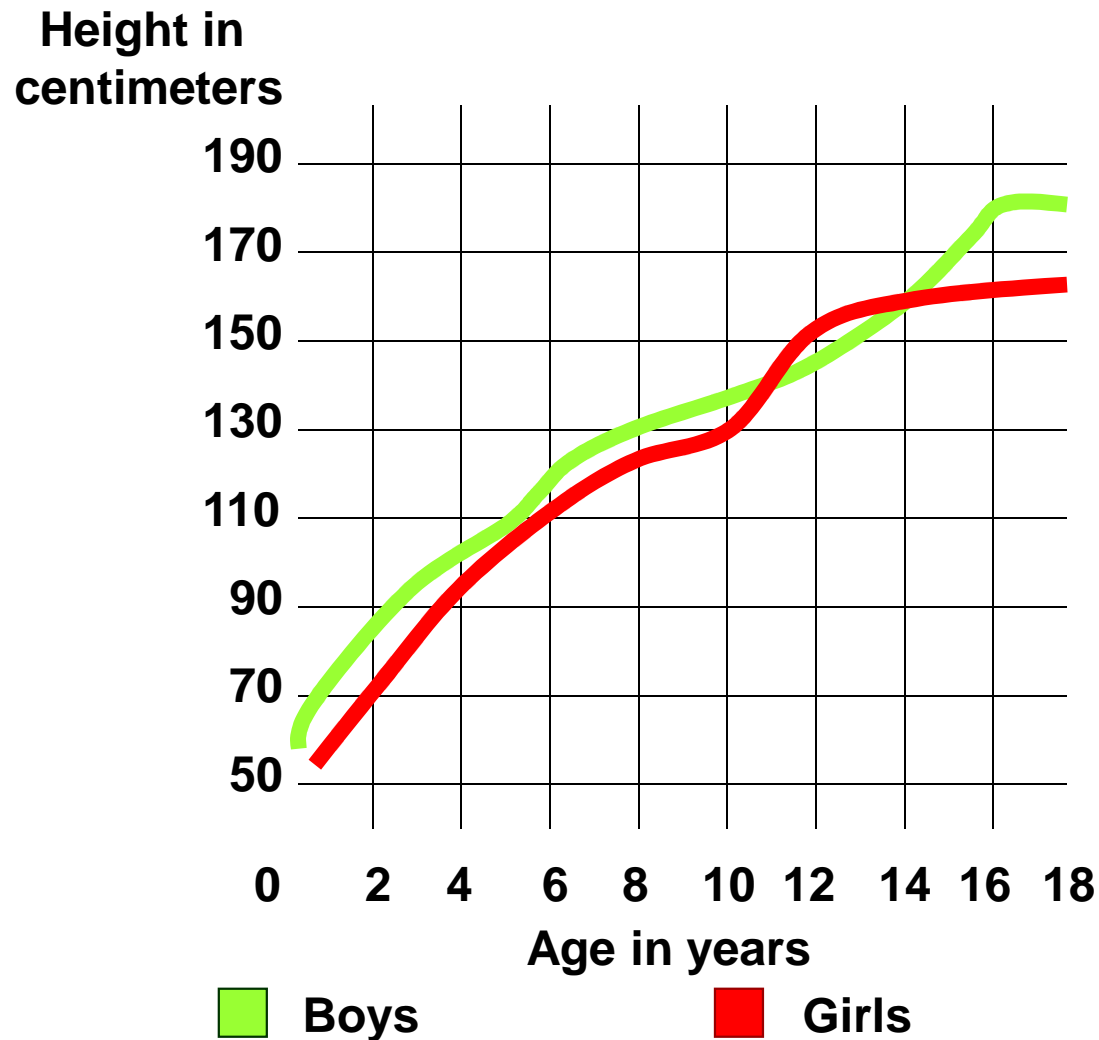


1995, Women



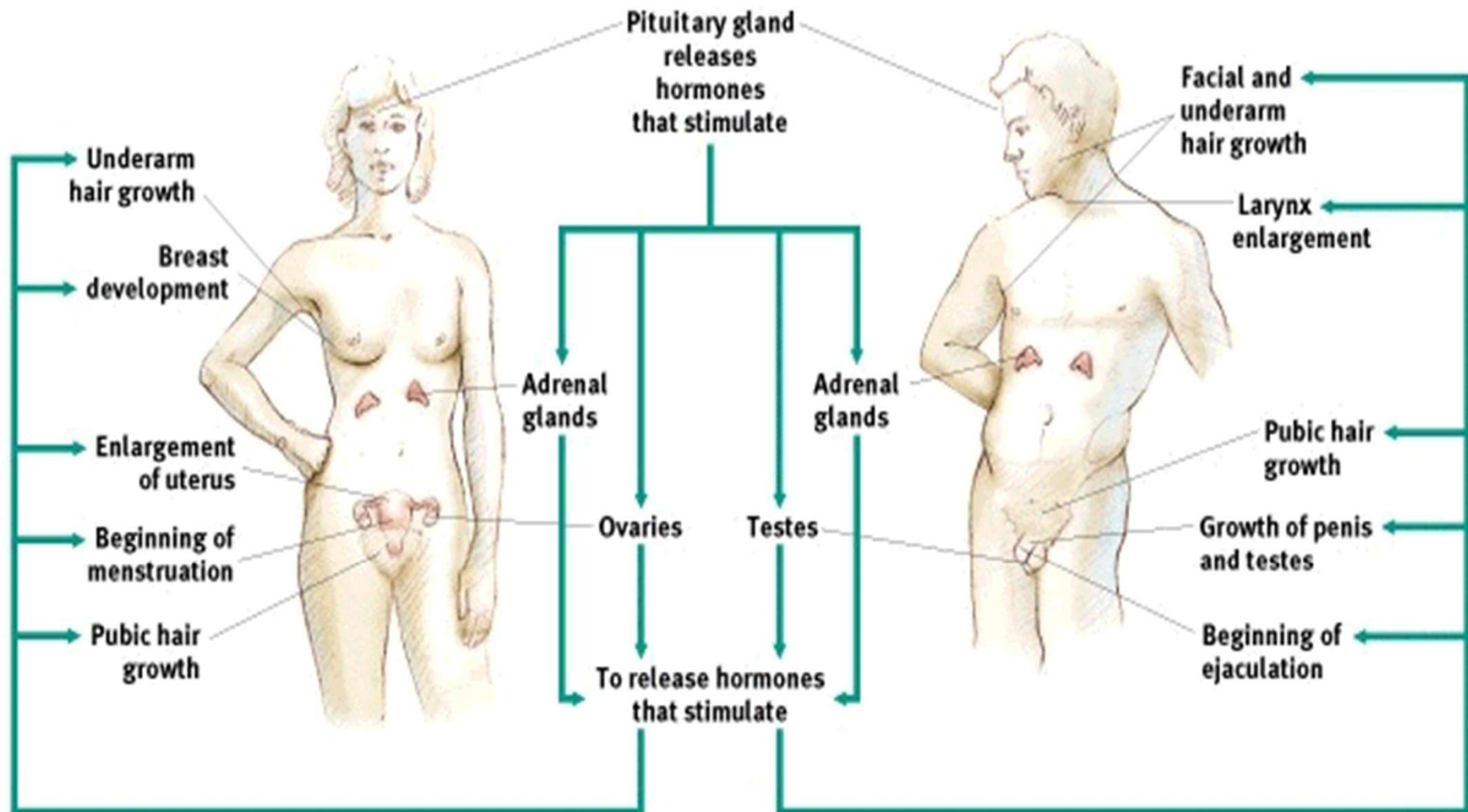
⌘ In the 1890's the average interval between a woman's menarche and marriage was about 7 years; now it is over 12 years.

# Adolescence and Adulthood

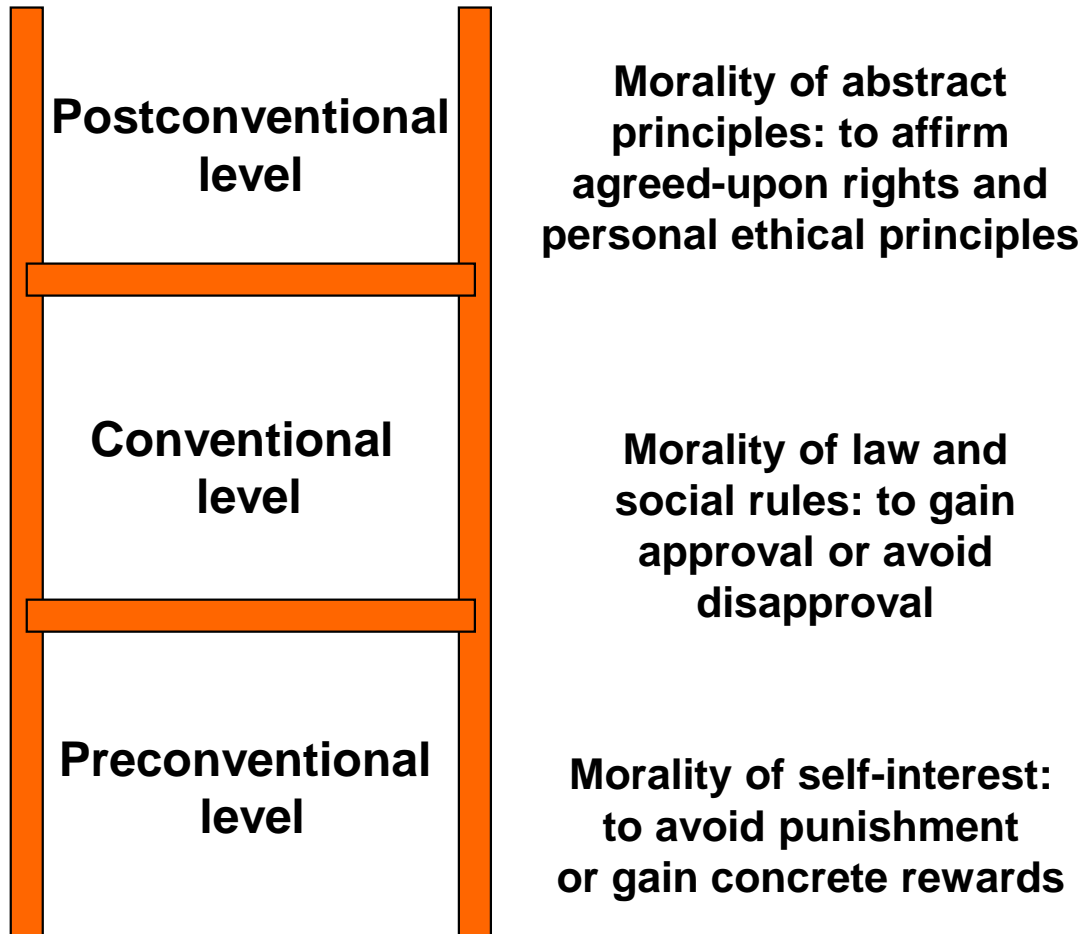


⌘ Throughout childhood, boys and girls are similar in height. At puberty, girls surge ahead briefly, but then boys overtake them at about age 14.

# Body Changes at Puberty



# ***Kohlberg's Moral Ladder***



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

# ***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.**

# ***Social Development***



## ⌘ Identity

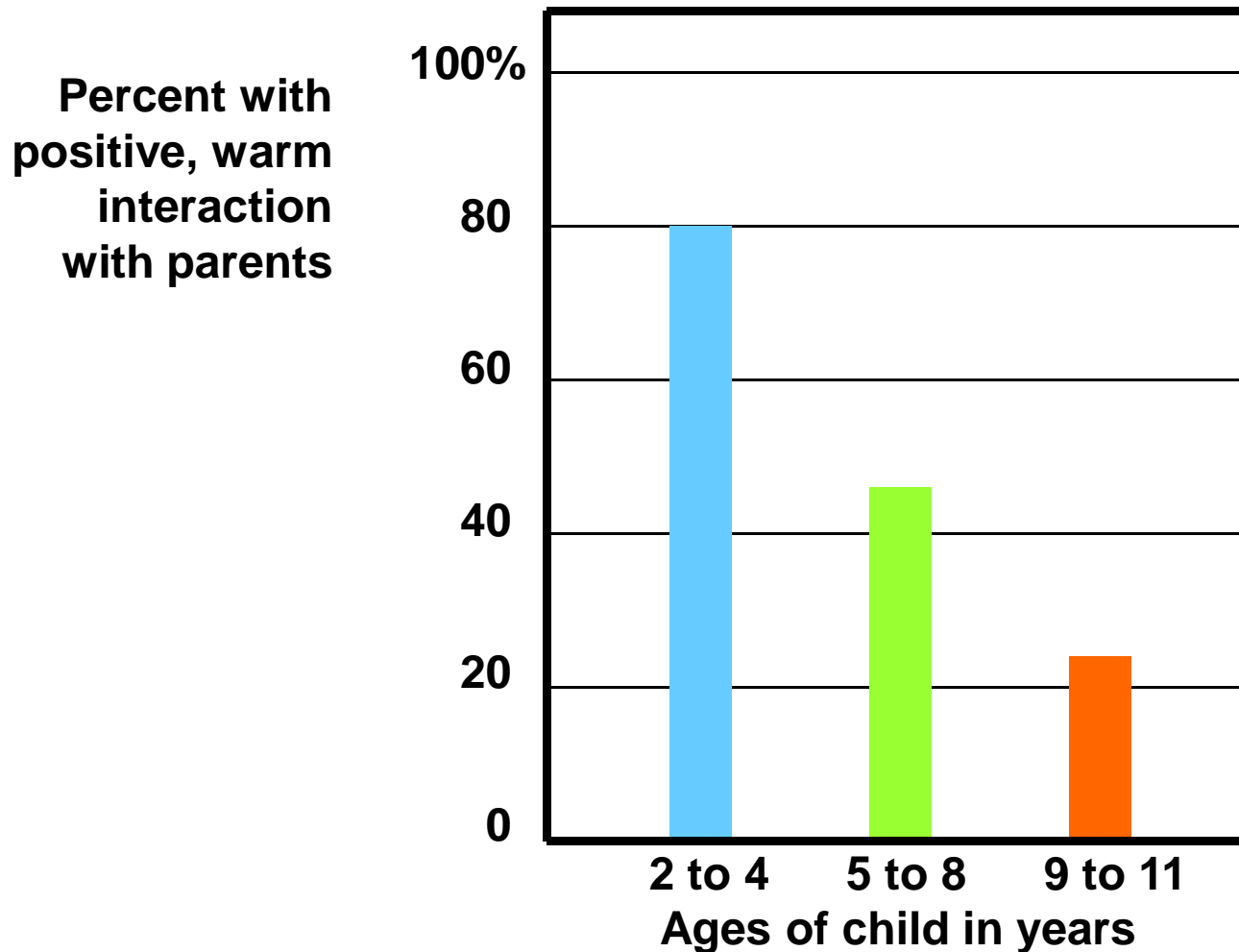
- ☑ one's sense of self
- ☑ the adolescent's task is to solidify a sense of self by testing and integrating various roles

## ⌘ Intimacy

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

# ***Social Development***

⌘ The changing parent-child relationship.



# ***Adulthood- Physical Changes***



## ⌘ Menopause

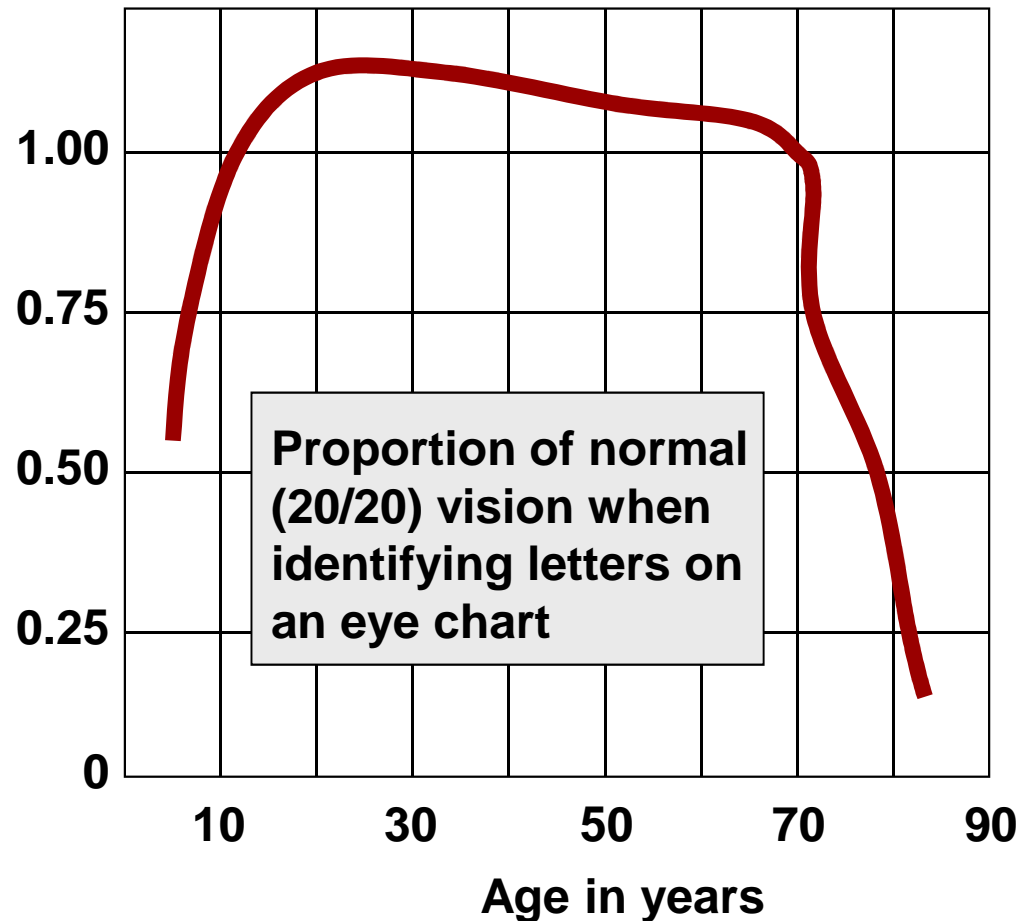
- ☒ the time of natural cessation of menstruation
- ☒ also refers to the biological changes a woman experiences as her ability to reproduce declines

## ⌘ Alzheimer's Disease

- ☒ a progressive and irreversible brain disorder
- ☒ characterized by a gradual deterioration of memory, reasoning, language, and finally, physical functioning

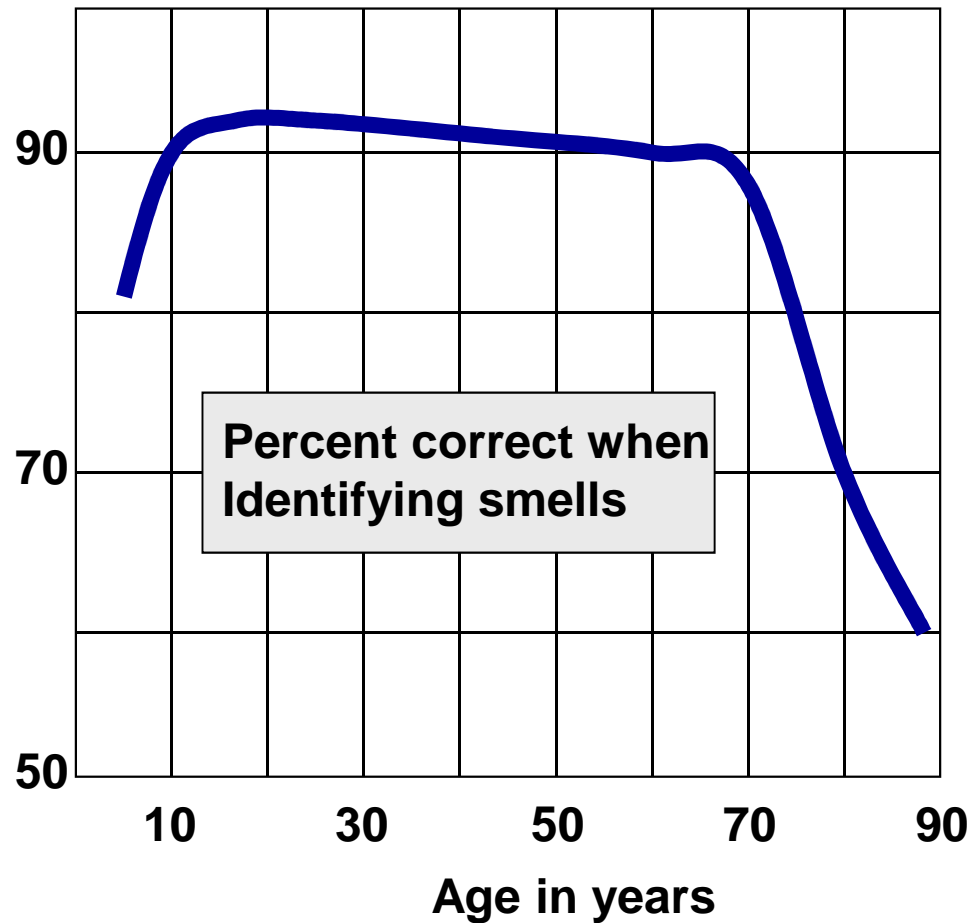
# Adulthood- Physical Changes

## ⌘ The Aging Senses



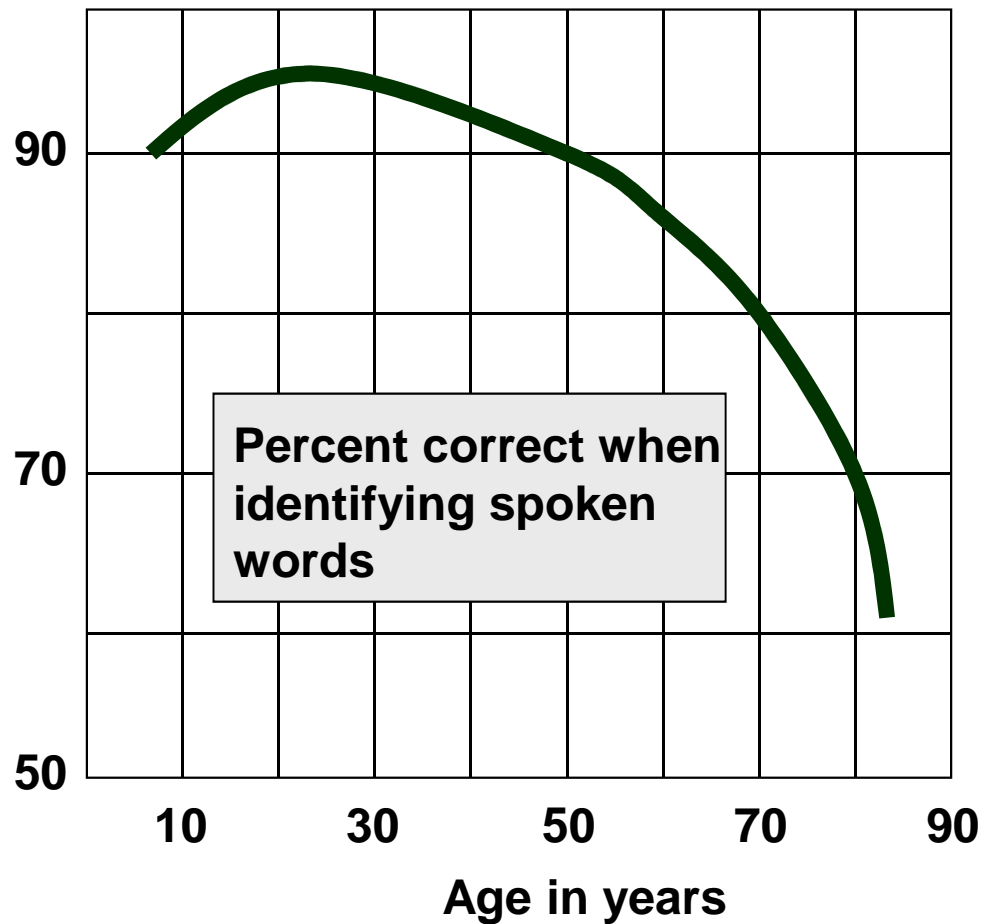
# Adulthood- Physical Changes

## ⌘ The Aging Senses

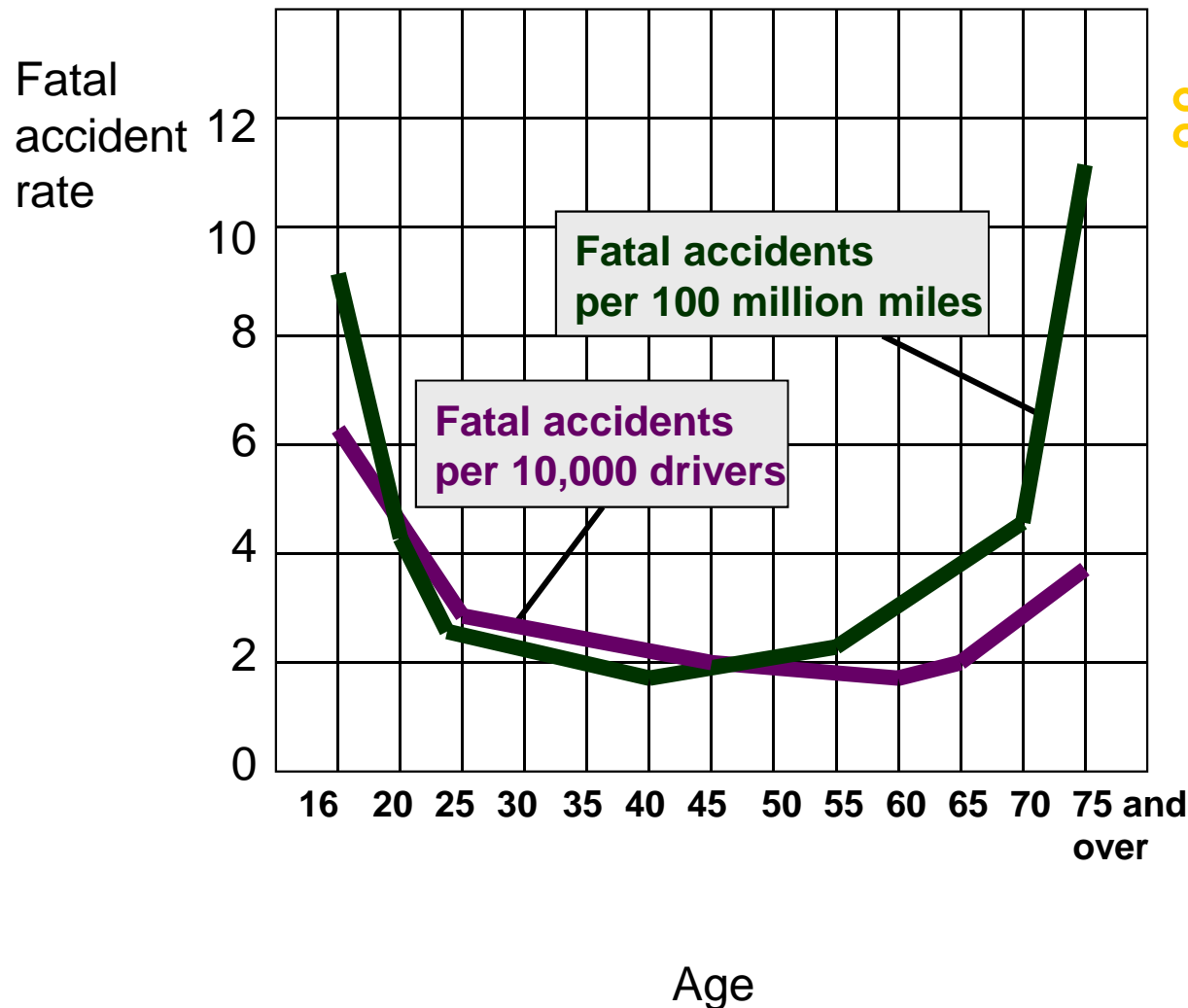


# Adulthood- Physical Changes

## ⌘ The Aging Senses



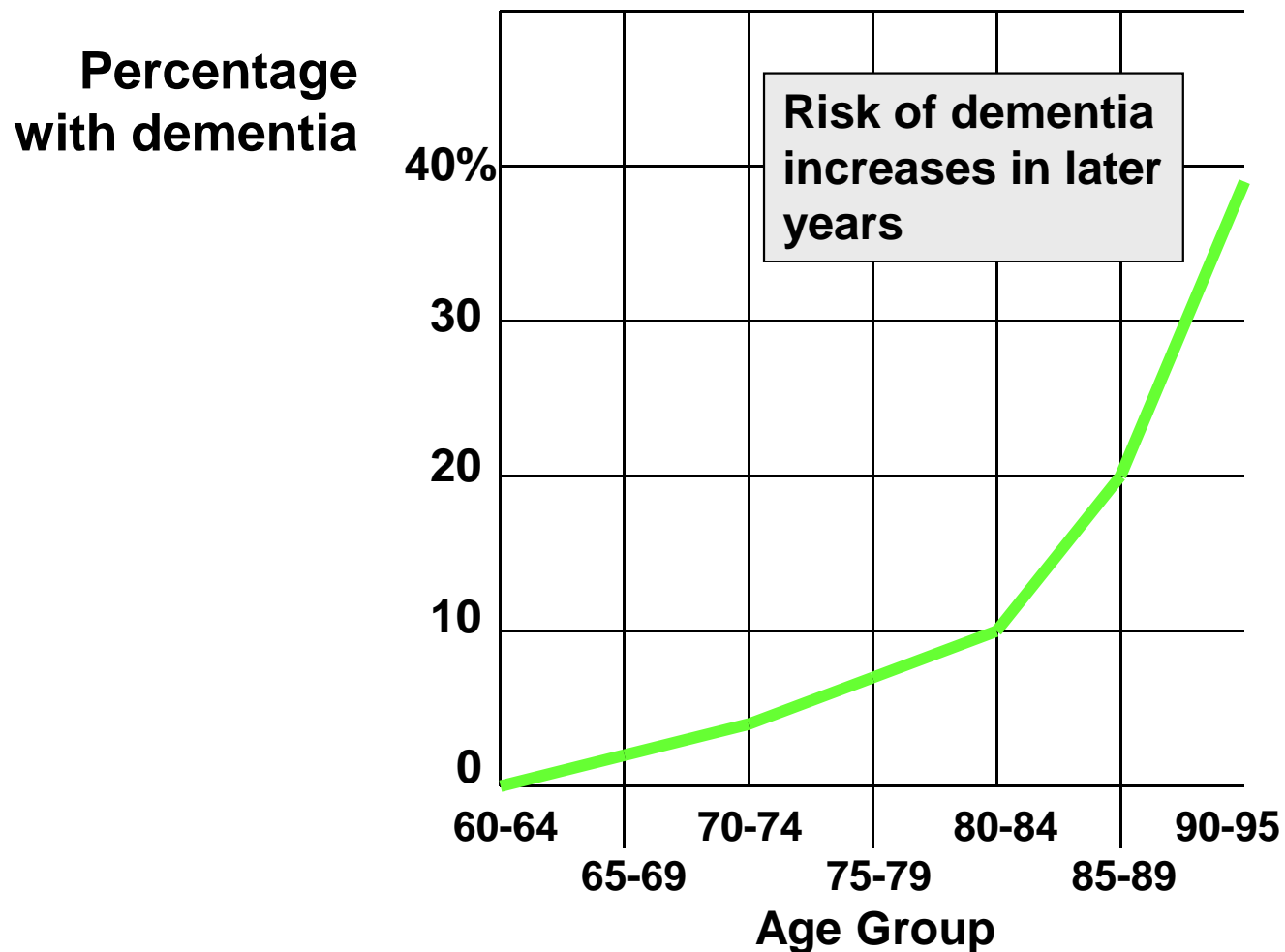
# Adulthood- Physical Changes



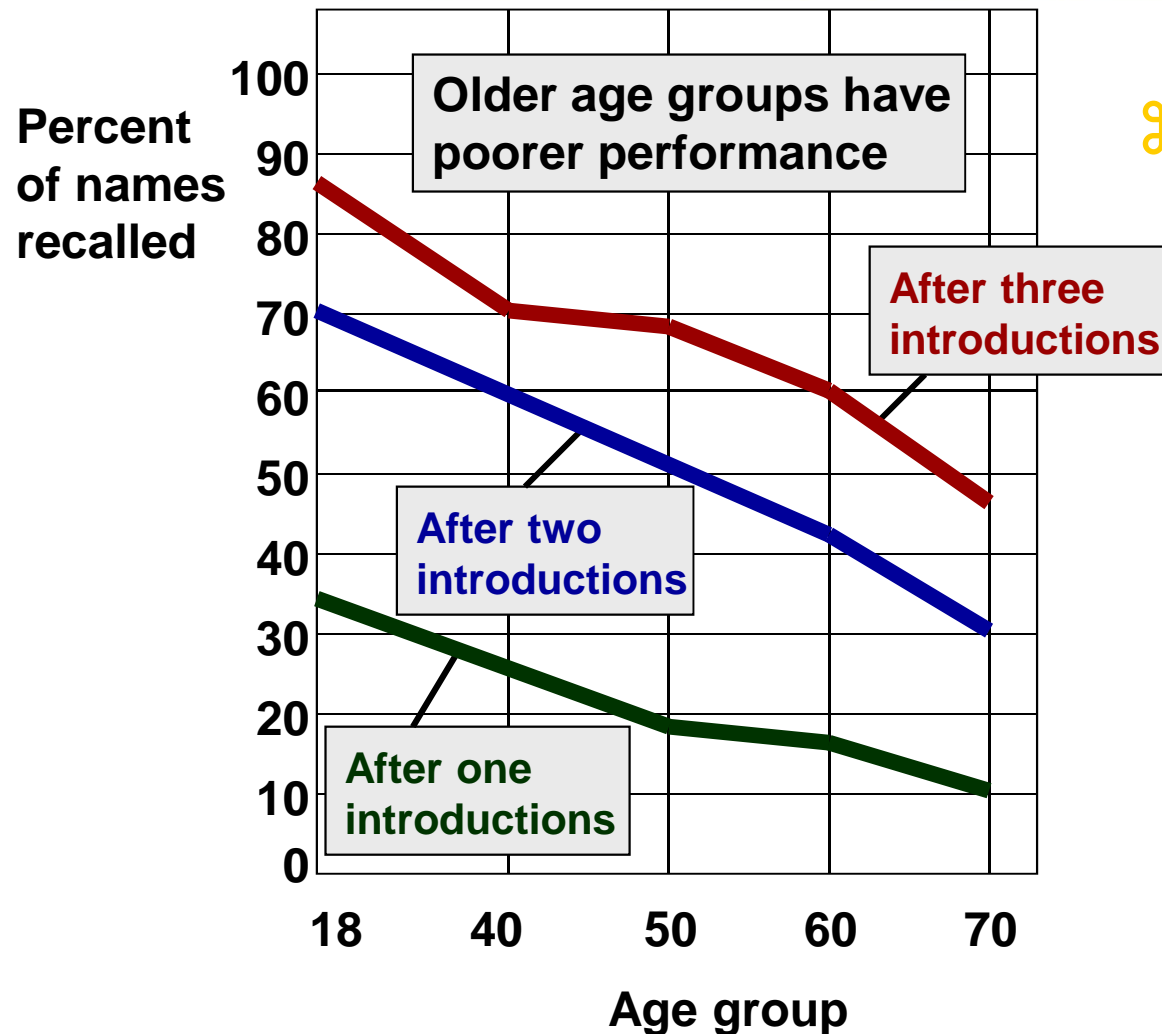
⌘ Slowing reactions contribute to increased accident risks among those 75 and older.

# Adulthood- Physical Changes

## ⌘ Incidence of Dementia by Age

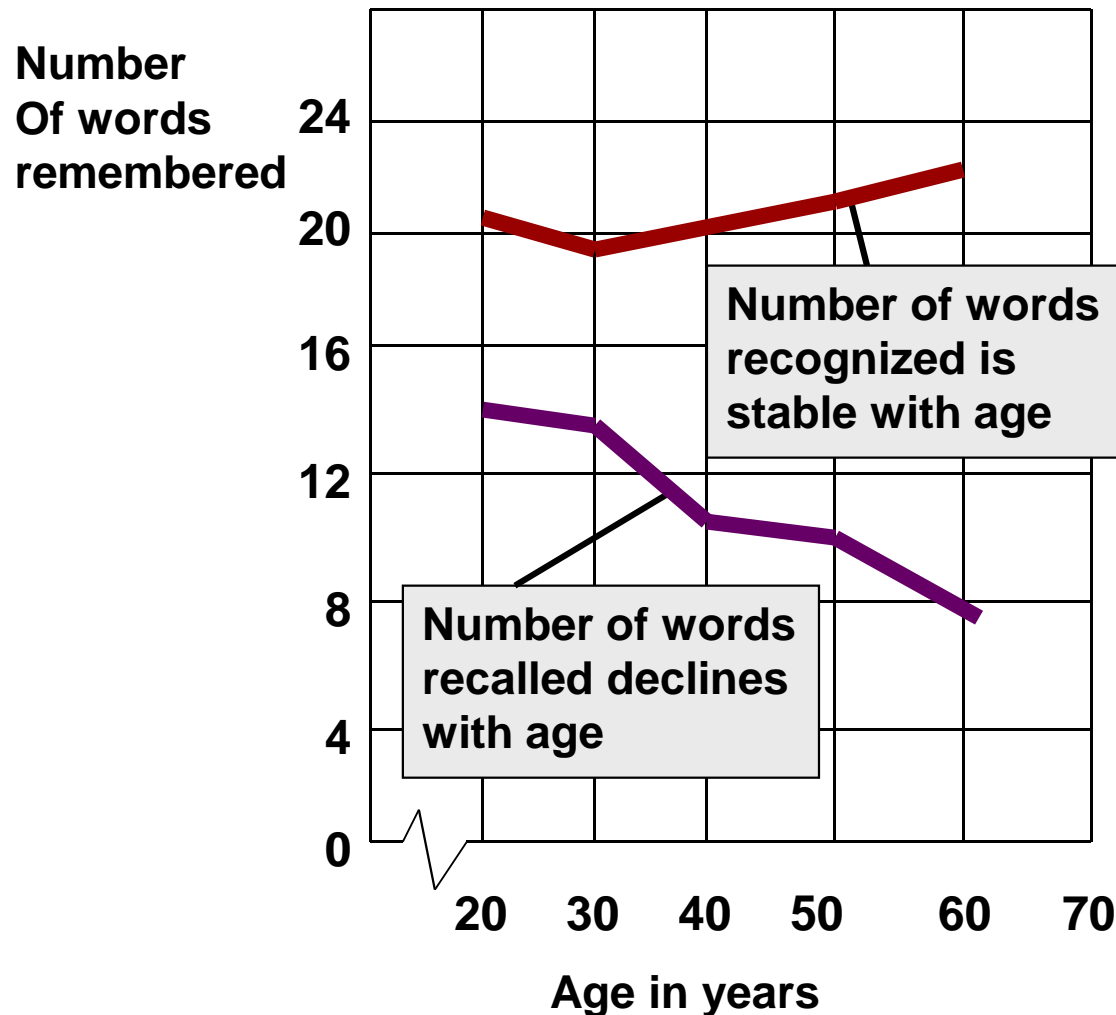


# Adulthood- Cognitive Changes



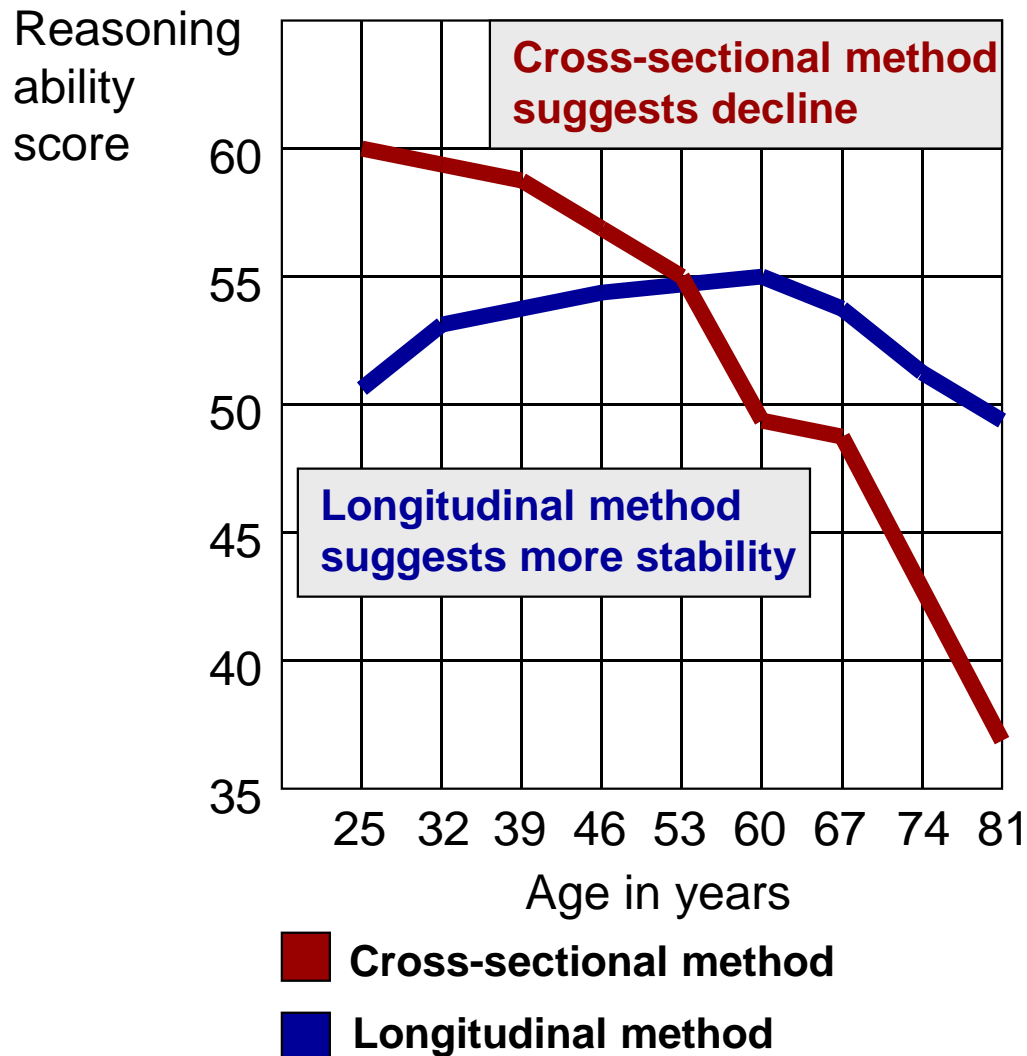
⌘ Recalling new names introduced once, twice or three times is easier for younger adults than for older ones (Crook & West, 1990).

# 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

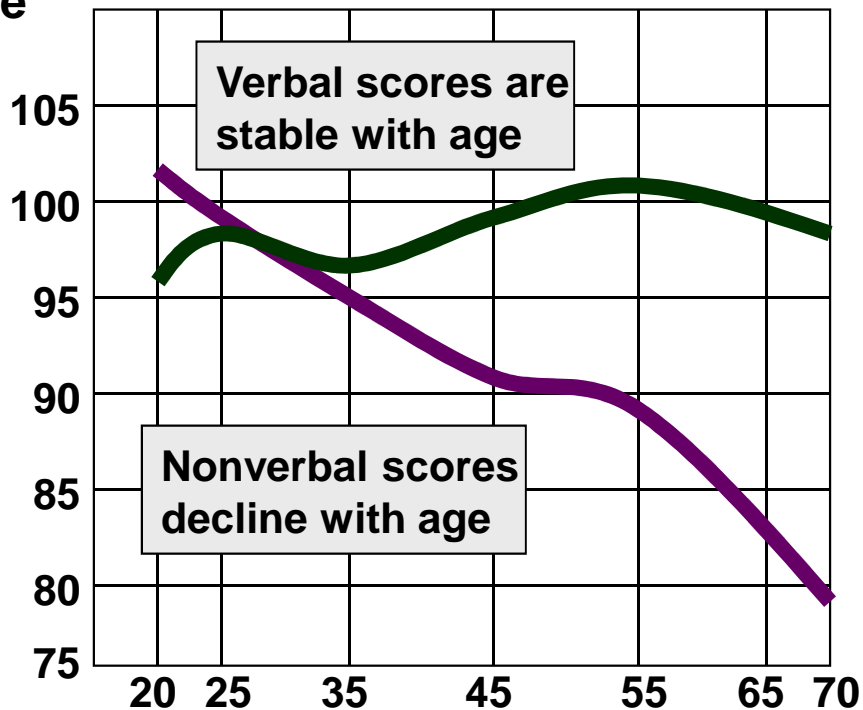
⌘ a study in which people of different ages are compared with one another

## ⌘ Longitudinal Study

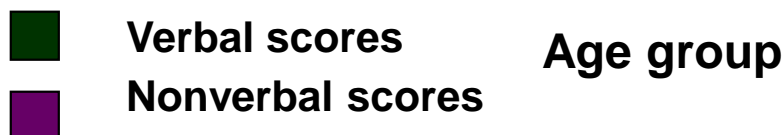
⌘ a study in which the same people are restudied and retested over a long period

# Adulthood- Cognitive Changes

Intelligence (IQ) score



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



# ***Adulthood- Cognitive Changes***



## ⌘ Crystallized Intelligence

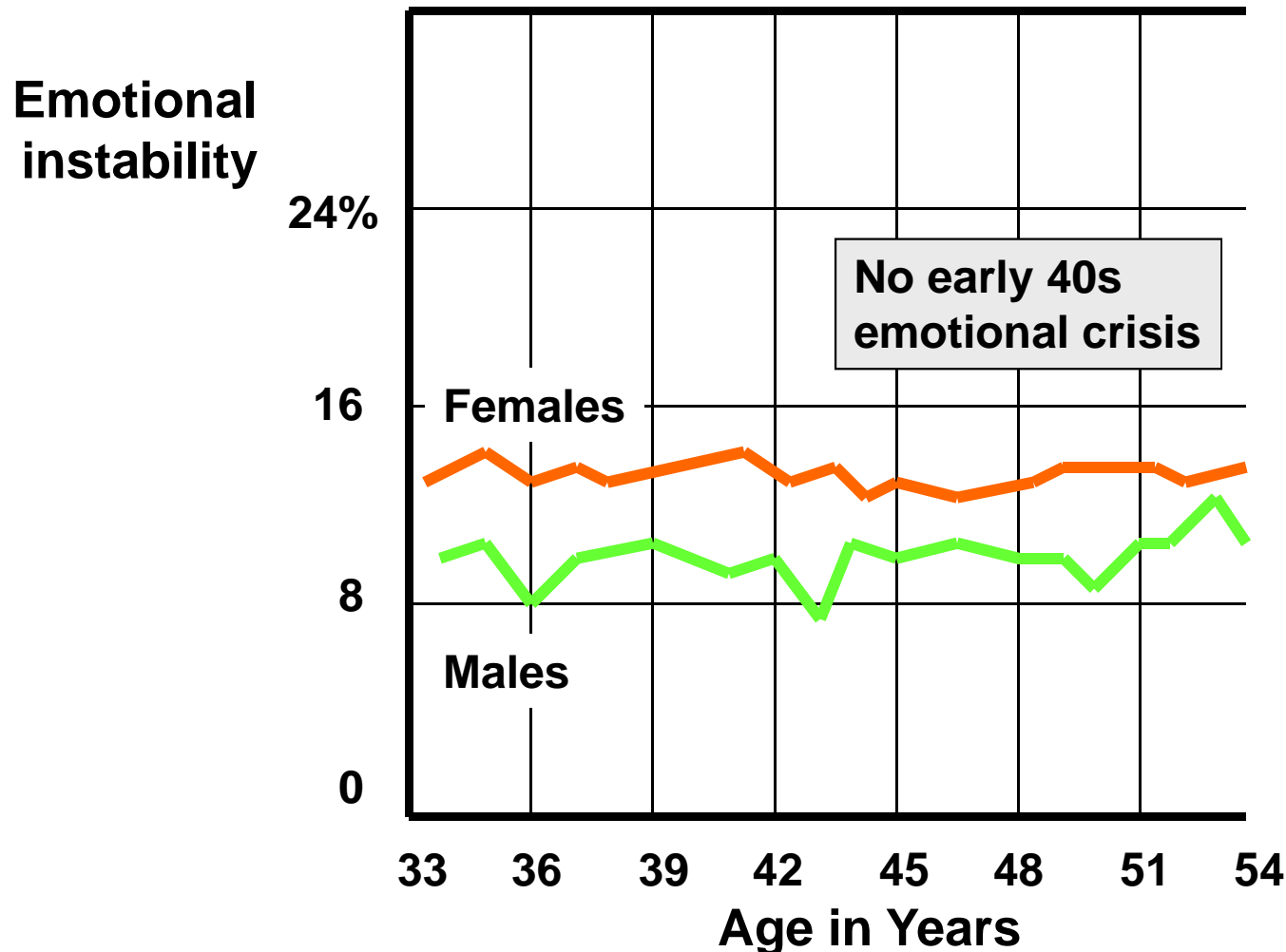
- ☑ one's accumulated knowledge and verbal skills
- ☑ tends to increase with age

## ⌘ Fluid Intelligence

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

# Adulthood- Social Changes

⌘ Early-forties midlife crisis?



# ***Adulthood- Social Changes***



## **⌘ Social Clock**

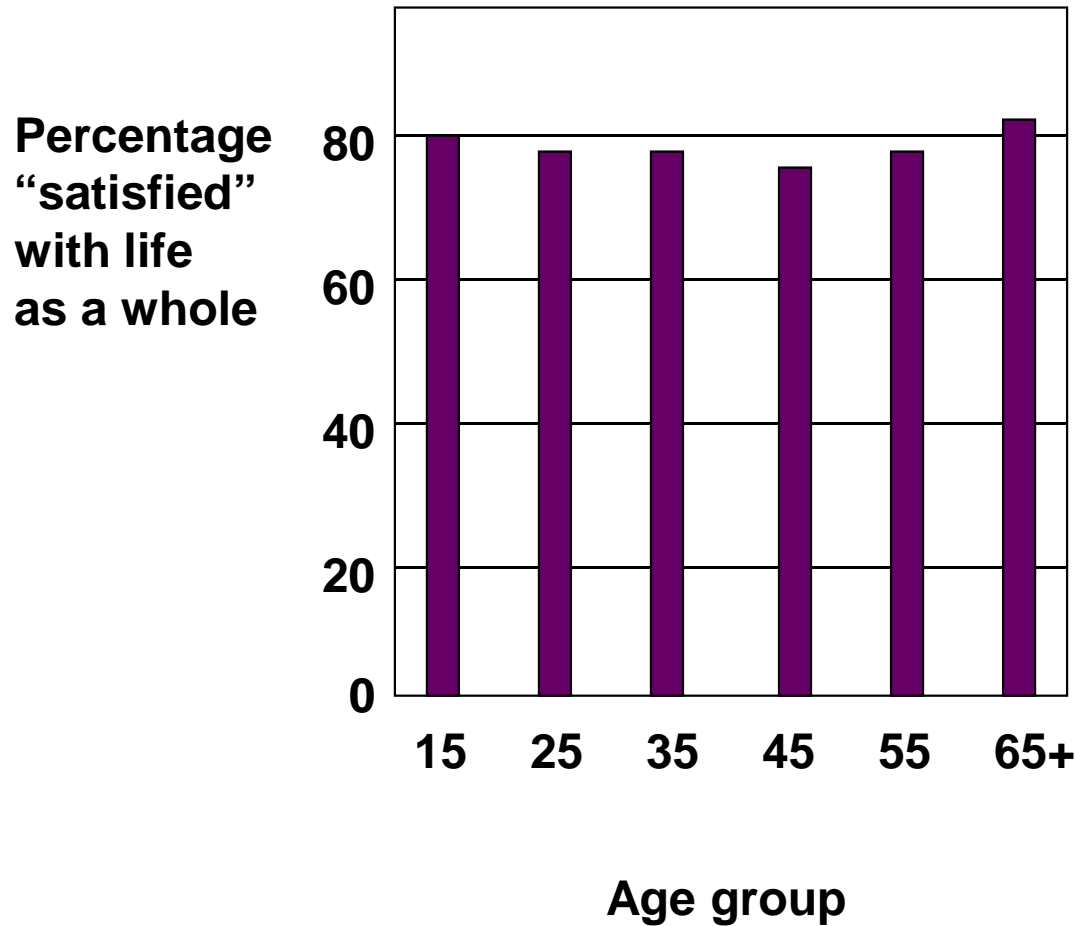
**⌘ the culturally preferred timing of social events**

**⌘ marriage**

**⌘ parenthood**

**⌘ retirement**

# Adulthood- Social Changes



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