### Developmental Psychology



The study of YOU from womb to tomb.

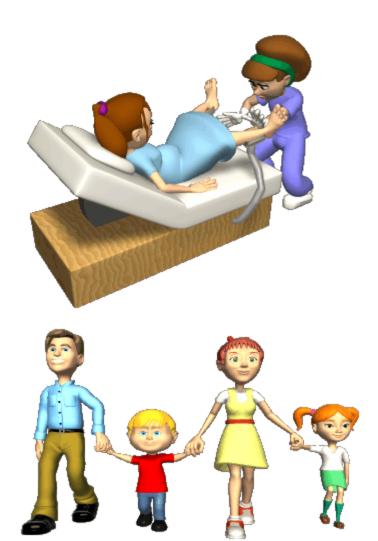
We are going to study how we change physically, socially, cognitively and morally over our lifetimes.

#### Nature Versus Nurture

While going through this unit always been in the back of your head....

Are you who you are because of:

- The way you were born- Nature.
- The way you were raised-Nurture.



#### Research Methods

#### **Cross-Sectional Studies**

 Participants of different ages studied at the same time.

#### **Longitudinal Studies**

 One group of people studied over a period of time.





### Physical Development

· Focus on our physical changes over time.



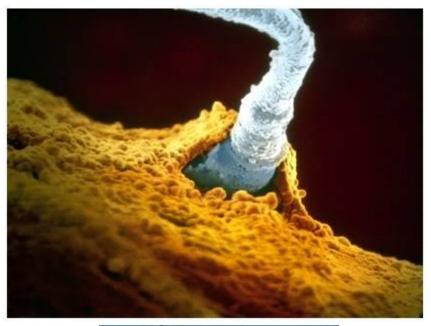


### Prenatal Development

- Conception begins with the drop of an egg and the release of about 200 million sperm.
- The sperm seeks out the egg and attempts to penetrate the eggs surface.



 Once the sperm penetrates the egg- we have a fertilized egg called......





### The Zygote

The first stage of prenatal development. Lasts about two weeks and consists of rapid cell division.

### Zygotes

- Less than half of all zygotes survive first two weeks.
- About 10 days after conception, the zygote will attach itself to the uterine wall.
- The outer part of the zygote becomes the placenta (which filters nutrients).



# After two weeks, the zygote develops into an.... **Embryo**



- · Lasts about 6 weeks.
- Heart begins to beat and the organs begin to develop.



#### Fetus

- By nine weeks we have a...
- The fetus by about the 6<sup>th</sup> month, the stomach and other organs have formed enough to survive outside of mother.
- At this time the baby can hear (and recognize) sounds and respond to light.

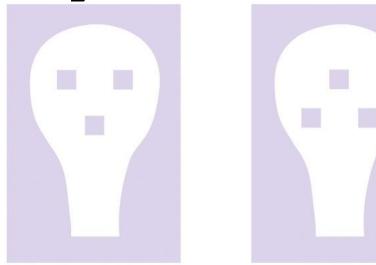
Teratogens



- Chemical agents that can harm the prenatal environment.
- Alcohol (FAS)
- Other STDs can harm the baby.....
- · HIV
- Herpes
- Genital Warts

### Healthy Newborns

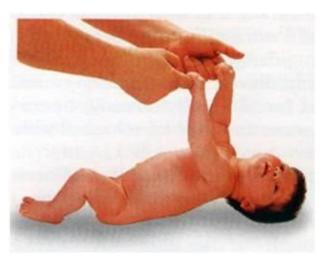
- Turn head towards voices.
- See 8 to 12 inches from their faces.
- Gaze longer at human like objects right from birth.





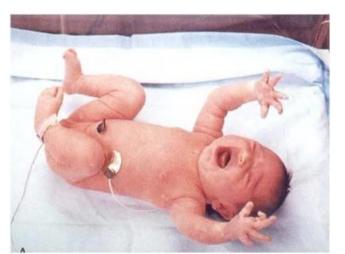


### Reflexes



- Inborn automatic responses.
- Rooting
- Sucking
- Grasping
- Moro
- · Babinski





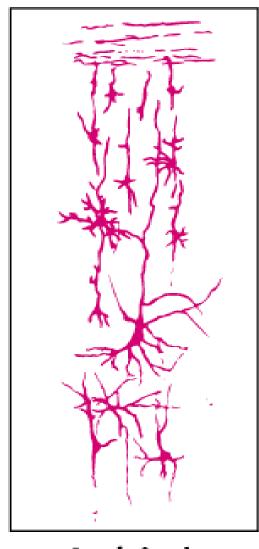


#### Maturation

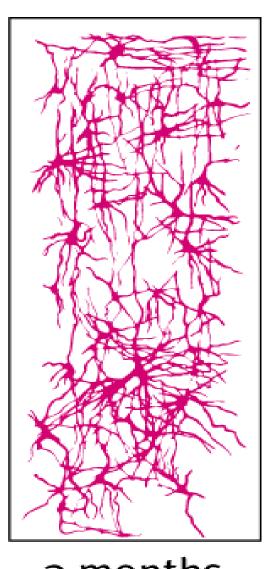


- Physical growth, regardless of the environment.
- Although the timing of our growth may be different, the sequence is almost always the same.

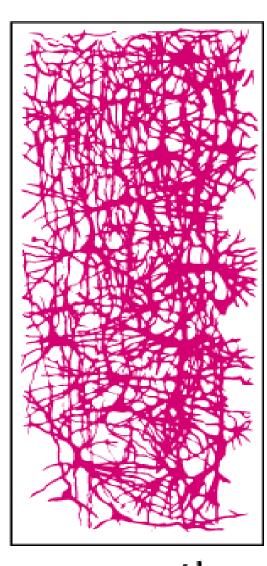
#### **Normal Maturation**



At birth

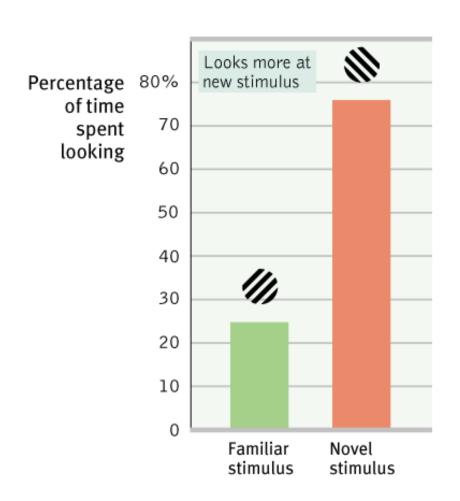


3 months



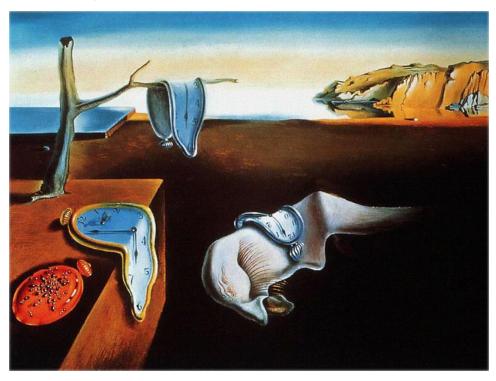
15 months

#### Habituation



- Infant's response to a novel stimulus decreases after repeated presentations
- Newborns can differentiate between different stimuli

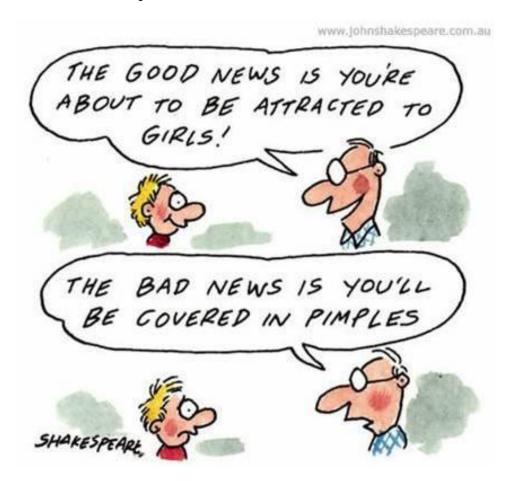
### Infantile Amnesia



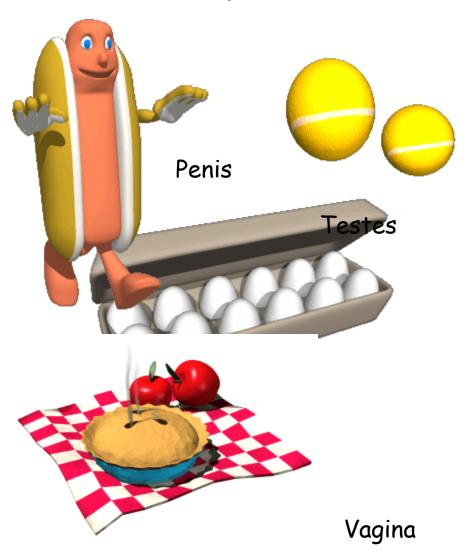
- When is your earliest memory?
- Probably not until your 3<sup>rd</sup> birthday...why?

### Puberty

 The period of sexual maturation, during which a person becomes capable of reproducing.



### Primary Sexual Characteristics



 Body structures that make reproduction possible.

### Secondary Sexual Characteristics

Non reproductive
 sexual
 characteristics.

Body Hair



Widening of the Hips





Deeper Voice

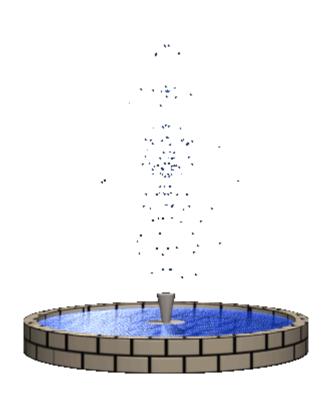


Breast Development

### Landmarks for Puberty

- Menarche for girls.
- First ejaculation for boys.





#### Adulthood



 All physical abilities essentially peak by our mid twenties.

#### Adulthood

Then is all goes
 downhill.



### Physical Milestones



Menopause

## Life Expectancy

- Life Expectancy keeps increasingnow about 75.
- Women outlive men by about 4 years.
- But more men are conceived 126 to 100. Then 105 to 100 by birth. In other words, men die easier.



# Death



- Elizabeth Kubler-Ross's
  Stages of Death/Grief.
- 1. Denial
- 2. Anger
- 3. Bargaining
- 4. Depression
- 5. Acceptance

Social Development

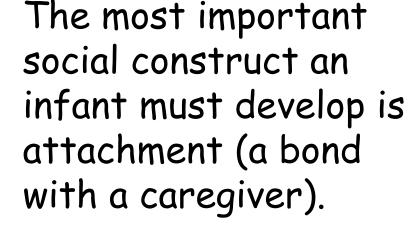
- Up until about a year, infants do not mind strange people (maybe because everyone is strange to them).
- At about a year, infants develop stranger anxiety.
- Why do you think it starts at about a year?

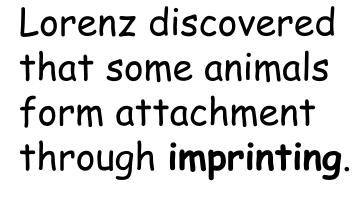


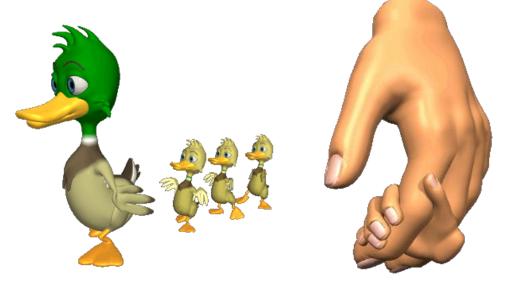


#### Attachment



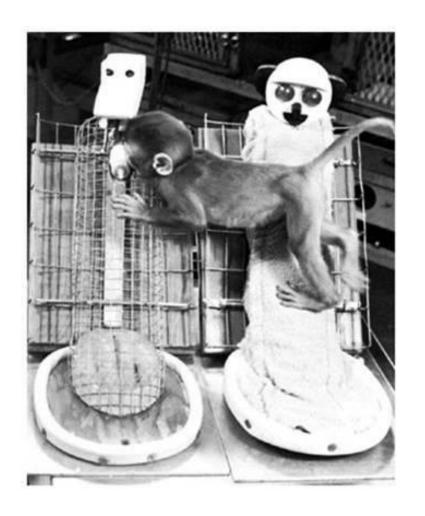






#### Attachment

- Harry Harlow and his monkeys.
- Harry showed that monkeys needed touch to form attachment.



#### Attachment

• Critical Periods: the optimal period shortly after birth when an organism's exposure to certain stimuli or experiences produce proper development.



 Those who are deprived of touch have trouble forming attachment when they are older.

### Types of Attachment



- Mary Ainsworth's
  Strange Situation.
- Three types of attachment:
- 1. Secure (60%)

2. Insecure-Avoidant/Anxious (40%) Parenting Styles

Authoritarian
 Parents

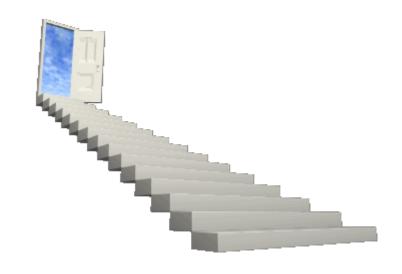
Permissive
 Parents

 Authoritative Parents



### Stage Theorists

 These psychologists believe that we travel from stage to stage throughout our lifetimes.



### Cognitive Development



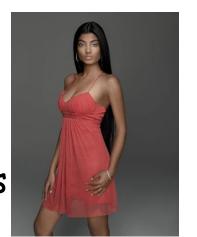


- It was thought that kids were just stupid versions of adults.
- Then came along
  Jean Piaget
- Kids learn differently than adults

Schemas

Right now in your head, picture a model.

- Children view the world through schemas (as do adults for the most part).
- Schemas are ways we interpret the world around us.
- It is basically what you picture in your head when you think of anything.







These 3 probably fit into your concept (schema) of a model.



But does this one?

If I teach my 3 year that an animal with 4 legs and a tail is a dog....

#### Assimilation



 Incorporating new experiences into existing schemas.

What schema would you assimilate this into?

### Assimilation in High School



 When you first meet somebody, you will assimilate them into a schema that you already have.

If you see two guys dressed like this, what schema would you assimilate them into?

•Would you always be right?

#### Accommodation

Changing an existing schema to adopt to new information.





If I tell someone from the mid-west to picture their schema of the Bronx they may talk about the ghetto areas.









But if I showed them other areas of the Bronx, they would be forced to accommodate (change) their schema to incorporate their new information.

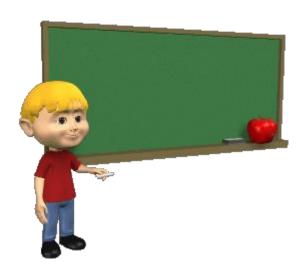
Stages of Cognitive Development

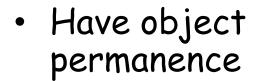
### Sensorimotor Stage

- Experience the world through our senses.
- Do NOT have object permanence.
- Develop separation anxiety around 12 mo.
- 0-2

### Preoperational Stage 2-6









- Begin to use language to represent objects and ideas
- Egocentric: cannot look at the world through anyone's eyes but their own.
- Do NOT understand concepts of conservation.
- Begin role playing

#### Conservation

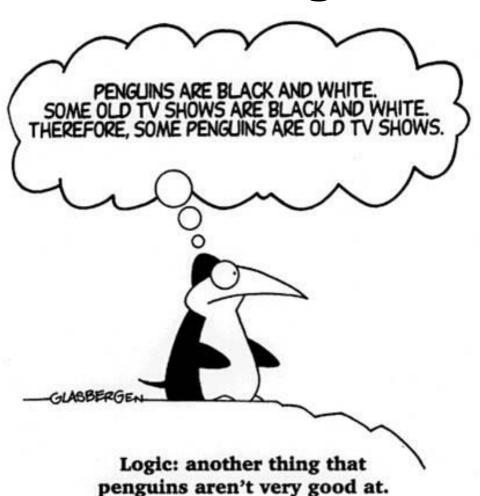
Conservation refers
 to the idea that a
 quantity remains the
 same despite
 changes in
 appearance and is
 part of logical
 thinking.





## Concrete Operational Stage 6-12

- Can demonstrate concept of conservation (7)
- Learn to think logically about CONCRETE events
- Can categorize
  (color & size)



### Formal Operational Stage

- What would the world look like with no light?
- Picture god
- What way do you best learn?

- Abstract reasoning
- Manipulate objects in our minds without seeing them
- Hypothesis testing
- Trial and Error
- Metacognition
- Not every adult gets to this stage

### Criticisms of Piaget

- Some say he underestimates the abilities of children.
- Information-Processing Model says children to not learn in stages but rather a gradual continuous growth.
- Studies show that our attention span grows gradually over time.
- Research shows cognitive development does follow this general sequence, though

