

# UNIT 5

developmental psychology

## CROSS-SECTORAL STUDIES

participants of different ages  
studied at the same time

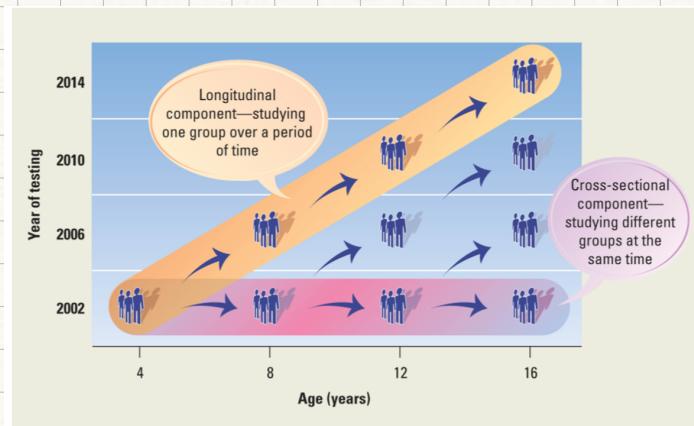
## LOGITUDINAL STUDIES

one group of people studied  
over a period of time

### TWO MAJOR DEVELOPMENTAL ISSUES

#### continuity and stages

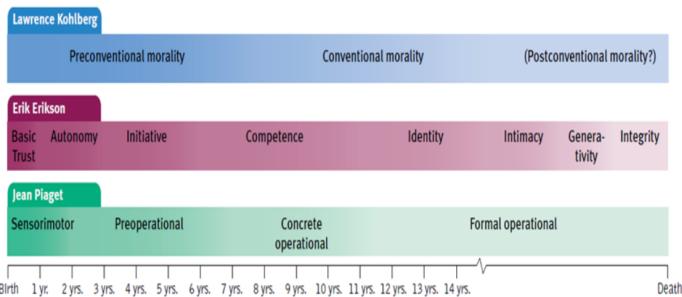
researchers who view development as a slow, continuous process are generally those who emphasize experience + learning. Those w/ a biological perspective, on the other hand, view maturation + development as a series of genetically predisposed steps or stages.



#### stability and change

lifelong development requires both stability + change. Personality gradually stabilizes as people age. However, this does not mean that our traits do not change over a lifetime. Some temperaments are more stable than others.

### Continuity and Stages



- Sigmund Freud
- Erik Erikson
- Jean Piaget

## STAGE THEORISTS

Freud, Erikson, and Piaget all believed that we travel from stage to stage throughout our lifetimes

## SIGMUND FREUD (1856-1939)

- we all have a libido/sexual drive
- our libido travels to different areas of our body throughout our development

### ORAL STAGE (AGE 0-1)

seek pleasure through our mouths

the oral receptive personality is preoccupied w/ eating/drinking and reduces tension thru oral activity.

They are generally passive, needy, and sensitive to rejection. They will easily 'swallow' other people's ideas.

### ANAL STAGE (AGE 1-3)

- develops during toilet training

- libido is focused on controlling and expelling waste

- a person fixated may become overly controlling (retentive) or out of control

- if we become preoccupied w/ any one area, we have become fixated on it
- together Freud called these stages our Psychosexual Stages of Development

### GENITAL STAGE (12 - DEATH)

- libido is focused on their genitals and sexual relationships w/ the opp. gender
- Freud thought balance in all areas of life and relationships reflect a mentally healthy individual

### TRUST VS. MISTRUST (INFANCY TO 1 YEAR)

- can a baby trust the world to fulfill its needs?
- the trust or mistrust they develop can carry on w/ the child for the rest of their lives

### AUTONOMY VS. SHAME & DOUBT (1 TO 3 YEARS)

- toddlers begin to control their bodies (toilet training)
- control temper Tantrums
- big word = NO
- can they learn control or will they doubt themselves?

### INITIATIVE VS. GUILT (3 TO 6 YEARS)

- word turns from No to Why?
- want to understand the world and ask questions
- is the curiosity encouraged or scolded?

### IDENTITY VS. ROLE CONFUSION

(TEEN YEARS INTO 20S)

- in our teenage years we try out different roles
- "who am I?"

The oral aggressive personality is hostile and verbally abusive to others, using mouth-based aggression

(expulsive)

### PHALLIC STAGE (3-6)

- children first recognize their gender (4-7)
- causes conflict in families w/ the Oedipus + Electra Complexes
- fixation can cause later problems in relationships

### LATENCY STAGE (6-12)

- libido is hidden (7-11)
- drive is transformed to allow for self-discovery thru hobbies and interests
- fixation in this stage could lead to ease or difficulty relating to others

## ERIK ERIKSON

- a neo-Freudian
- worked w/ Anna Freud
- thought our personality was influenced by our experiences w/ others
- stages of psychosocial development
  - ↳ each stage centers on a conflict
- Psychosocial Theory
  - a revision of Freud's theory - Erikson focused on healthy child development
  - Erikson proposed 8 stages of psychosocial development, plus one in 1997

### INDUSTRY VS. INFERIORITY (6 YEARS TO PUBERTY)

- school begins
- we are for the first time evaluated by our peers and a formal system
- do we feel good/bad about our accomplishments?
- can lead us to feeling bad about ourselves for the rest of our lives [inferiority complex]

### MARRIAGE

- at least a 5-1 ratio of positive to negative in-

→ if I do not find myself → identity crisis

## INTIMACY VS. ISOLATION

(20S TO EARLY 40S)

→ have to balance work and relationships

→ what are my priorities?

Teractions is a clear indicator of a healthy relationship

## GENERATIVITY VS. STAGNATION

→ is everything going as planned?

→ am I happy w/ what I created?

→ mid-life crisis!!

## INTEGRITY VS. DESPAIR

→ look back on life

→ was my life meaningful or do I have regret?

## PREGNATAL DEVELOPMENT

→ conception begins w/ the drop of an egg release of about 200 million sperm

→ the sperm seeks out the egg and attempts to penetrate the eggs surface

### • CRITICAL PERIODS:

- at what prenatal stage is the developing baby most vulnerable to toxins such as alcohol, cocaine, and cigarette smoke?
- are the effects more severe when the exposure occurs early in pregnancy?
- or are they more severe when the exposure occurs closer to birth?

### • CONCEPTION

→ the process of fertilization where a sperm cell combines w/ an egg to create a new organism

### • OVULATION

→ release of an egg (ovum) from female

### • DIFFERENTIATION

→ process that occurs during cell division in which each new cell is committed to become a particular structure

### • STAGES OF PREGNATAL DEVELOPMENT

→ the germinal stage: conception - 2 wks

▫ implantation

1st stage

→ the embryonic stage: weeks 3-8

▫ miscarriage

2nd stage

▫ stillbirth

▫ cephalocaudal pattern

▫ proximodistal pattern

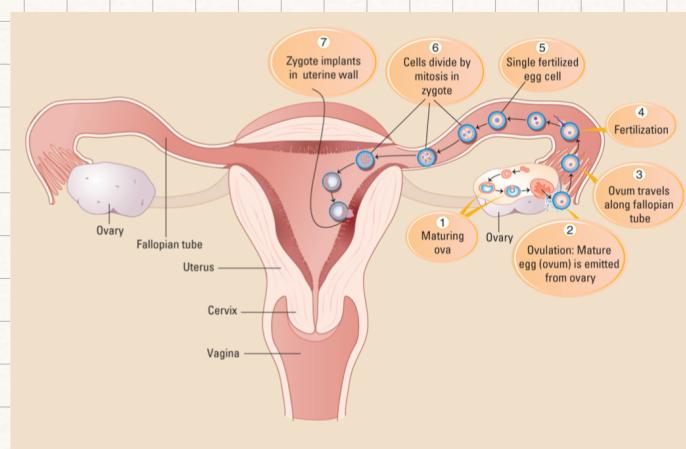
## LIFE TRANSITIONS VS. LIFE COMPLETIONS

(LATE 80S AND UP - GEOTRANSCENDENCE)

→ Joan Erikson completed work on the 9th stage of development from notes made by her husband before he died

→ in the 9th stage the old person confronts all previous eight stages again, but this time all stages converge at the same time

→ the negative pole now takes a dominant role



## THE ZYGOTE

• less than half of zygotes survive the first 2 wks

• ≈ 10 days after conception, zygote attaches to uterine wall

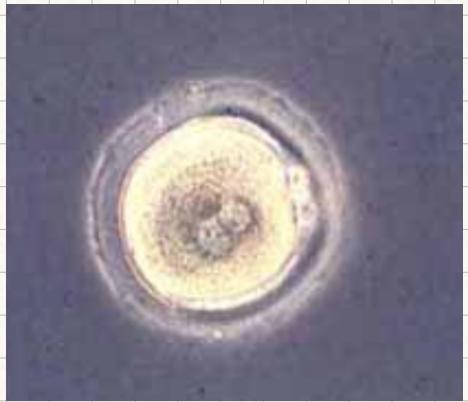
• outer part of zygote → the placenta (filters nutrients)

# EMBRYO

- heart begins to beat + organs develop

→ fetal stage : 9 wks - birth (38 - 40 wks)

- the fetus by ~ 6 mo, the stomach + other organs have formed enough to survive outside of the mother
- at this time the baby can hear (and recognize) sounds and respond to light



## THE MOTHER'S HEALTH + AGE

↳ if a woman is carrying an infectious disease while pregnant, it can endanger the fetus

- herpes
- syphilis
- HIV / AIDS
- mother's age

• [Teratogens + their effects on the developing brain and mind]

↳ any substance or condition that might disrupt prenatal development + cause birth defects

• alcohol, cocaine, and cigarette use during pregnancy

↳ Fetal Alcohol Syndrome (FAS)

- syndrome of birth defects caused by prenatal exposure to alcohol
- lowered IQ, hyperactivity, growth defects, physical malformations

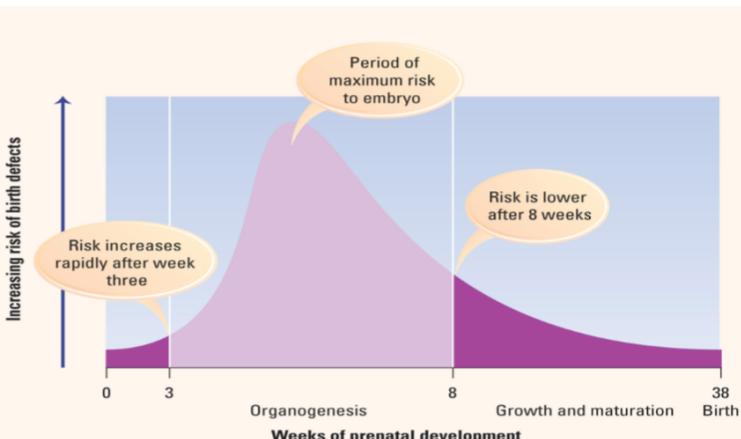
↳ Cocaine

- retards growth, can cause pre-term birth, malformations in the baby's brain, intestines, and genital-urinary tract

↳ Cigarette Smoking

- contains more than 400 different harmful chemicals like nicotine, carbon monoxide, and cyanide
- damage the placenta, reduce the blood supply, oxygen + nutrients for the fetus

## Relative Risk of Birth Defects During Prenatal Development



## PHYSICAL DEVELOPMENT IN INFANCY + CHILDHOOD

→ maturation:

the development of the brain unfolds based on genetic instructions, causing various bodily and mental functions to occur in sequence — standing before walking, babbling before talking

→ to understand the emergence of motor skills + memory, we must understand the developing brain

→ maturation sets the basic course of development, while experience adjusts it

### basic components of vision

→ HOW CLEAR IS THEIR VISION?

- visual acuity - the ability to see fine detail
  - ↳ visual acuity for newborns is between 20/150 - 20/600
- infants reach 20/20 by 6 to 12 months

→ CAN THEY SEE DIFFERENT COLOR?

- color vision is relatively mature by 6 months

→ HOW DEEP IS THAT DROP? EARLY DEPTH PERCEPTION

- depth perception is available by the time infants learn to crawl

### smell and taste

→ IMMEDIATELY AFTER BIRTH, THEIR FACIAL EXPRESSIONS SHOW THAT NEWBORNS REACT TO CERTAIN ODORS IN A MANNER SIMILAR TO ADULTS

→ INFANTS SHOW TASTE PREFERENCES IMMEDIATELY AFTER BIRTH, EVEN BEFORE THEIR FIRST FEEDINGS

### how well do infants hear?

→ EVEN BEFORE BIRTH, FETUSES REACT TO LOUD NOISES

→ BY 6 MO OF AGE INFANTS RESPOND TO A BROAD RANGE OF SOUNDS INCLUDING RATTLES, VOICES, SONGS, ETC (ENVIRONMENTAL NOISES)

### mother development

- REFLEXES: the infant's first coordinated movements
- VOLUNTARY MOVEMENTS: the motor milestones
- CULTURAL DIFFERENCES IN EARLY EXPERIENCE

involuntary movements elicited by environmental stimuli = **REFLEXES**

- rooting reflex: if you touch a newborn's cheek, the infant's head will turn in the direction of the touch
- sucking reflex: if anything touches an infant's lips, the infant automatically begins to suck
- grasping reflex: when an object touches an infant's palm, the baby will attempt to grab

## VOLUNTARY MOVEMENTS

VOLUNTARY MOVEMENTS = milestones

- dynamic systems theory (Thelen, 1989)
- gross motor development: process of coordinating intricate movements w/ the large muscles in the body
- fine motor development: process of coordinating intricate movements w/ smaller muscles
- proximodistal
  - PALMAR GRASP (HANDS) ( $\approx$  5-6 mo old)
  - PINCER GRASP ( $\approx$  9-10 mo old)
  - TRIPOD GRASP
  - STEPPING REFLEX
  - MORO (CHANGE POS OF BABY  $\rightarrow$  ARMS + LEGS COME UP)
  - BABINSKI (PRESS ON SIDE OF FOOT  $\rightarrow$  TOES OPEN)

## JEAN PIAGET

- cognitive development focuses on how children think and how their thinking impacts their actions
- children learn differently than adults by adjusting their own understanding as they explore the world

• mental schemes

**motor development**

infant rolls over → sit unsupported → crawl → walk  
 ↗ experience has little effect on this sequence

**schemas** = the way we interpret the world around us

→ children view the world through schemas (as do adults for the most part)

**assimilation** = incorporating new experiences into existing schemas

→ if I teach a 3 year old that a "dog" is an animal w/ 4 legs + a tail ...

... he/she will assimilate any animal that fits the broad description as a dog

→ assimilation in high school: when you first meet somebody you will assimilate them into a schema you already have

**accommodation** = changing an existing schema to adapt to new info

Piaget believed children in the sensorimotor stage could not think — they don't have any abstract concepts or ideas. However research shows that children in the sensorimotor stage can think and count

1. children understand the basic laws of physics. They are amazed at how a ball can stop in midair or disappear
2. children can also count. Wynn (1992, 2020) showed that children stared longer at the wrong # of objects

## SOCIAL AND EMOTIONAL DEVELOPMENT

- up until ≈ 8 mo. infants don't mind strange ppl (maybe b/c everyone is strange to them)
- at ≈ 1 yr infants develop stranger anxiety  
 ↗ this is the age at which infants form schemas for familiar faces and cannot assimilate a new face

- assimilation
  - accommodation
- stages of development
- sensorimotor
  - preoperational
  - concrete operational
  - formal operational

\* Piaget believed that the driving force behind intellectual development is our biological development amidst experiences w/ the environment

→ our cognitive development is shaped by the errors we make

## SENSORIMOTOR STAGE

- experience the world thru senses
  - DO NOT have permanence
  - 0-2
  - babies take in the world by looking, hearing, touching, mouthing, and grasping.
  - MATURATION + INFANT MEMORY
- the earliest stage of conscious memory is around 3½ yrs; a 5 yo has a sense of self and an increased long-term memory  
 → organization of memory is different from 3-4 years

## SEPARATION ANXIETY

separation anxiety peaks at 13 mo of age, regardless of whether the children are home or sent to day care

## PREOPERATIONAL STAGE

- have object permanence
- begin to use language to represent objects and ideas
- egocentric: can't look at the world thru anyone's eyes but their own
- DO NOT understand concepts of conservation

### THEORY OF MIND

- preschoolers, although still egocentric, develop the ability to understand another's mental state when forming a theory of mind

Piaget suggests that from 2 y/o - 6-7 y/o, children are in the preoperational stage — too young to perform mental operations

they know something so they assume that another person must know the same. Theory of mind recognizes the ability to have 2 perspectives at the same time, which they develop over time.

Work on demonstrating that the child understands

children begin to think about other thoughts and minds

example of assimilation:  
the children are applying the new concept of a different perspective and putting it into the existing info that they have

## 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 they have trouble forming attachment when they're older

### THE HISTORY OF ATTACHMENT RESEARCH

#### → JOHN BOWLEY'S ETHOLOGICAL THEORY

- attachment emerges from a system of traits - behaviors that have evolved over time to increase infant's chance of survival

#### → MARY AINSWORTH + STRANGE SITUATION

- infants will seek to be near their attachment figure when they are distressed

#### → HARRY HARLOW'S RESEARCH w/ Rhesus MONKEYS

- argued that contact comfort is critical in attachment

### ATTACHMENT - COMFORT

## CONCRETE OPERATIONAL STAGE 6-7 y/o

- can demonstrate concept of conservation
- learn to think logically
- Children in this stage are able to transform mathematical functions. So if  $8+4=12$ , then a transformation,  $12-4=8$ , is easily doable