

# WELCOME TO PSYC 110

# change your ex's name in your phone to help yourself get over them. it's kind of hard to sext

"aunt mildred".

**PSYC 110 (General Psychology)** 

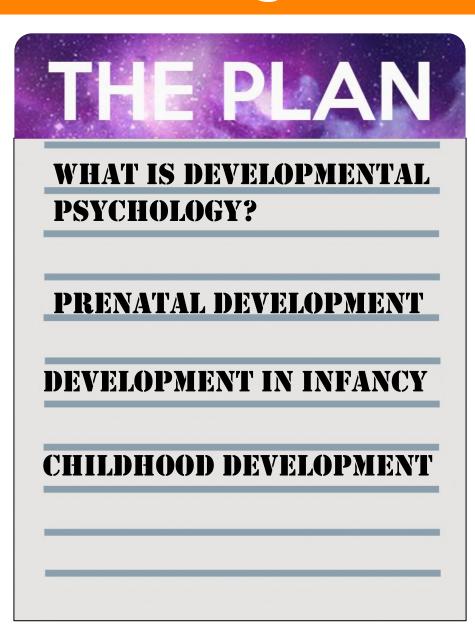
**Module 4:** 

Developmental Psychology

Trenton C. Johanis, Ph.D.

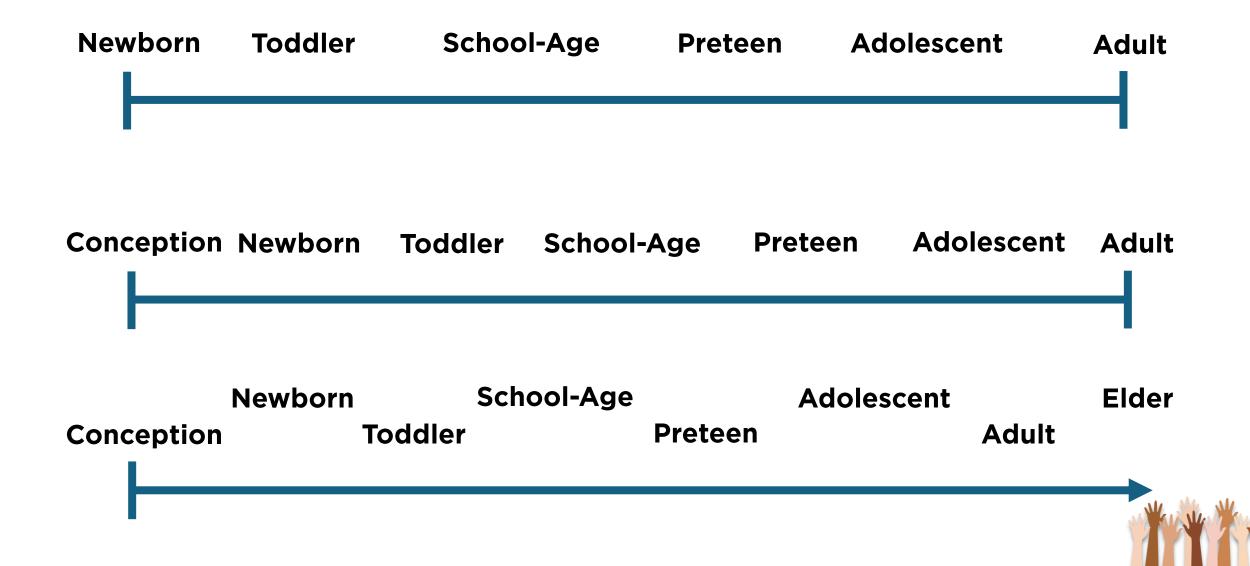


# What should we get out of today?





#### When does development start, and end?





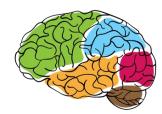
## We study development from various perspectives

## Physiological

Visible growth



Brain structure changes



Motor control



#### Social

Parental attachment



Peers and networking



Social convention



#### Cognitive

Information processing



Language learning



**Emotion regulation** 





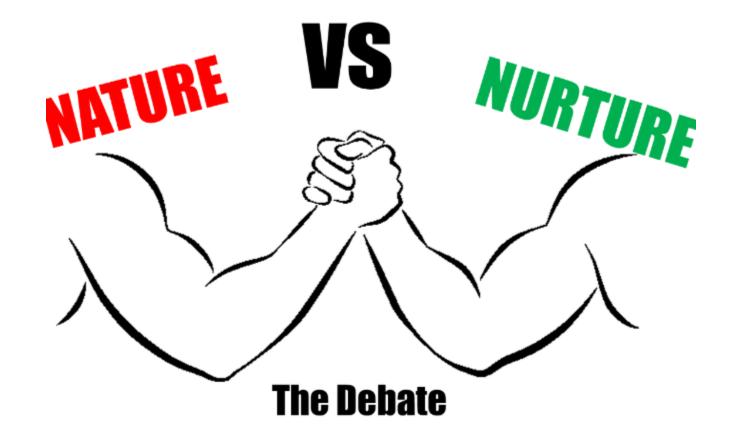








#### Keep this in mind through this module: Which is more influential?









# PRENATAL DEVELOPMENT



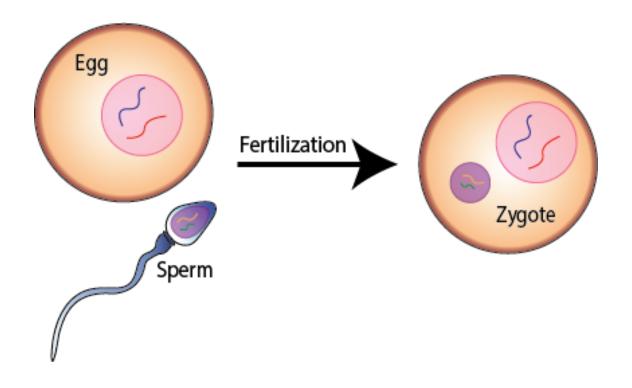






#### Mom, where do babies come from?

Gamete + Gamete = Zygote



#### Prenatal development has three major stages

# Zygotic Period

- Rapid cell division
- Fertilized egg embeds on uterine wall

0-2 weeks

## Embryonic Period

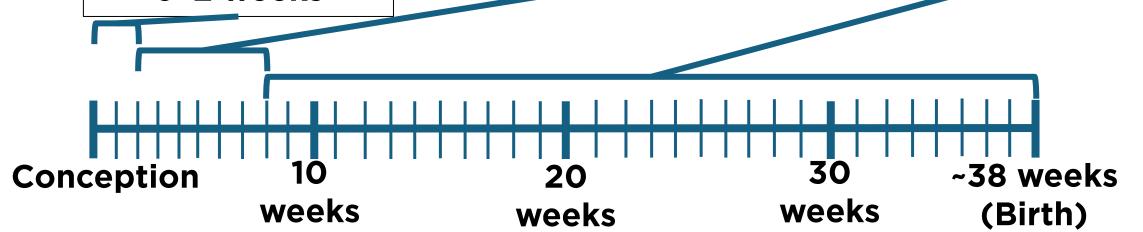
- Major development
- Organs and systems

2-8 weeks

## Fetal Period

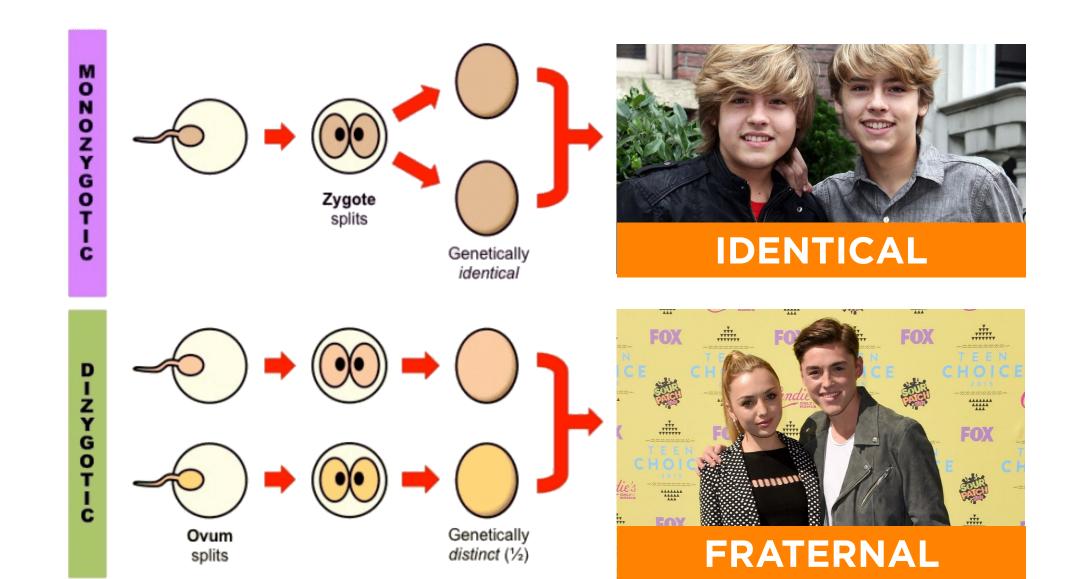
- Refinements
- Significant brain development

8 weeks to birth





#### Prenatal development can vary: Twins!









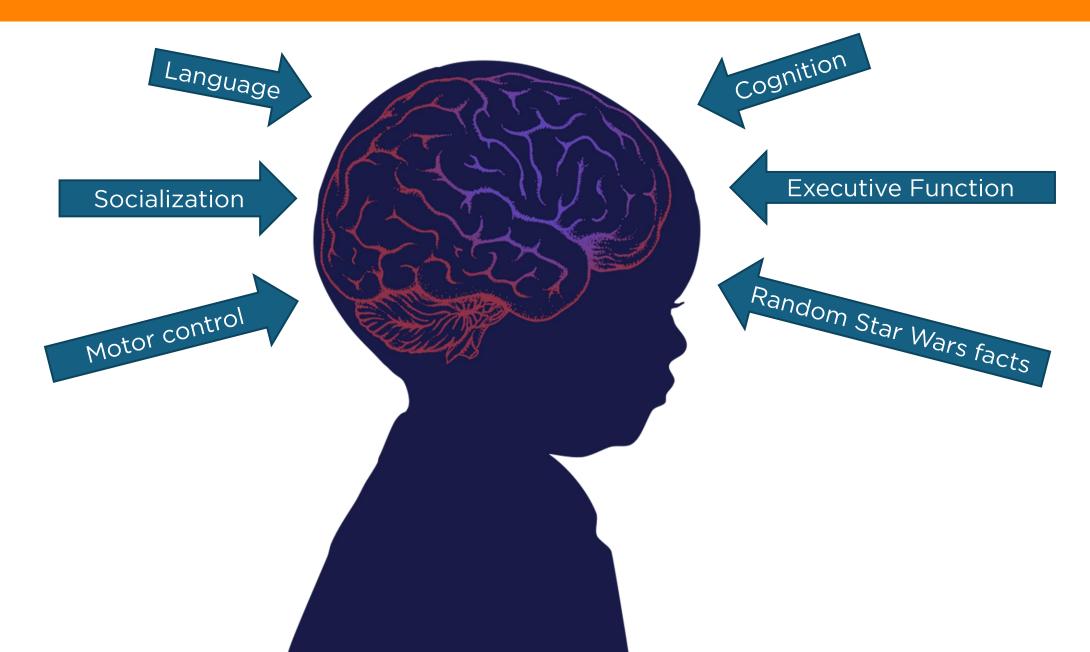








#### A baby brain is ready to learn at birth







Birth to Adolescence

#### Dialectical

 Based on incorporating new and conflicting information

#### Constructivist

 Children build their own understanding of the world



	Sen	sor	imo	oto	r	Drooporational	Concrete	Formal Operational	
1	2	3	4	5	6	Preoperational	Operational		
0 - 2 years						2 - 7 years	7 - 12 years	12+ years	



Sensorimotor 🛴												
Learning through actions												
2	3	4	5	6								
1 - 4 months	4 - 8 months	8 - 12 months	12 - 18 months	18 - 24 months								
Primary Circular Actions (own body)	Secondary Circular Actions (external; objects, people)	Object Permanence Sequences of actions	Tertiary Circular Actions (interactions between objects)	Mental Representation (acting on memory)								
	1 - 4 months  Primary Circular Actions	Learning thr  2 3  1-4 4-8 months Months  Primary Circular Actions (own body)  (own body)  Cexternal; objects,	Learning through actions  2 3 4  1-4 4-8 8-12 months months  Primary Circular Actions (own body)  (external; objects, Sequences of actions	Learning through actions  2								



# Preoperational (2 - 7 years)

- Symbolic thinking
  - Communication of thoughts and feelings
- Animism
  - Ascribing feeling/intention to inanimate objects (e.g., stuffed animals)
- Egocentrism
  - Difficulty understanding others' perspectives



# Preoperational (2 - 7 years)

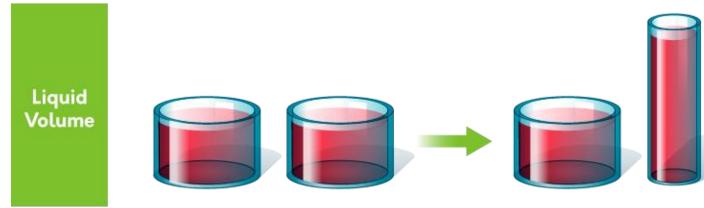
- Preconceptual thinking
  - 2 to 4 years
  - Little to no understanding of logic
- Intuitive thinking
  - 4 to 7 years
  - Logic only based on own perceptions and experiences



# Concrete Operational (7 - 12 years)



Understands conservation



Can make sense of the present but hypotheticals are difficult



# Formal Operational (12+ years)



- Thinking like an adult...kinda
- Abstract reasoning
  - Hypotheticals
  - Outside-the-box thinking





All Piaget stages and their components must be completed in full

Time spent in each period can vary

Can learn skills from other stages before leaving current one (e.g., prodigies)



#### Developing Theory of Mind is a major milestone

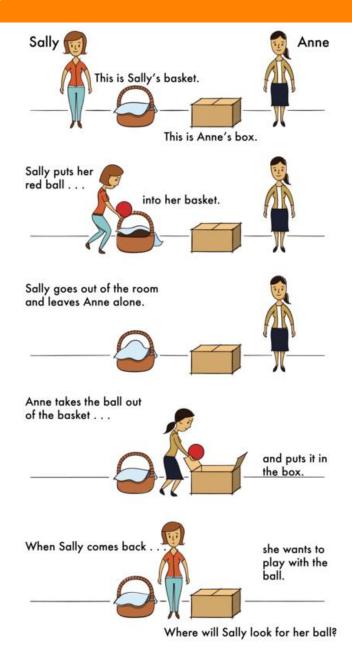
#### Theory of Mind (ToM):

Understanding that others can think and experience the world, just like you

People can know things that you don't, and vice versa

Clinicians often test ToM using the Sally-Anne Test

Non- or under-development by age 3 is an indicator of Autism Spectrum Disorder (ASD)



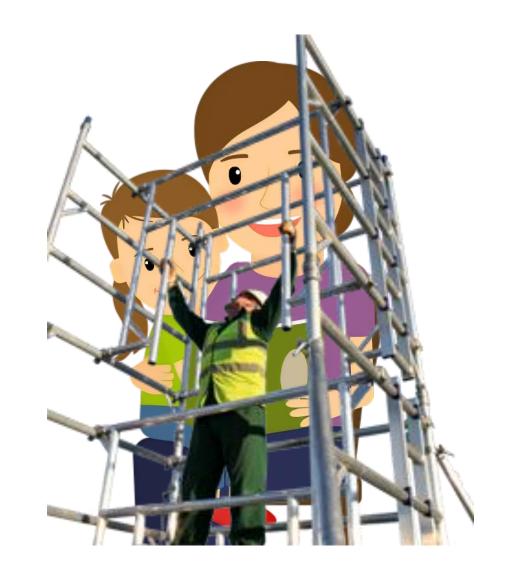


#### Vygotsky's theory considered external influences

According to Vygotsky, adults have a critical influence on child's cognitive development

#### Scaffolding

 Providing a framework for child to be successful with a skill just above their level of competency



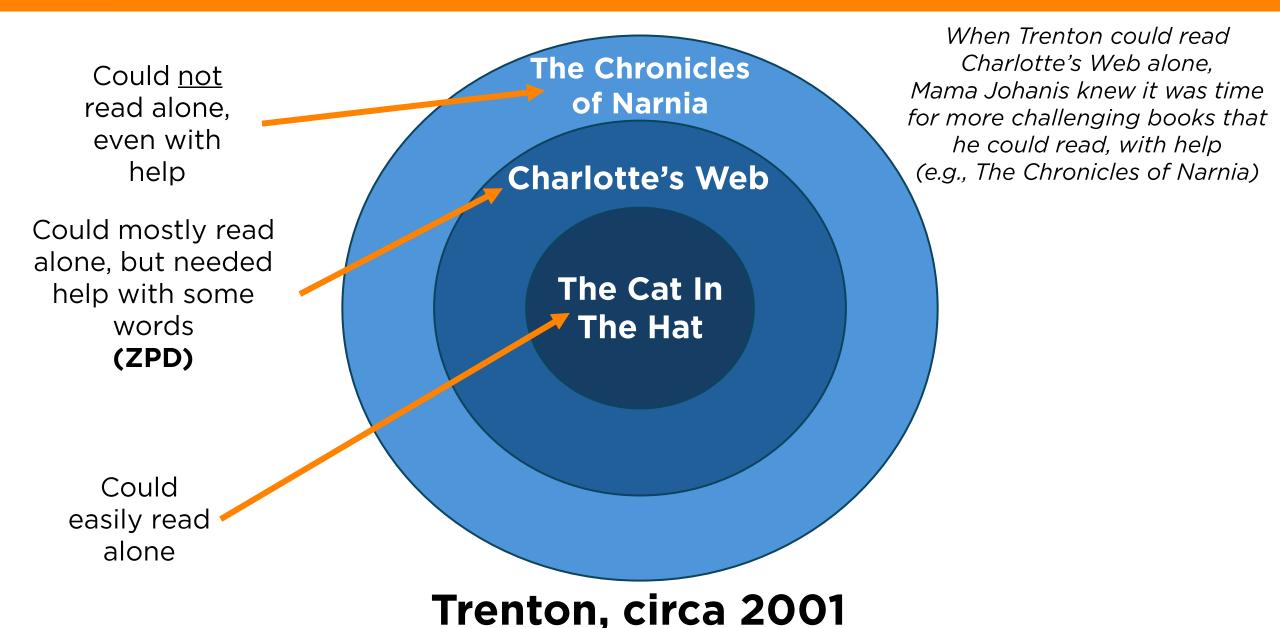


#### Children best develop skills when adults provide the right amount of help





#### The Zone of Proximal Development (ZPD) is the opportunity for growth





#### Neuroplasticity is highest in childhood



# Neuroplasticity Ability of the brain to form new connections—learning

#### Sensitive Periods

Specific times in the lifespan where specific external influences are required for specific aspects of cognitive and neural development



#### Stimulation is critical during sensitive periods









#### We naturally help infants develop language

#### **Infant-Directed Speech**

- "Motherese"
- Exaggerated intonation and segmentation
- Helps infants learn language understanding and speaking
- Appears to be an innate behavior performed naturally by most people



#### Lack of input during a sensitive period can have life-long consequences

#### <u>Genie</u>



Kept in a locked room from 20 months old

Discovered at age 13

No language

- Failed to receive stimulation during critical period (infancy and childhood)
- Never could learn to speak even after she was freed

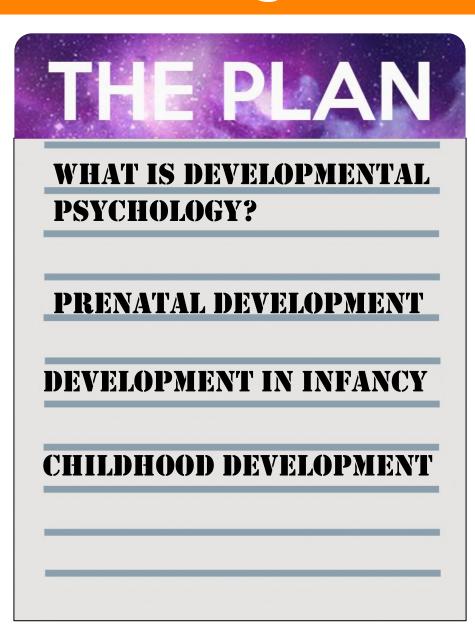
Exhibited other cognitive and social deficits







# What should we get out of today?





#### How did we do?



#### For y'all:

Friday Quiz 4 is Feb 21 < 3

Reflection Journal 4 due Feb 23

InQuizitive due Feb 23