



PSYCHOLOGY

WELCOME TO PSYC 110

brotip #3612

most people don't listen to understand you, they listen so they can reply to what you say. listen to understand.

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PSYC 110 (General Psychology)

Module 4: Development

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THE PLAN

THE ZONE OF PROXIMAL DEVELOPMENT

SENSITIVE PERIODS

ADOLESCENT DEVELOPMENT

ADULTHOOD + BEYOND

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

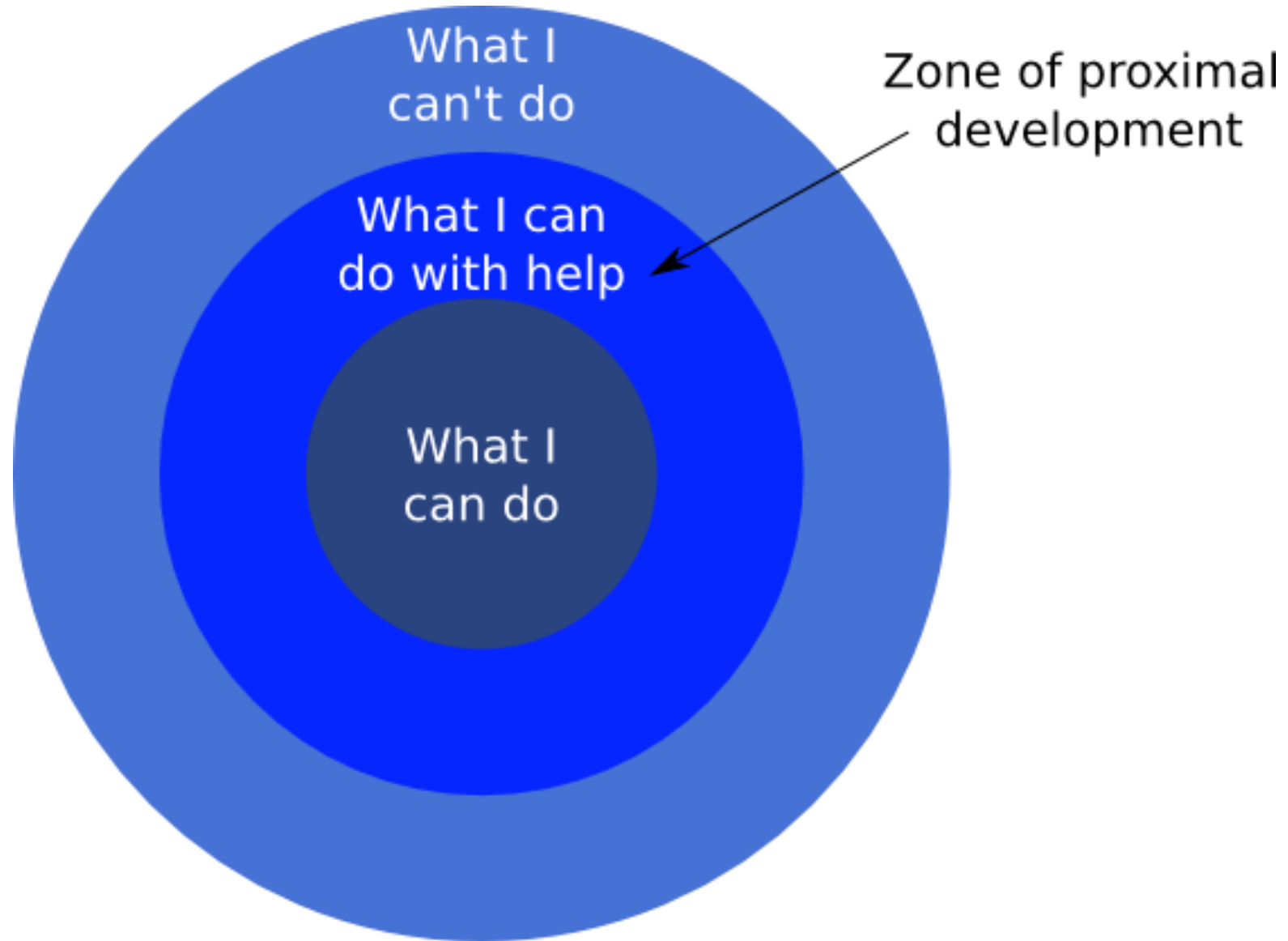
Scaffolding

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



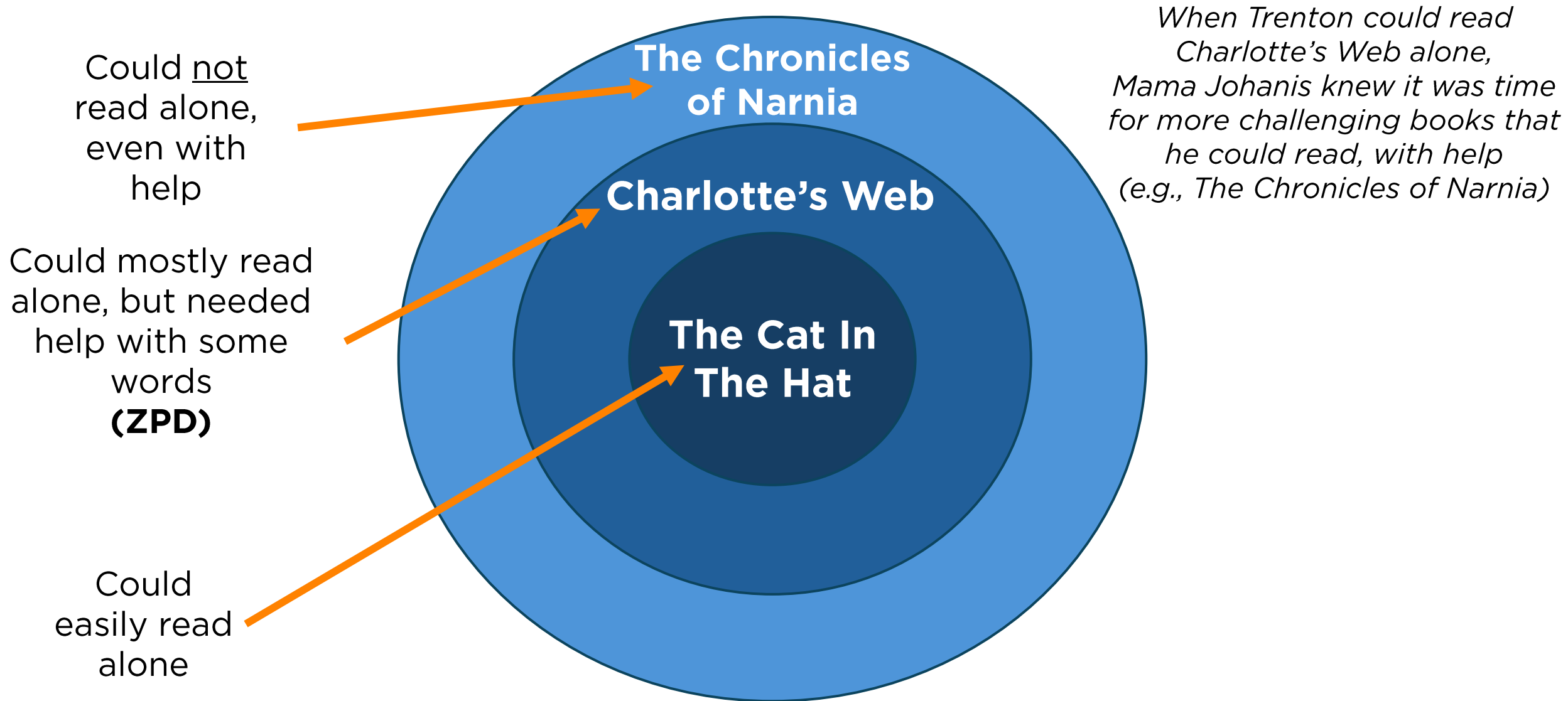


Children best develop skills when adults provide the right amount of help





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



Could not read alone, even with help

Could mostly read alone, but needed help with some words
(ZPD)

Could easily read alone

The Chronicles of Narnia

Charlotte's Web

The Cat In The Hat

When Trenton could read Charlotte's Web alone, Mama Johanis knew it was time for more challenging books that he could read, with help (e.g., The Chronicles of Narnia)

Trenton, circa 2001



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



Fine Motor
Friends



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



Genie



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



ADOLESCENT DEVELOPMENT



Adolescence *is* the Formal Operational stage



**You can't
tell me what
to do; I'm an
adult now**




**Touch grass;
your brain
isn't even fully
developed yet**



Cognitive

- Abstract thinking
- Complex reasoning
- Executive function
 - Future planning
 - Impulse control
 - Making decisions

Neurological

- Frontal lobe
 - Prefrontal Cortex
- Pruning
- Dopamine 

Remember:
Passing one of Piaget's stages doesn't
always mean mastery!

Adolescents tend to have poor impulse
control and lack consideration of
consequences

Very vulnerable to social pressure





Adolescents exhibit high dopamine-seeking behavior



Adolescent Egocentrism

What it feels like



What’s actually happening



Adolescent Egocentrism



Personal Fable

- I am unique
- I am invincible

Imaginary Audience

- Everyone pays attention to me
- Everyone cares about what I do



“...it’s not—it’s just the beginning.”

Erikson’s Theory of Identity Formation

How can I
decide who I
want to be?

How committed
am I to that
ideal?





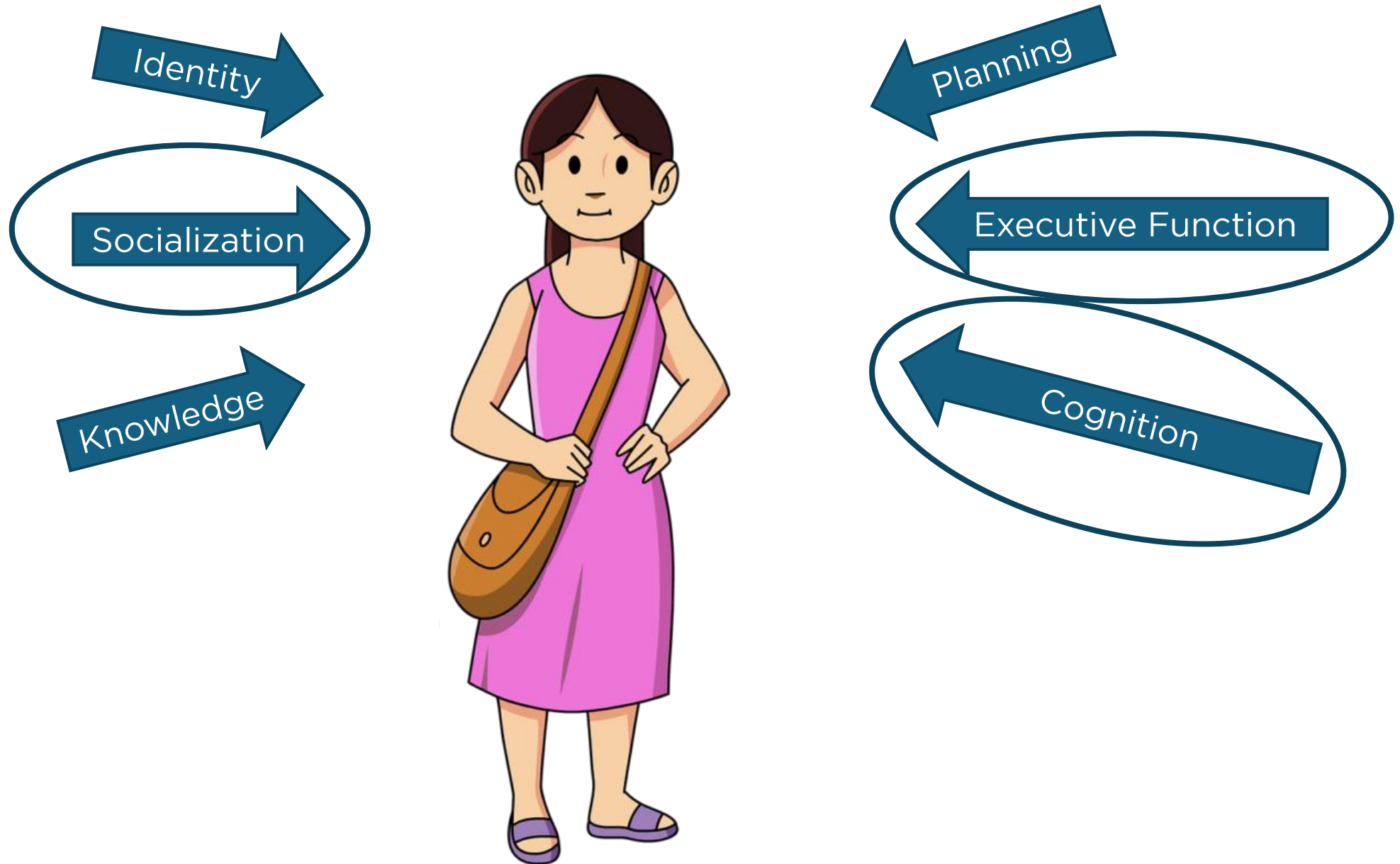
“...it’s not—it’s just the beginning.”

Erikson’s Theory of Identity Formation





Adolescent development is complex and critical





ADULTHOOD + BEYOND





Our brains never stop developing!

Learning gets more difficult as we get older, but never stops completely

Neuroplasticity decreases with age

Stimulation becomes most important

- Brain prioritizes pruning if connections aren't being used

Adults use cognitive strategies (experience) to make up for cognitive decline





Why do we lose cognitive function later in life?

Thanks to technology, the human life has been extended substantially

- Average expectancy in 1922: ~**59 years**
- Average life expectancy in 2025: ~**78 years**

Could Dementia be a consequence?

Brain is evolutionarily designed to be efficient

- We prune unused connections
- How long has it been since you used the Quadratic Formula?
Can you recall it from memory?



Nature vs. Nurture

Nature = our *potential* for growth

Nurture = external input that influences how growth occurs





Did you keep this in mind?



~~The Debate~~

The Dynamic Duo



point
solutions

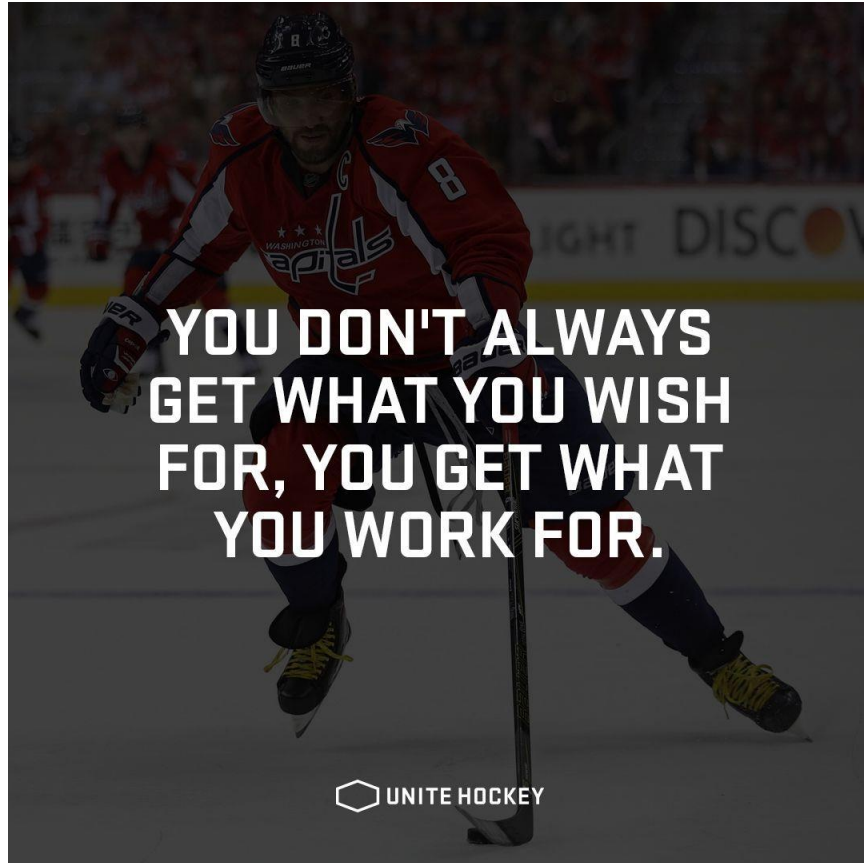
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For y'all:

Friday Quiz 4 is **Feb 21**

Reflection Journal 4 due **Feb 23**

InQuizitive due **Feb 23**