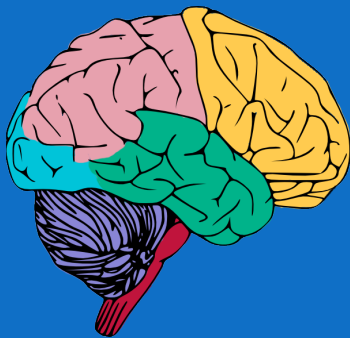


Adolescent Development and Juvenile Transfer Decisions



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“Adolescence is a time in life that harbors many risks and dangers, but also one that presents great opportunities for sustained health and well being.”

The Lancet, 2007

3 Stages of Adolescence



**10-14
YEARS OLD**

EARLY ADOLESCENCE

**GRADES
5-9**

**15-17
YEARS OLD**

MIDDLE ADOLESCENCE

**GRADES
9-12**

**18-24
YEARS OLD**

**LATE ADOLESCENCE/
EARL ADULthood**

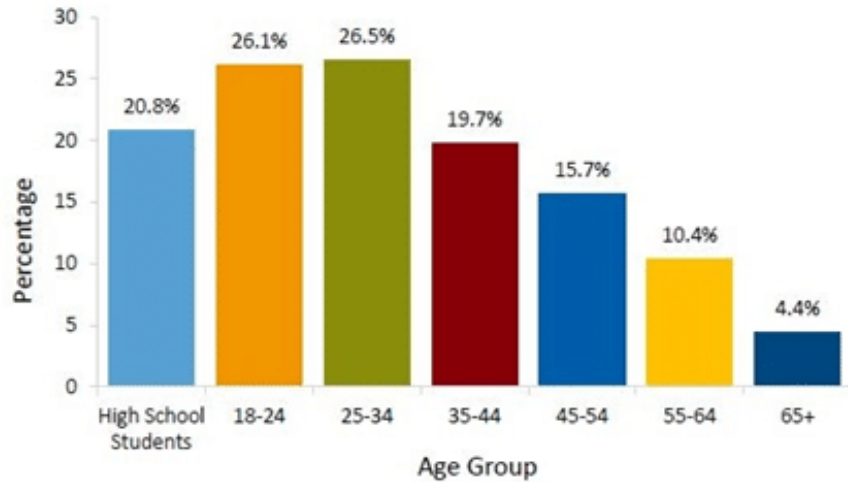
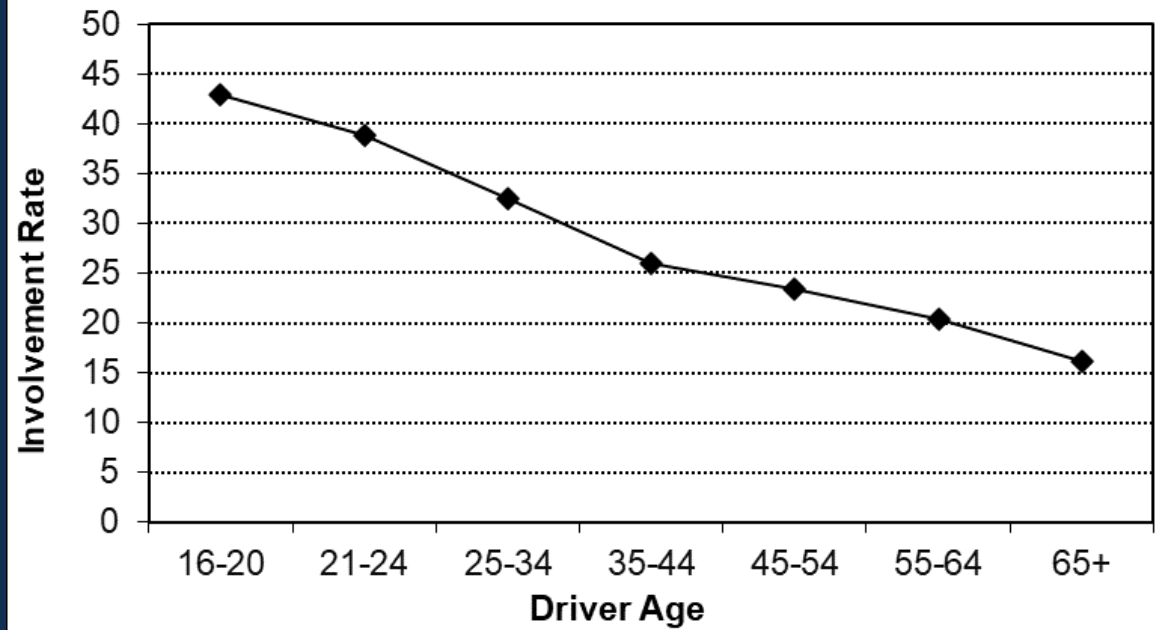
**POST HIGH
SCHOOL**



theyunion.org

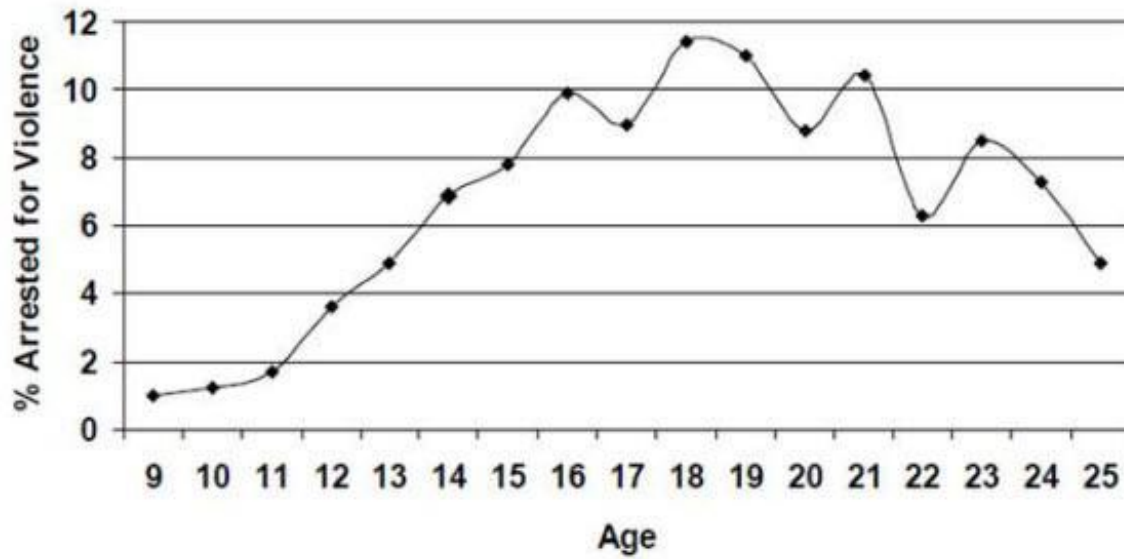
Driver Involvement in Fatal Crashes Per 100,000 Licensed Drivers, 2021

National Highway Traffic Safety Administration, 2023



Note: High school students are defined as those in grades 9-12.
Sources: CDC. Youth Risk Behavior Surveillance System and Behavioral Risk Factor Surveillance System, 2013.

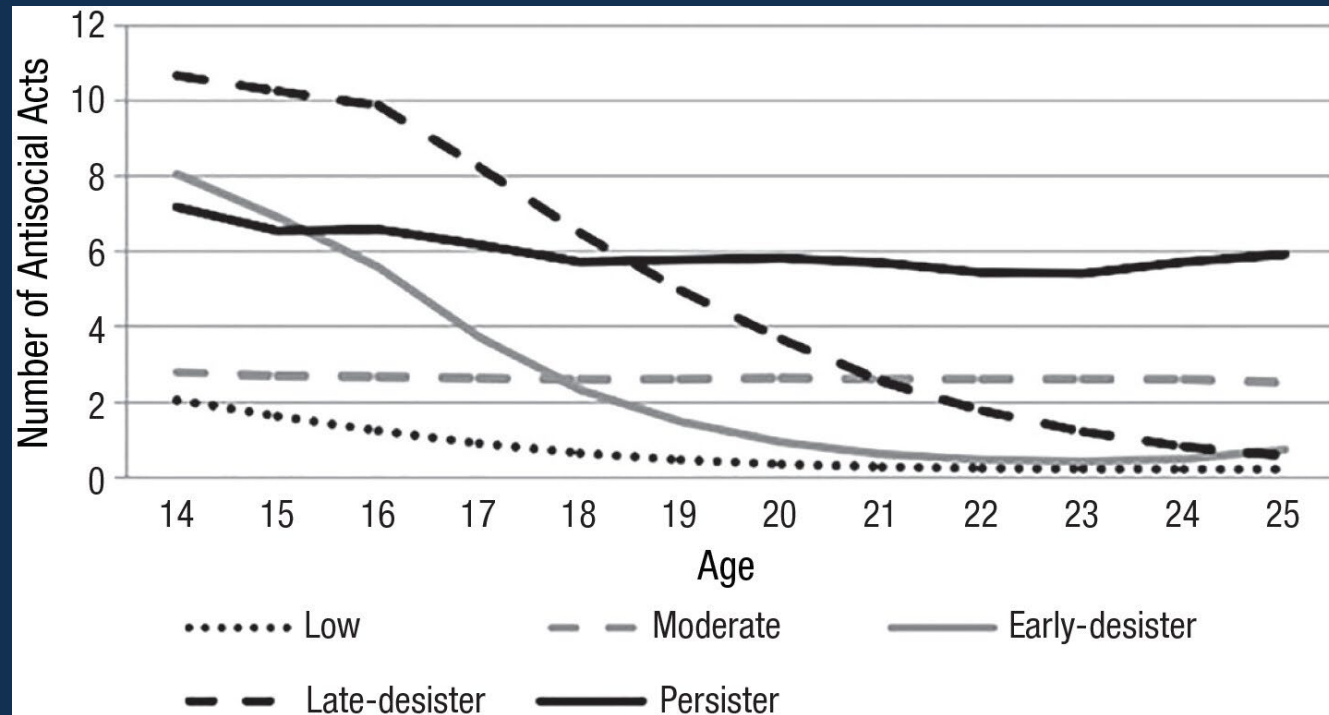
Binge drinking in the U.S. by age
Centers for Disease Control, 2017



Age Crime Curve

Loeber et al., 2011

Monahan et al. (2013)





Cognitive

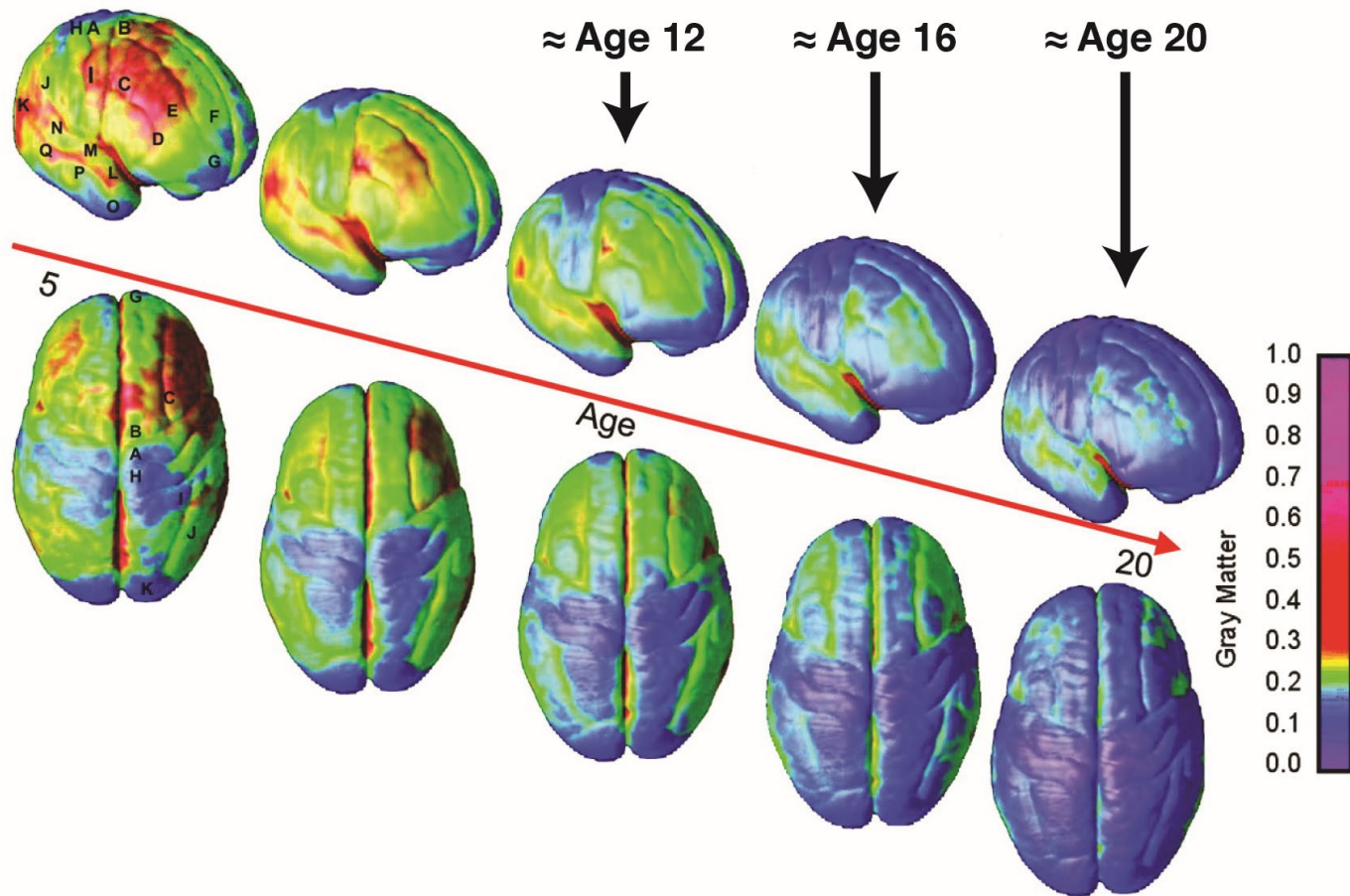
Emotional

Psychosocial

Cognitive



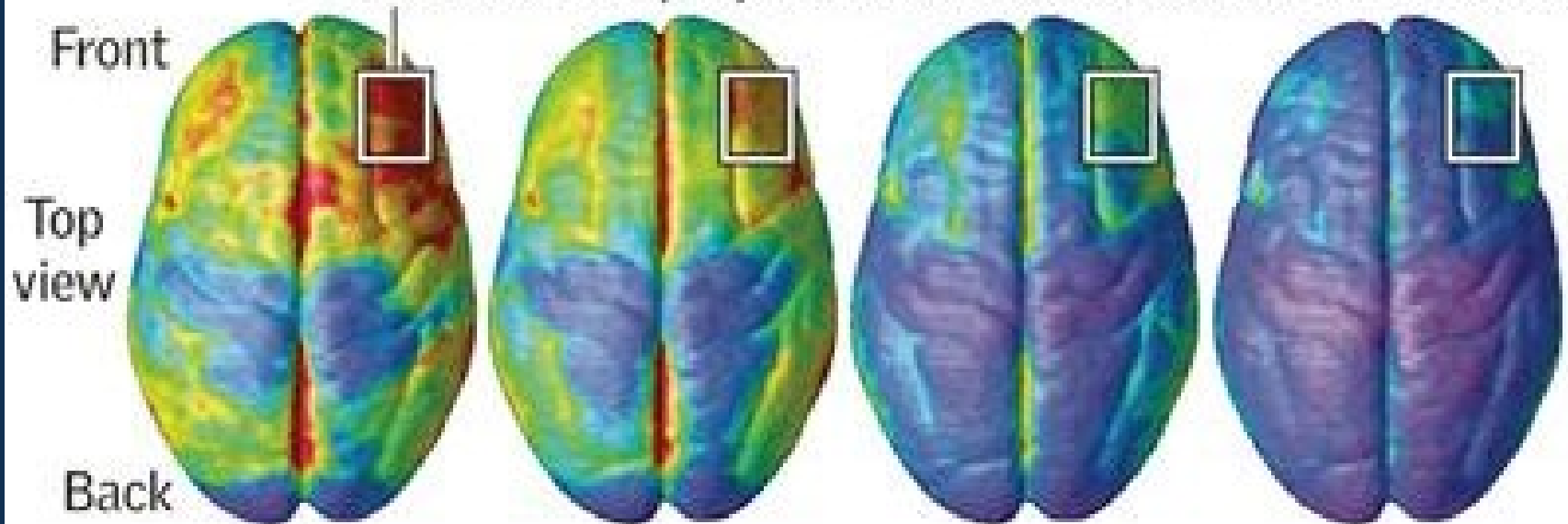
MRI Study of Normal Brain Development



The decade-long magnetic resonance imaging (MRI) study of normal brain development, from ages 5 to 20, by researchers at NIH's National Institute of Mental Health (NIMH) and University of California Los Angeles (UCLA) Source: Paul M. Thompson, Ph.D., Laboratory of Neuro Imaging, UCLA, NIMH/UCLA Project. Reprinted with permission from Dr. Paul Thompson.

5-year-old brain Preteen brain Teen brain 20-year-old brain

Dorsal lateral prefrontal cortex ("executive functions")



Red/yellow: Parts of brain less fully mature



Blue/purple: Parts of brain more fully matured

*Sources: National Institute of Mental Health;
Paul Thompson, Ph.D., UCLA Laboratory of
Neuro Imaging*

Thomas McKay | The Denver Post

Cognitive

Executive Functions

Working
Memory

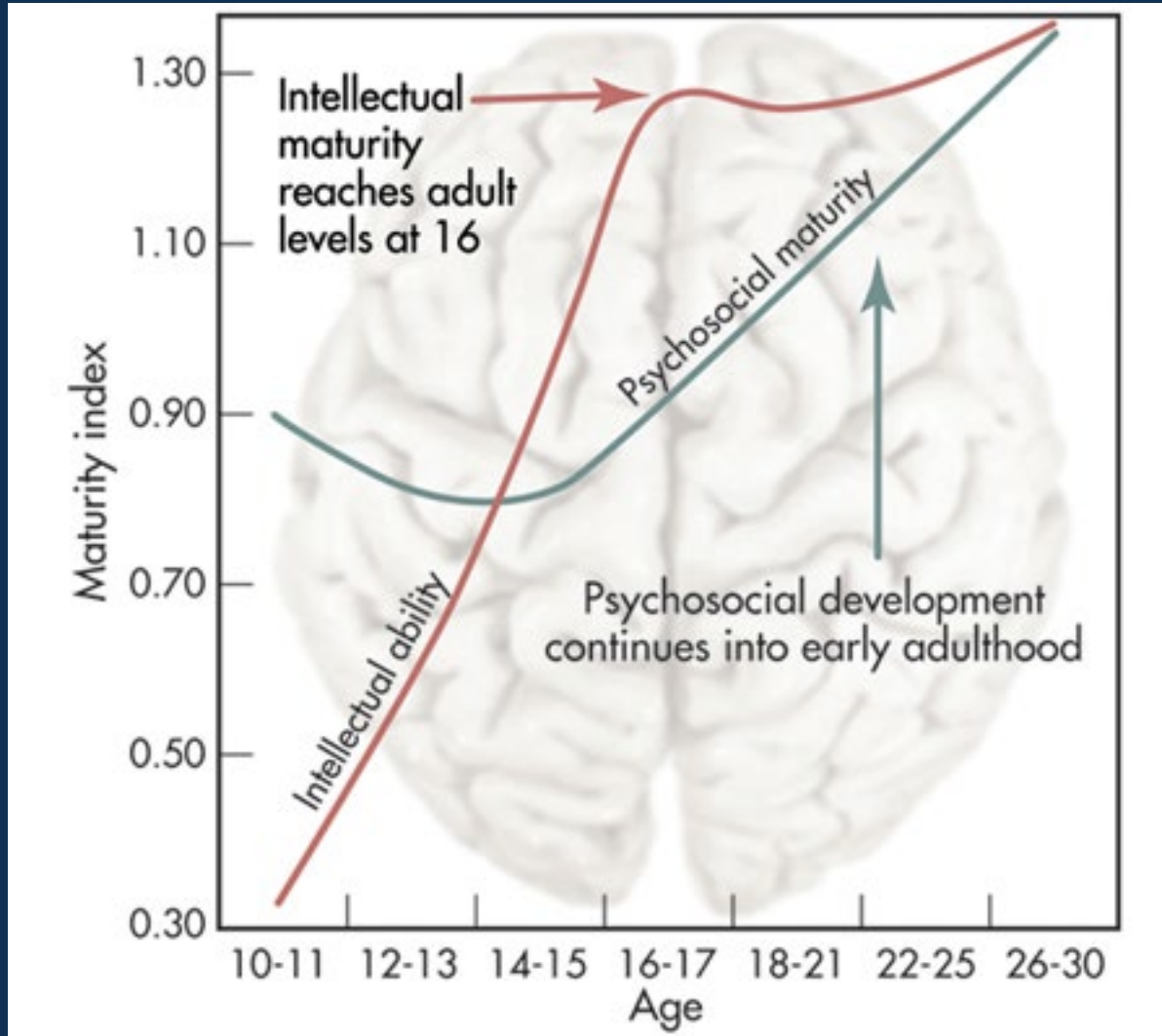
Problem
Solving

Decision
Making

Inhibit
Responses

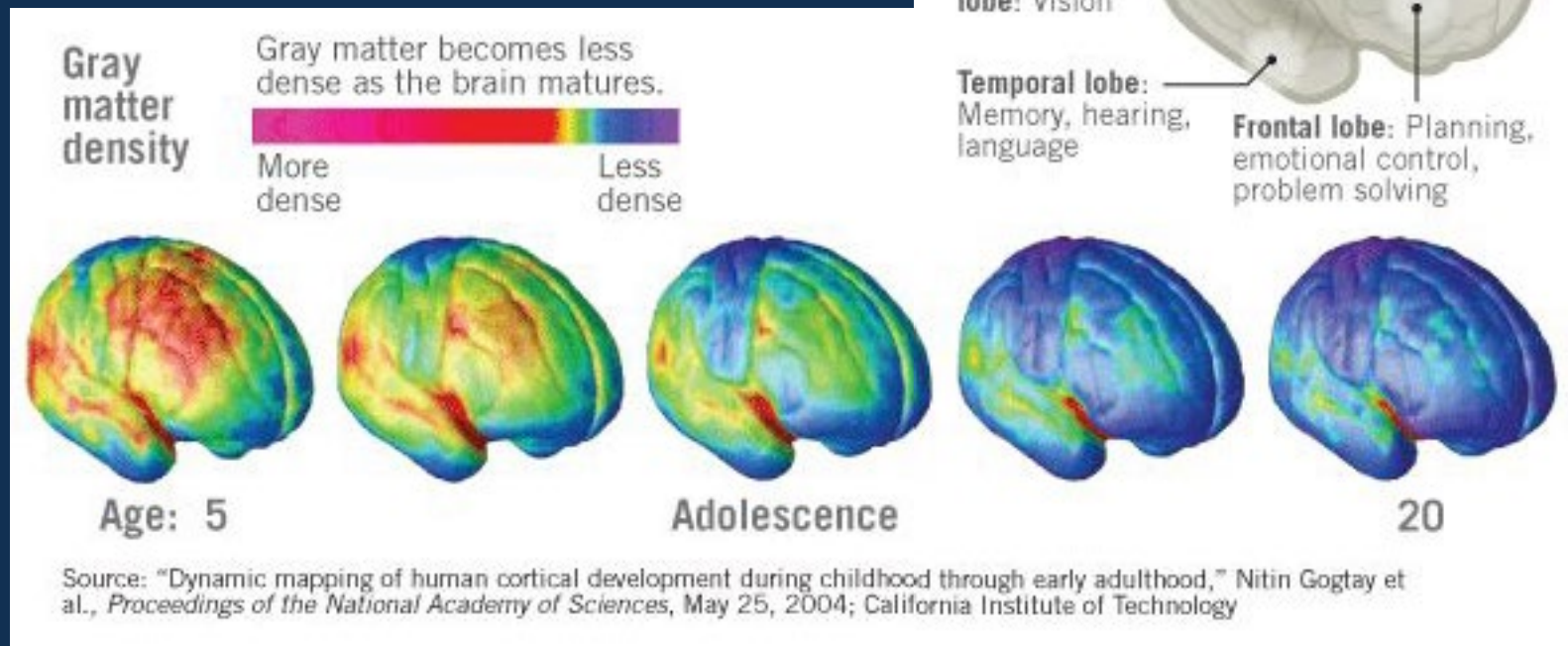
Processing
Speed

“Immaturity Gap”



Increasing Efficiency

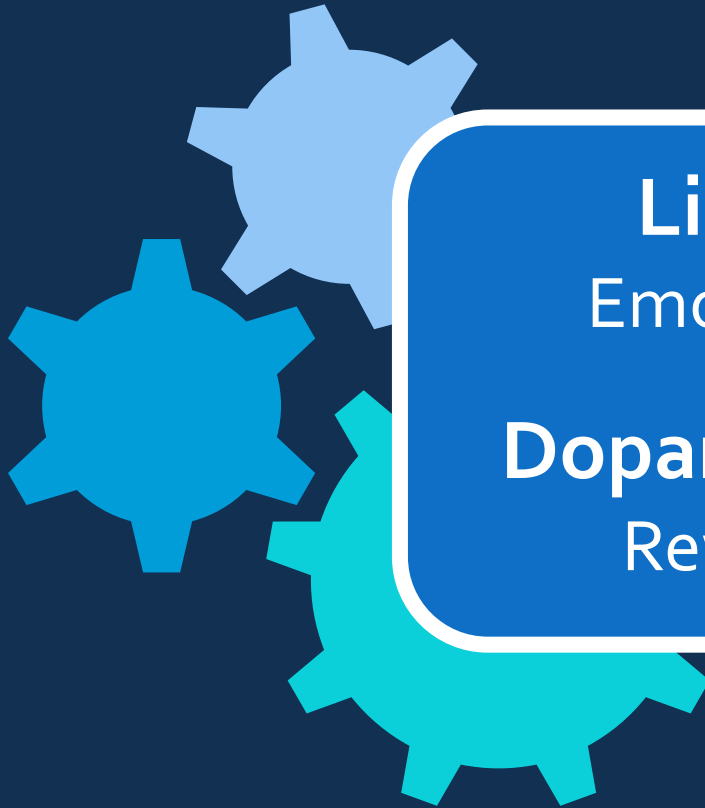
- Synaptic pruning
- Myelination
- Connectivity between cortical and subcortical regions





Emotional

Emotional



Limbic System

Emotional Reactivity

Dopaminergic System

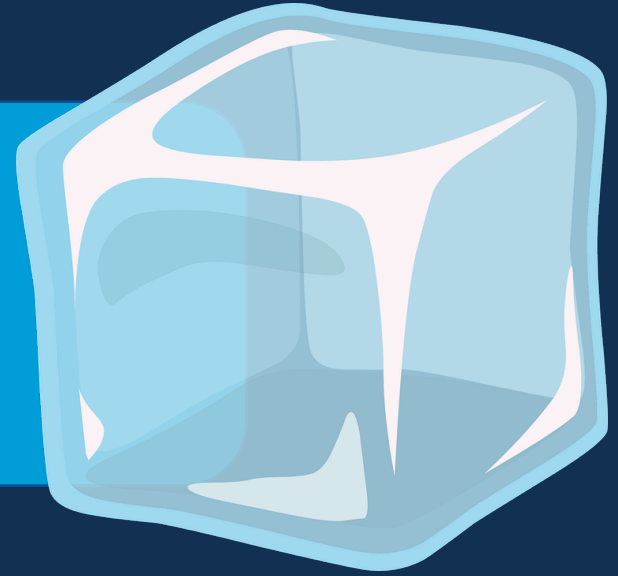
Reward Sensitivity



Psychosocial

Cold Context

Non-emotional situations



Hot Context

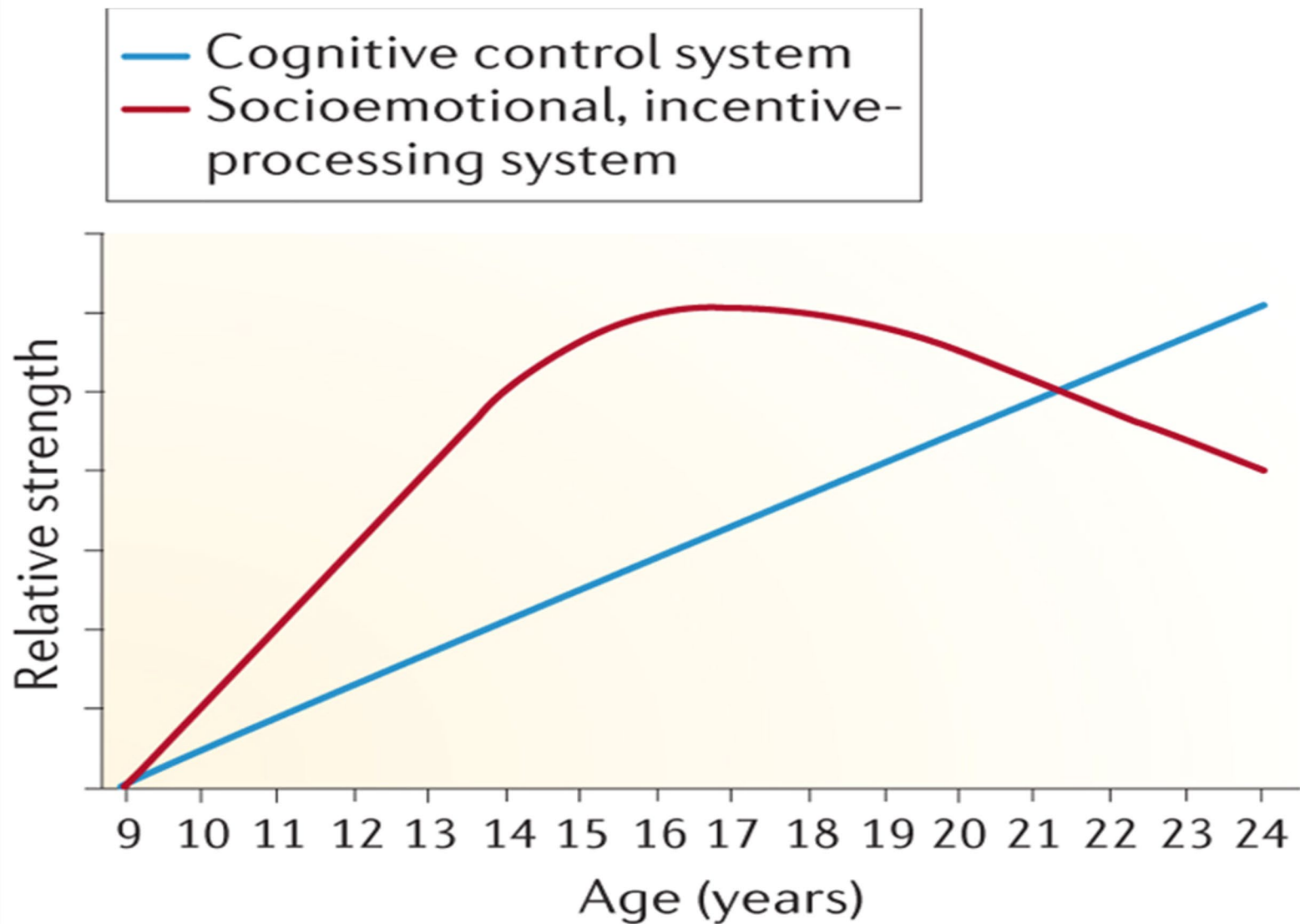
Emotionally charged situations

Psychosocial

Long-term Negative
Consequences



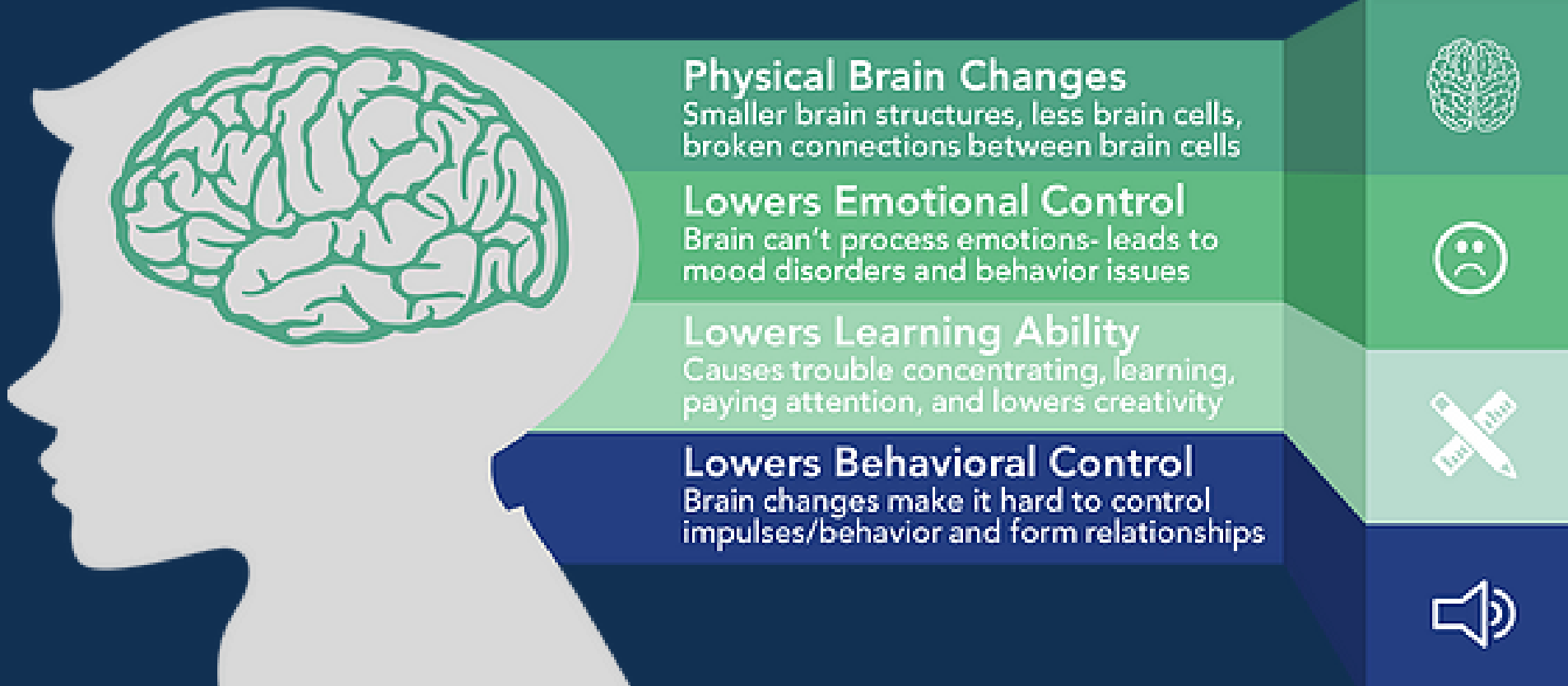
Short-term
Positive Outcomes



Steinberg, 2013

Nature Reviews | Neuroscience

How Trauma Affects the Developing Brain



Key Takeaways: Transfer Criteria

Criminal sophistication

- Similar intellectual capacity to adults by ~16 years old, but ability to regulate emotions and behaviors is not fully developed.
- Behavior can be impulsive (not always pre-planned)

Gravity of the offense

- Behavioral responses can seem disproportionate to the situation and result in serious consequences

Rehabilitative prospects

- Adolescents are responsive to appropriate rehabilitative efforts - the brain is still developing until the mid 20s!

Prior delinquent history

- Learning can take repetition

Other Factors

- Trauma can impact neuro- and psychosocial development
- Presence of peers can impact decision-making

For more information, contact
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