



I'm Speaking

ANNUAL
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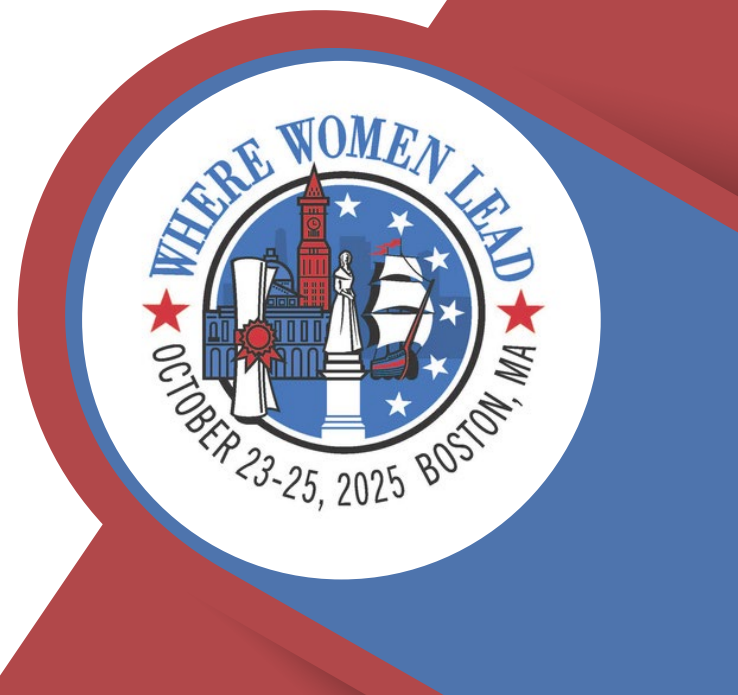
BREAKOUT SESSION
**EMERGING TRENDS IN
EMERGING ADULTS:
ADOLESCENT BRAIN
DEVELOPMENT AND
THE LAW**

Speakers:

Stephanie Tabashneck,
Psy.D., J.D.

Hon. Robert Ullmann
(Ret.)

Emerging Trends in Emerging Adults: Adolescent Brain Development and the Law



Emerging Trends in Emerging Adults: Adolescent Brain Development and the Law

Honorable Gloria Tan
Massachusetts Appeals Court

Honorable Robert Ullmann (ret.)
Massachusetts Superior Court

Stephanie Tabashneck, PsyD, JD

Center for Law, Brain and Behavior, Massachusetts General Hospital, Harvard Medical School
Petrie-Flom Center, Harvard Law School

Agenda

- 1) Review key SCOTUS case law
- 2) Review state case law developments with particular focus on Washington, Massachusetts, and Michigan
- 3) Discuss how neurodevelopmental and psychosocial factors affect functional maturity
- 4) Commonwealth v. Mattis
- 5) Recidivism research
- 6) Q & A

Children In a Distinct Category



“Children are **constitutionally different** from adults in their levels of culpability.”

(Miller v. Alabama, 2012)

Children In a Distinct Category

J.D.B. v. North Carolina
(2011)

"So long as the child's age was known to the officer at the time of police questioning, or would have been objectively apparent to any reasonable officer, its inclusion in the custody analysis is consistent with the objective nature of the test."

Roper v. Simmons (2005): Barred execution for juveniles as a class

- “**Developments in psychology and brain science** continue to show fundamental differences between juvenile and adult minds. For example, parts of the *brain involved in behavior control continue to mature through late adolescence.*”
- Greater possibility exists that a minor’s character deficiencies will be reformed.

Graham v. Florida (2010): Barred life without parole for non-homicides for juveniles

- “**Scientific and sociological studies**”
- “Lack of maturity” “*Impetuous and ill-considered actions and decisions*”
- “Adolescents are overrepresented statistically in virtually every category of *reckless behavior*.”

Miller v. Alabama (2012): Barred mandatory life without parole for juveniles for homicide

- “[A]n ever-growing body of research in **developmental psychology and neuroscience** continues to confirm and strengthen the Court’s conclusions”
“It is increasingly clear that adolescent **brains are not yet fully mature** in regions and systems related to higher-order executive functions such as impulse control, planning ahead, and risk avoidance.” (citations omitted)
- “**Numerous studies** post-Graham indicate that exposure to deviant peers leads to increased deviant behavior and is a consistent predictor of adolescent delinquency.” (citations omitted)

Jones v. Mississippi
(2021)

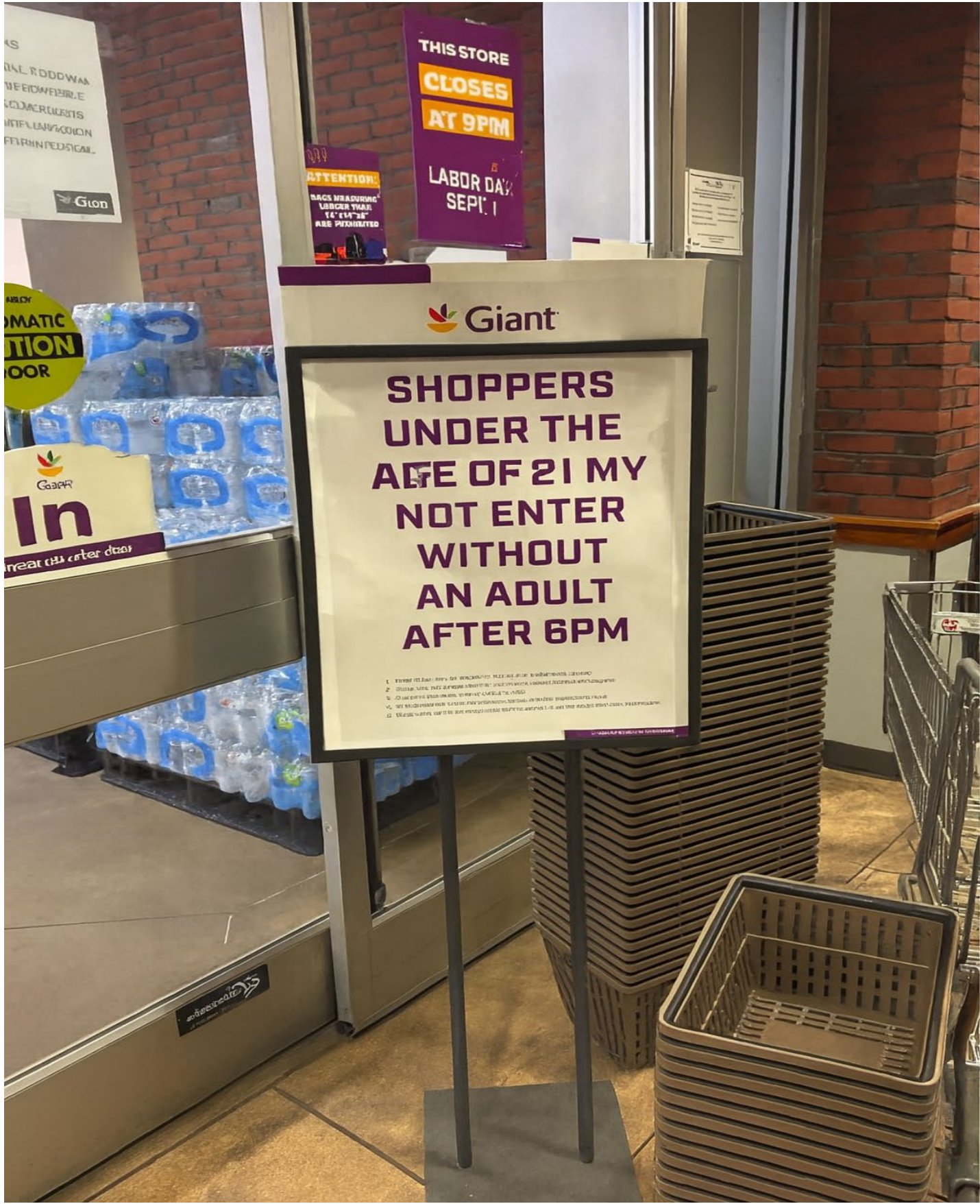
- Life without parole sentence for juveniles only require consideration of youth as a mitigating factor.
- (No science)

“*Miller-Fix*” Statutes

- In response to *Miller*, many states created “*Miller-fix*” statutes:
 - Intended to bring state sentencing practices in line with *Miller*
 - Different states took different approaches, creating “*Miller-fix* hearings” in some states to consider *Miller* factors
 - *Jones* affirmed less robust *Miller-fix* hearing requiring only consideration of youthfulness rather than proof of incorrigibility or outright ban of JLWOP



Case Law and Forensic Resentencing



- The Court of Appeals of the State of Washington recognized that **youthfulness remains a valid sentencing consideration even after turning 18** (as a mitigating factor).

Washington v. O'Dell

(Supreme Court of
Washington, 2015)

In re Monschke (Supreme Court of Washington, 2021)

- **Question:** Whether the constitutional requirement that prohibit mandatory LWOP sentences for defendants under 18, also prohibits mandatory LWOP sentences for **defendants 18 – 21**.

In re Monschke (Supreme Court of Washington, 2021)

In the majority, concurrence, and dissent:

- “Brain” = nearly 2 dozen times
- “Neuroscience” or “neurological” = 13 times

“What they have shown is that **no meaningful neurological bright line** exists between age 17 and age 18 or, as relevant here, between age 17 on the one hand, and ages 19 and 20 on the other hand.”

In re Monschke (Supreme Court of Washington, 2021)

- “The petitioners have shown that many youthful defendants older than **18 share the same developing brains** and impulsive behavioral attributes as those under 18. Thus, **we hold that these 19- and 20-year-old petitioners must qualify for some of the same constitutional protections as well.**”

Haag (2021), Anderson (2022), Reite (2024), Carter (2024)

- *Haag*: “gave **undue emphasis to retributive factors** over mitigating factors.”
- *Anderson*: de facto LWOP sentences are unconstitutional under state constitution **only for juvenile offenders whose crimes reflect youthful immaturity, impetuosity, or failure to appreciate risks and consequences.**
- *Carter & Reite*, found that evidence of planning crime did not eliminate youth as a mitigating consideration, court **still granted reduced sentence**



Other States That Have Extended Protection to Emerging Adults

Rhode Island: “Mario’s Law” (Youthful Offender Act)

- **2021:** Rhode Island passed the Youthful Offender Act, allowing individuals sentenced for **any offense before age 22** to seek parole after 20 years, except those serving LWOP.
- **2024:** Rhode Island Supreme Court affirmed that individuals **sentenced before turning 22** (“emerging adults”) have the **right to parole review after 20 years**, regardless of multiple consecutive sentences in *Mario Monteiro v. State of Rhode Island* (No. 2023-167-M.P. (PM 23-921)).

Michigan Supreme Court, 2022-2025

People v. Parks (2022)

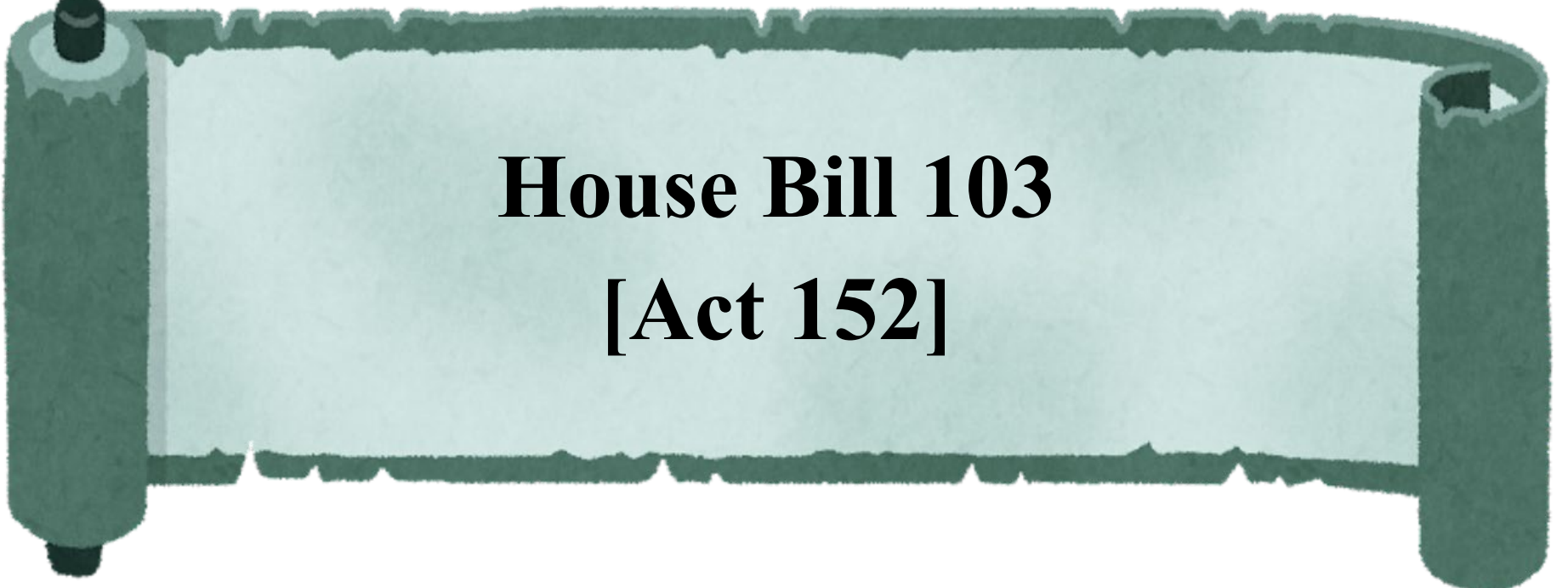
- Mandatory LWOP for 18-year-olds is **unconstitutional** under Michigan's ban on "cruel or unusual punishment."

People v. Czarnecki; People v. Taylor (2025)

- "Late adolescents who are 19 or 20 years old, as a class, share with 18-year-olds **the same mitigating characteristics of late-adolescent brain development.**";
objective, undisputed scientific research
- "the **scientific research relied on by the Parks Court applied equally to 19- and 20-year-old individuals**"

Hawaii's Ban on LWOP

“The purpose of this Act is to prohibit life without parole sentences for emerging adult defendants between eighteen and twenty-one years of age.”



House Bill 103
[Act 152]

Enacted by the Legislature of the State of Hawaii on June 3, 2025

United States Supreme Court

“The qualities that distinguish juveniles from adults do not disappear when an individual turns 18.”

Justice Kennedy, *Roper v. Simons*



Juvenile and Emerging Adult Brain Development

This is Your
Brain In (Normal)
Adolescence

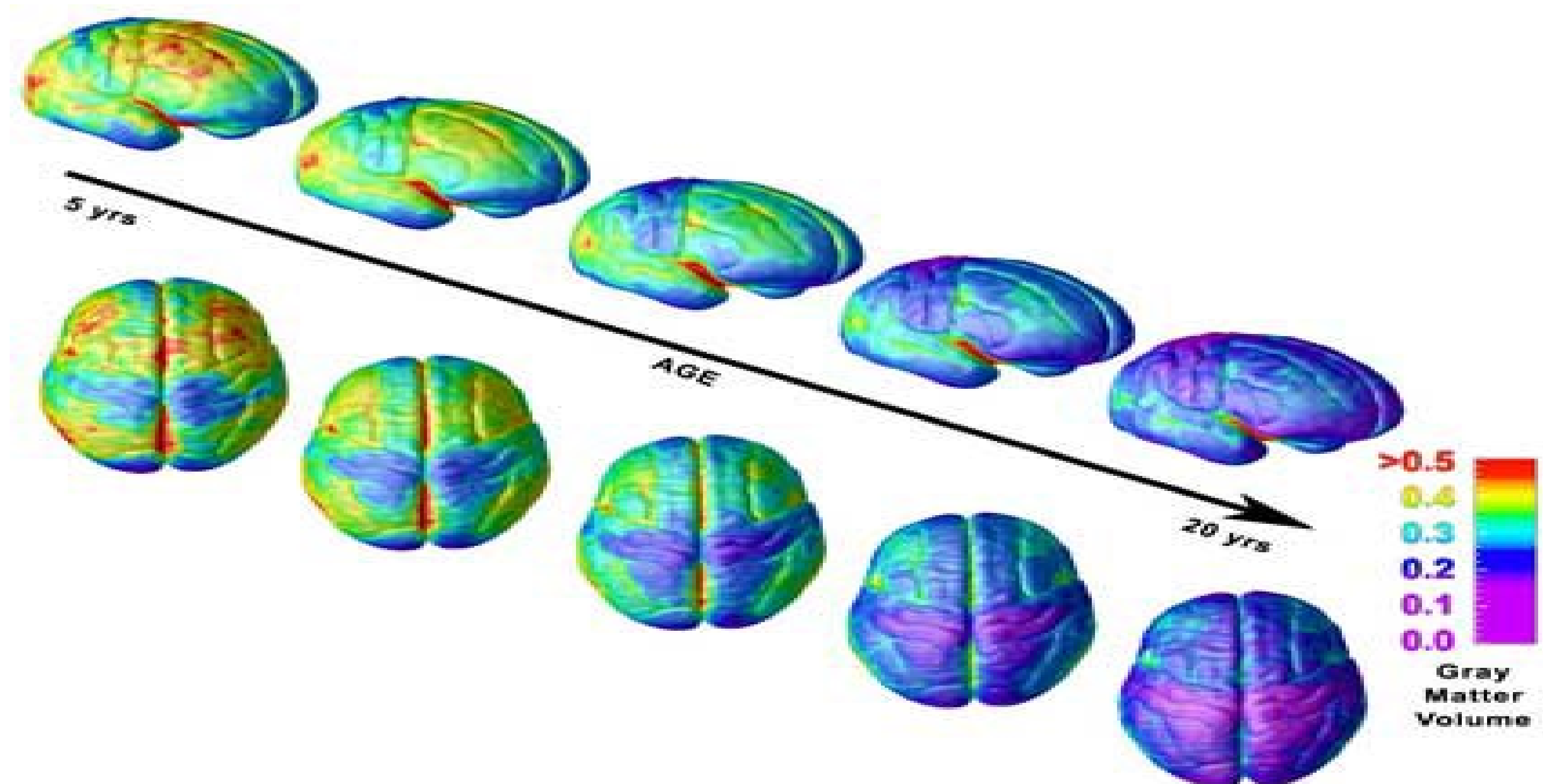


TLDR

Adolescent and late adolescent brains are different from adult brains



Changes in Grey Matter Volume



White Matter Development

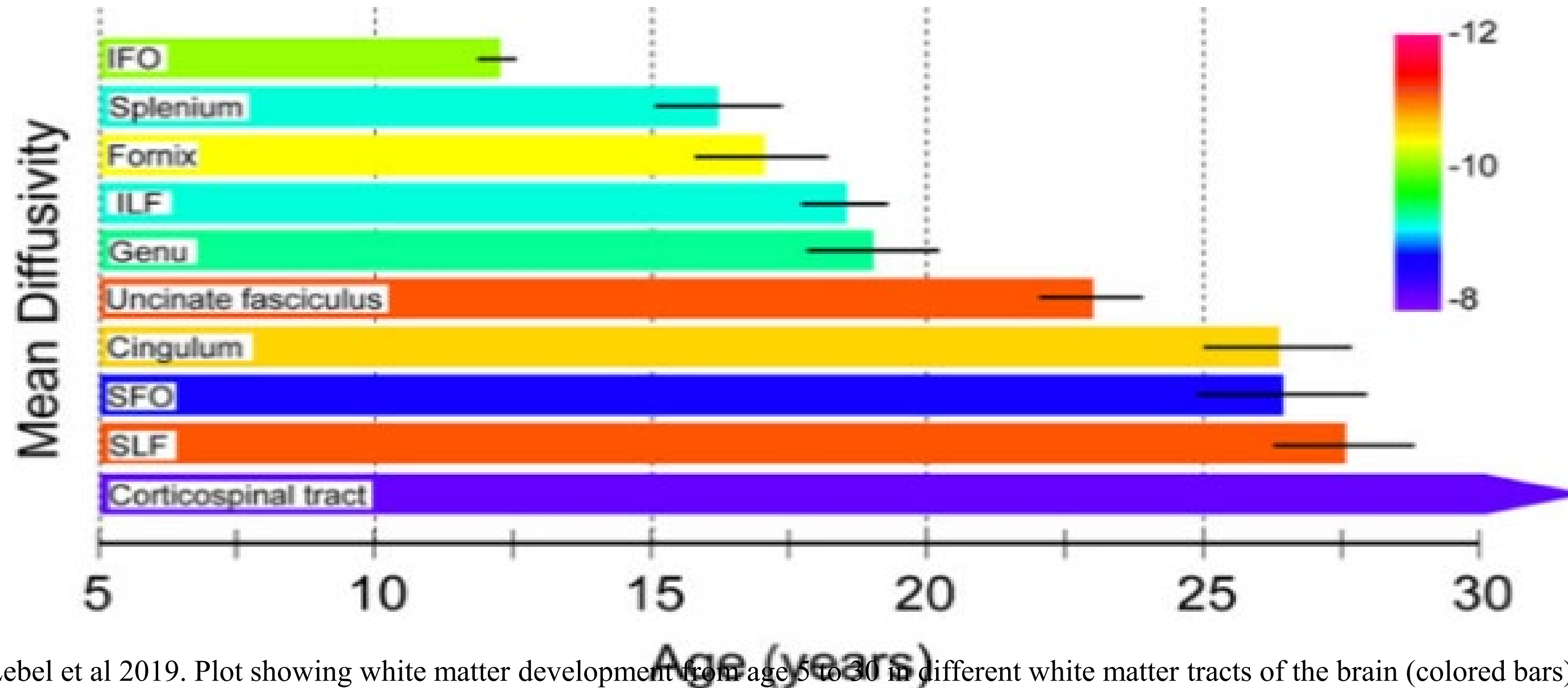


Figure 4: Lebel et al 2019. Plot showing white matter development from age 5 to 30 in different white matter tracts of the brain (colored bars). Decreases in mean diffusivity provide an approximation of strengthening white matter connections. The end of each bar represents the age at which the measure reaches 90% of its developmental plateau. IFO: inferior fronto-occipital fasciculus; ILF: inferior longitudinal fasciculus; SFO: superior fronto-occipital fasciculus; SLF: superior longitudinal fasciculus

Decreases in Cortical Thickness Over Time

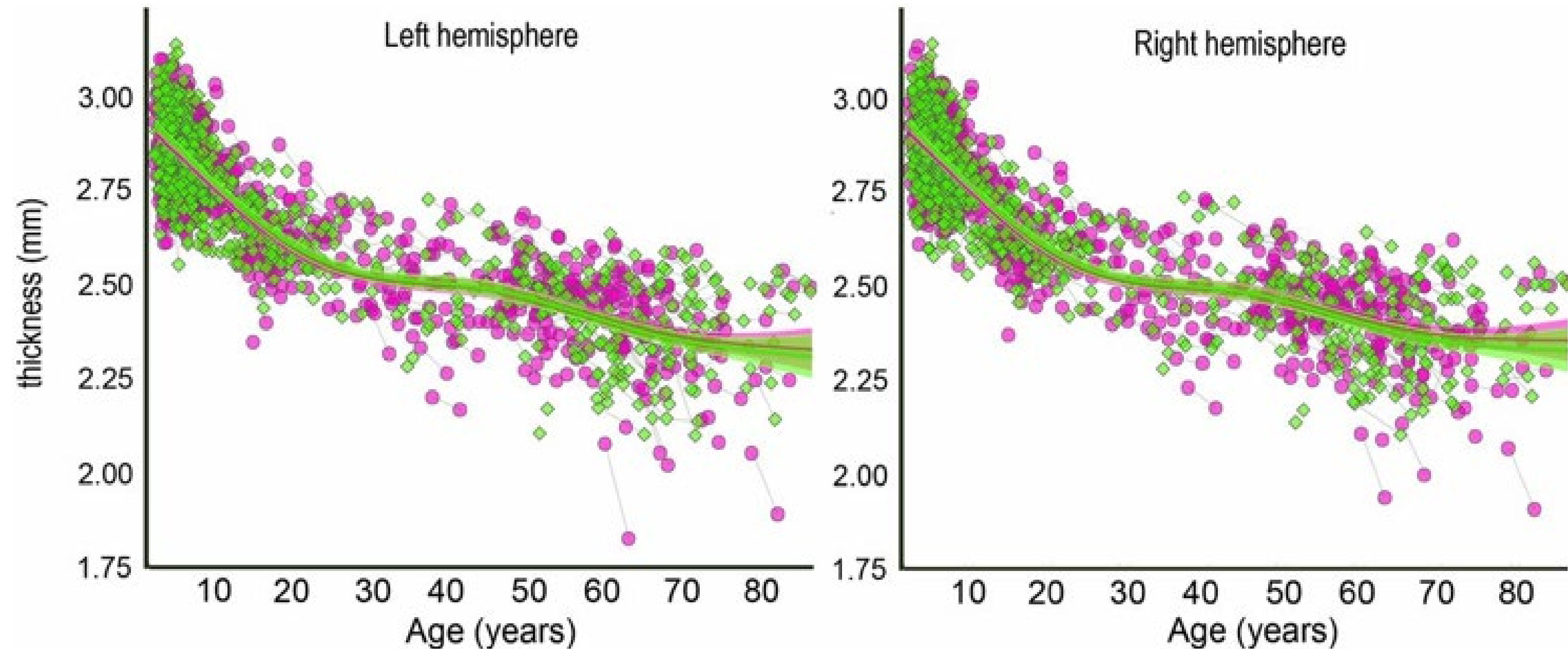
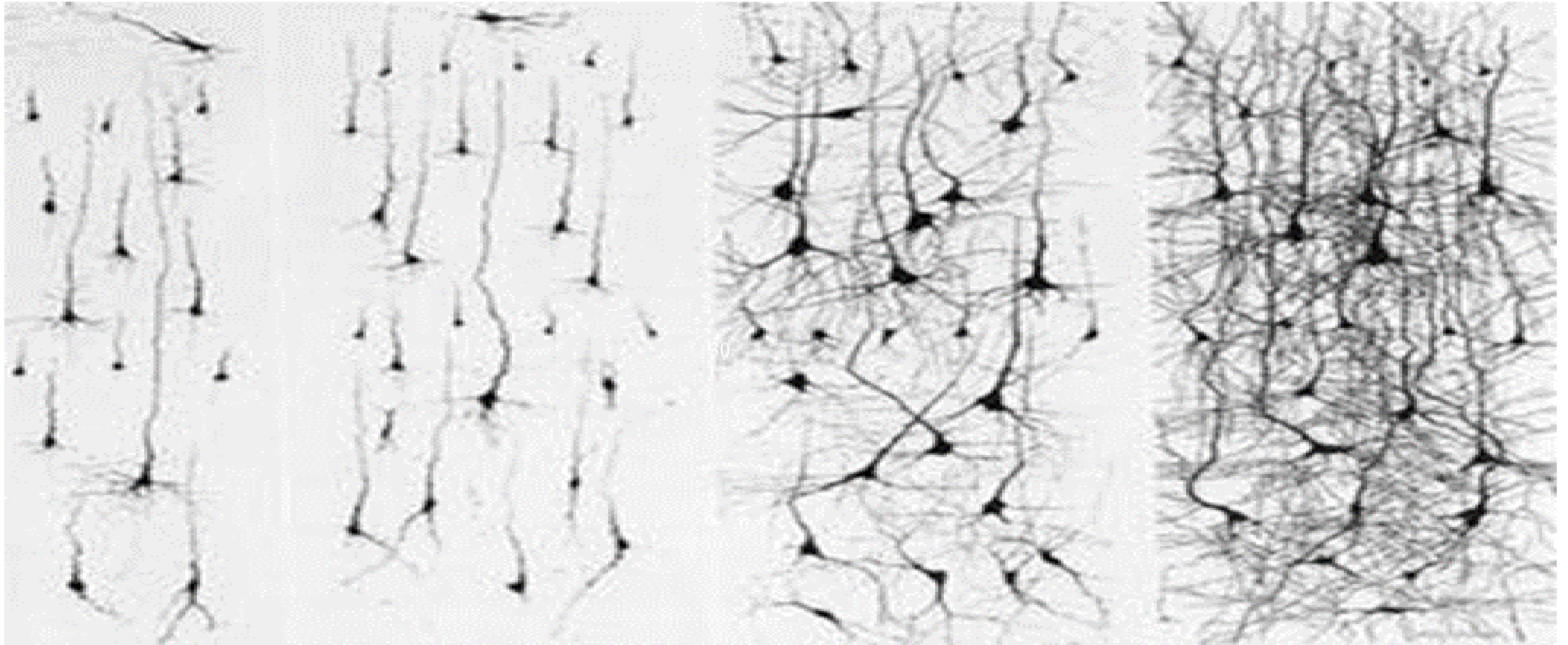


Figure 3: Fjell et al 2015. Global changes in cortical thickness. Longitudinal study testing 974 participants ages 4-89. Green is female, pink is male.

Process of Myelination and Neural Connection

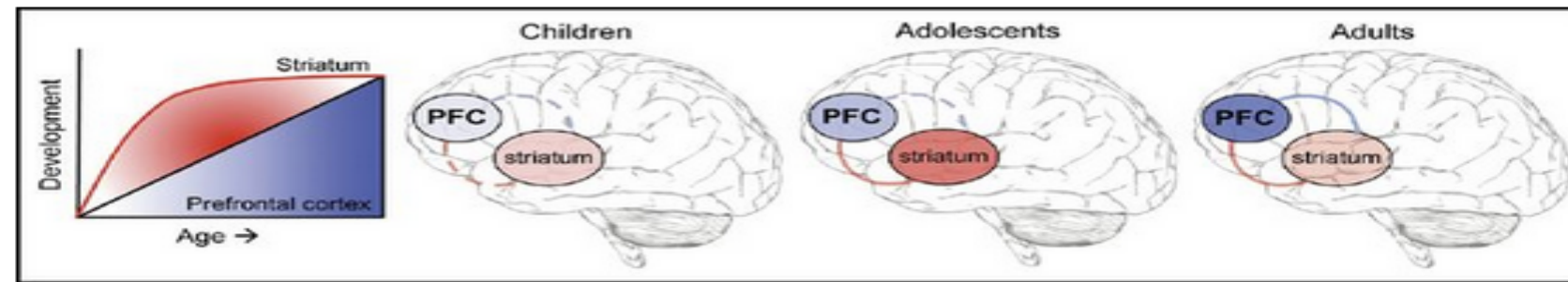


Newborn

3 month old

15 month old

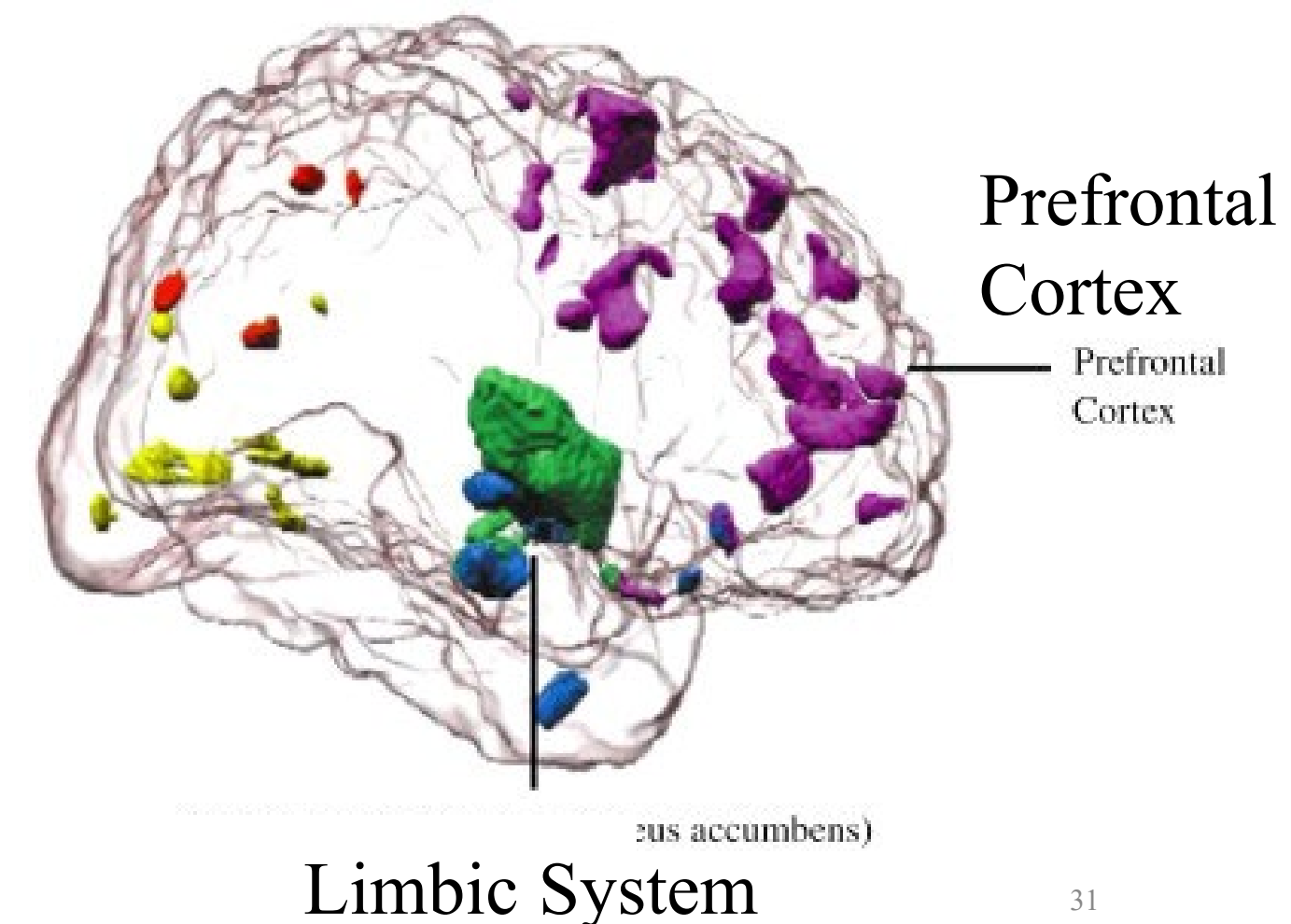
Teen Brain & Rewards / Emotions



Caption

FIGURE 1 Cartoon model of ventral striatal cortex and prefrontal cortex (PFC) interactions across development. Note: Deeper color indicates greater regional signaling. Line represents functional connectivity, with solid line indicating mature connection and dotted line indicating immaturity. Reprinted from Current Opinion in Neurobiology, Vol. 20, Somerville LH, Casey BJ. Developmental neurobiology of cognitive control and motivational systems, 236- 241. Copyright 2010, with permission of Elsevier. 21

- Limbic system (e.g. striatum) overly developed/sensitive
- Prefrontal Cortex less developed
- Rewards/emotions outweigh “regulation” from the Prefrontal Cortex

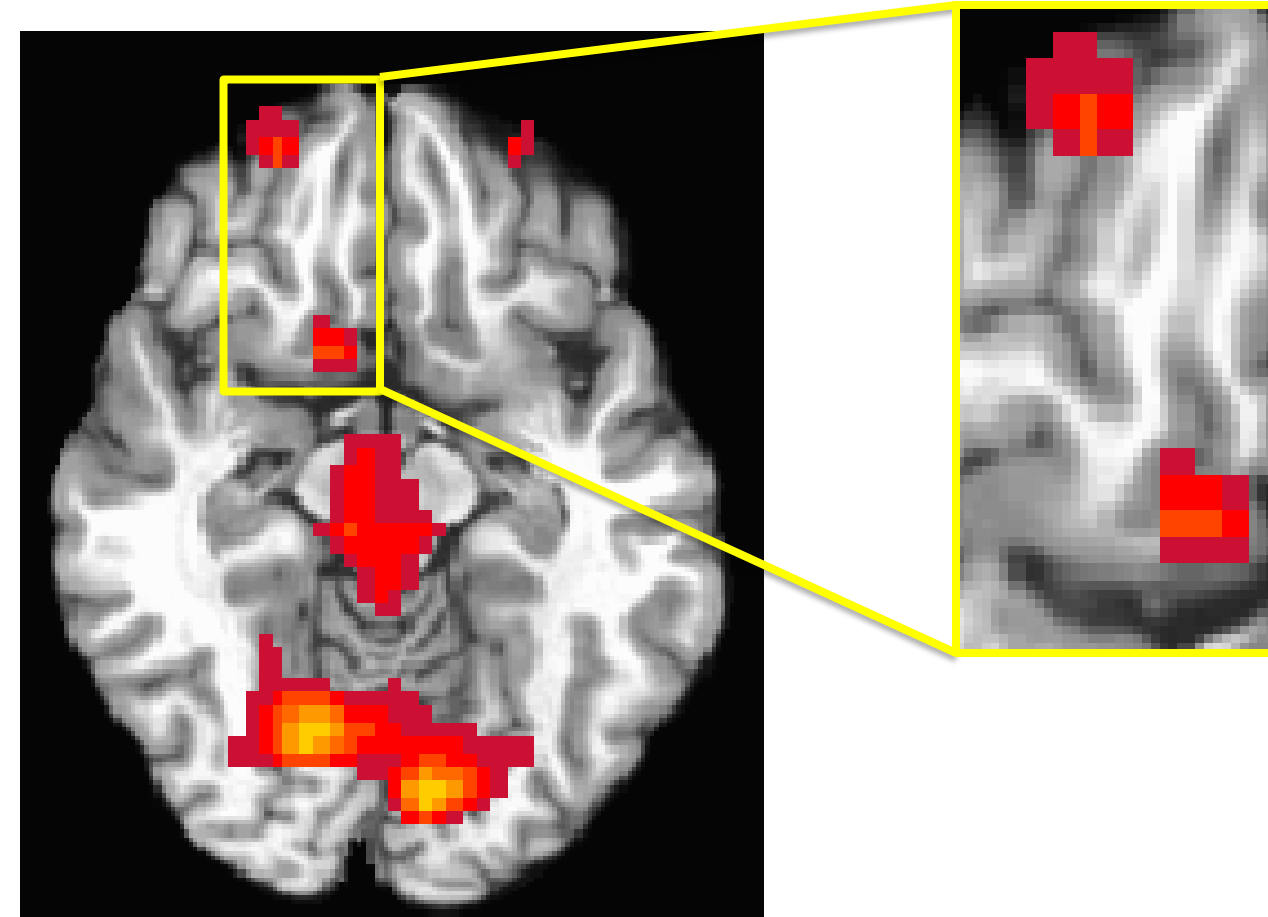




Adolescents are less likely than adults to:

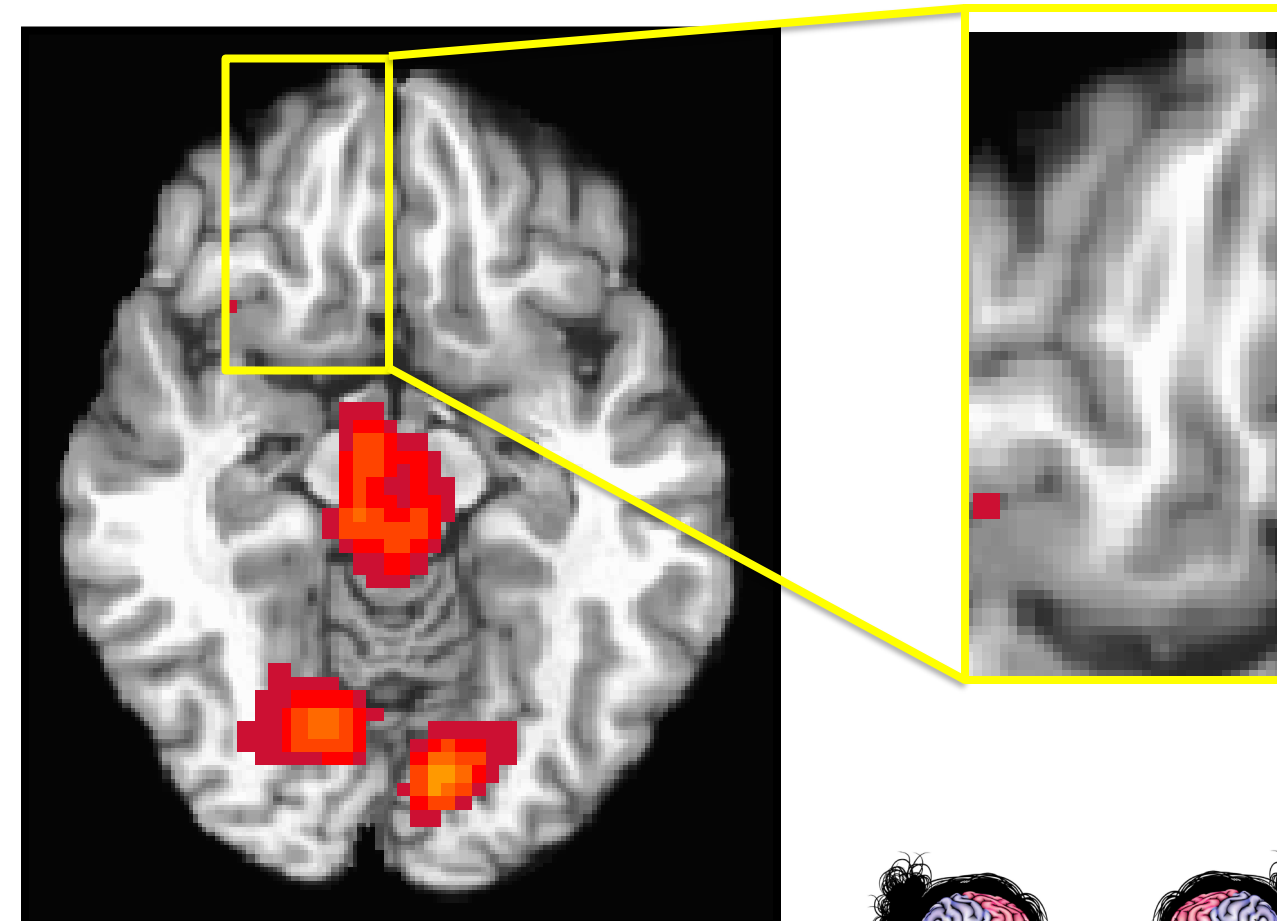
- Identify and/or consider likely future consequences of their actions
- Plan ahead beyond the very short term
- Control impulses or resist peer influences
- Move beyond the immediacy of perceived reward/gain
- Simultaneously consider the risks and rewards of a decision

Friends
Watching



Average change in brain activity among adolescent participants (14-18 years) playing the driving game, either with friends watching, or with no audience.

Alone



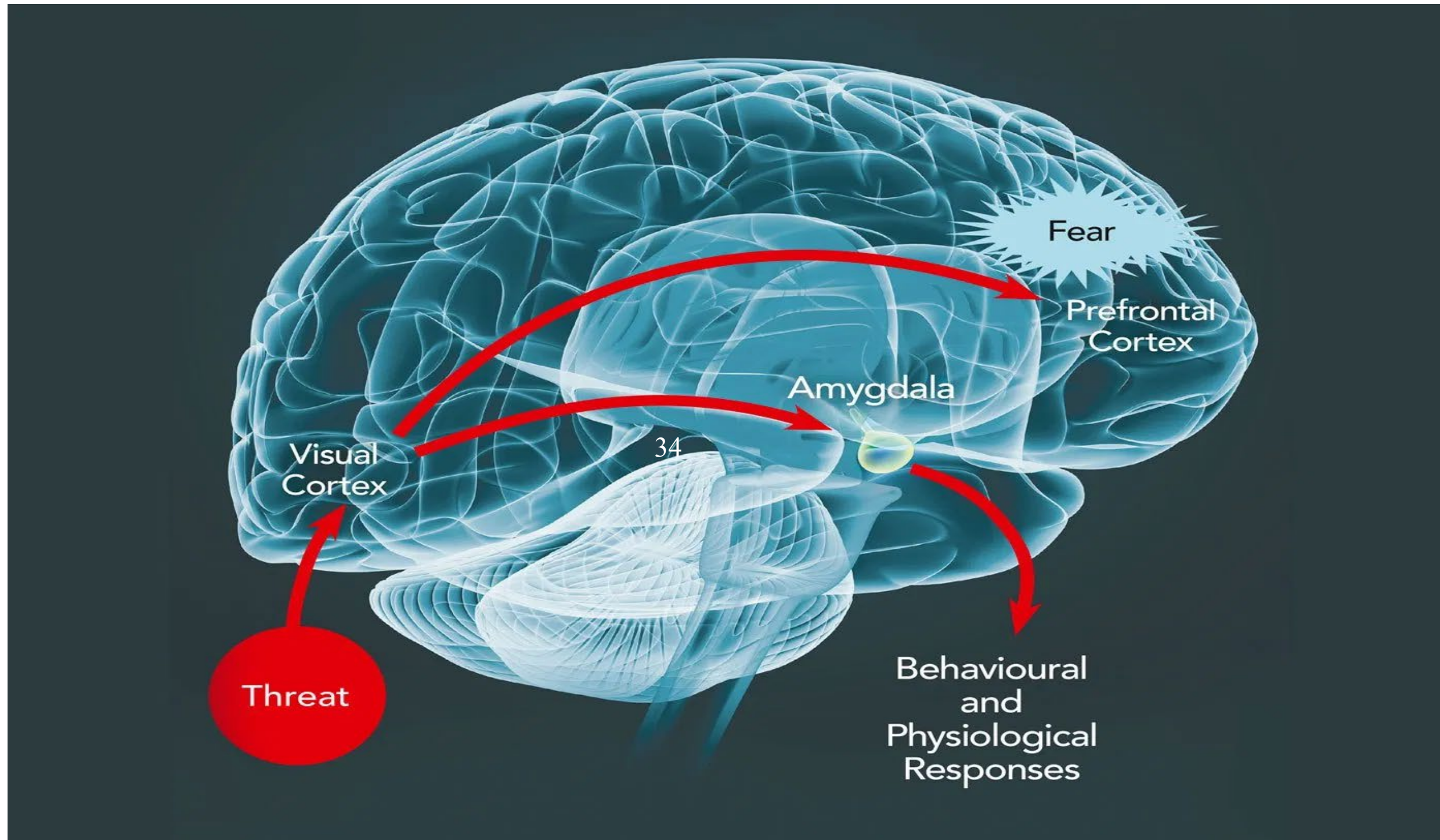
There is significantly greater activation in reward centers when friends are watching.

No such effect is seen among adults



(Chein et al., 2011)

Threat Response



Executive Functioning in Contexts

•Hot Cognition

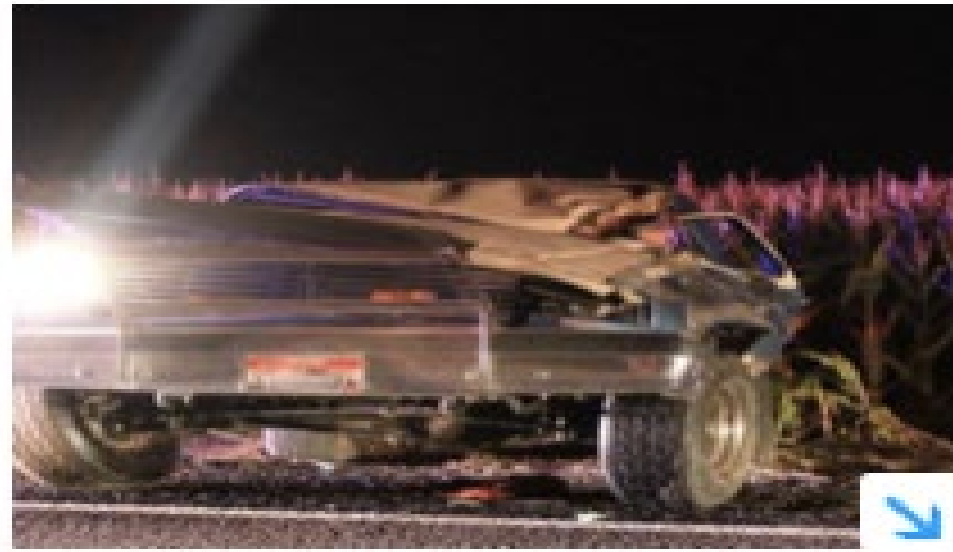
- Under stress, in the heat of the moment, during high emotional arousal (> 180 heartbeats a minute)
- Emotionally influenced thinking and perception that decision must be made immediately – more susceptible to impulse, risk-taking, influence of others

•Cold Cognition

- Calm environment, availability of input/consideration
- Time and tools to make well-thought-out decisions
- More logical and reasoned thinking



Deputies: Teen setting armpit hair on fire causes rollover crash



(Photo: KREM)



BOISE, Idaho -- A teenager crashed his SUV Sunday morning after a passenger used a lighter to set his armpit hair on fire, according to the Ada County Sheriff's Office.

The crash happened at 5:30 a.m. on Columbia Road between Meridian and Linder roads. Eighteen-year-old Tristan Myers was driving when his front-seat passenger, a 16-year-old boy, set Myers' armpit hair on fire. The driver lost control of the Ford Bronco, rolling the vehicle.

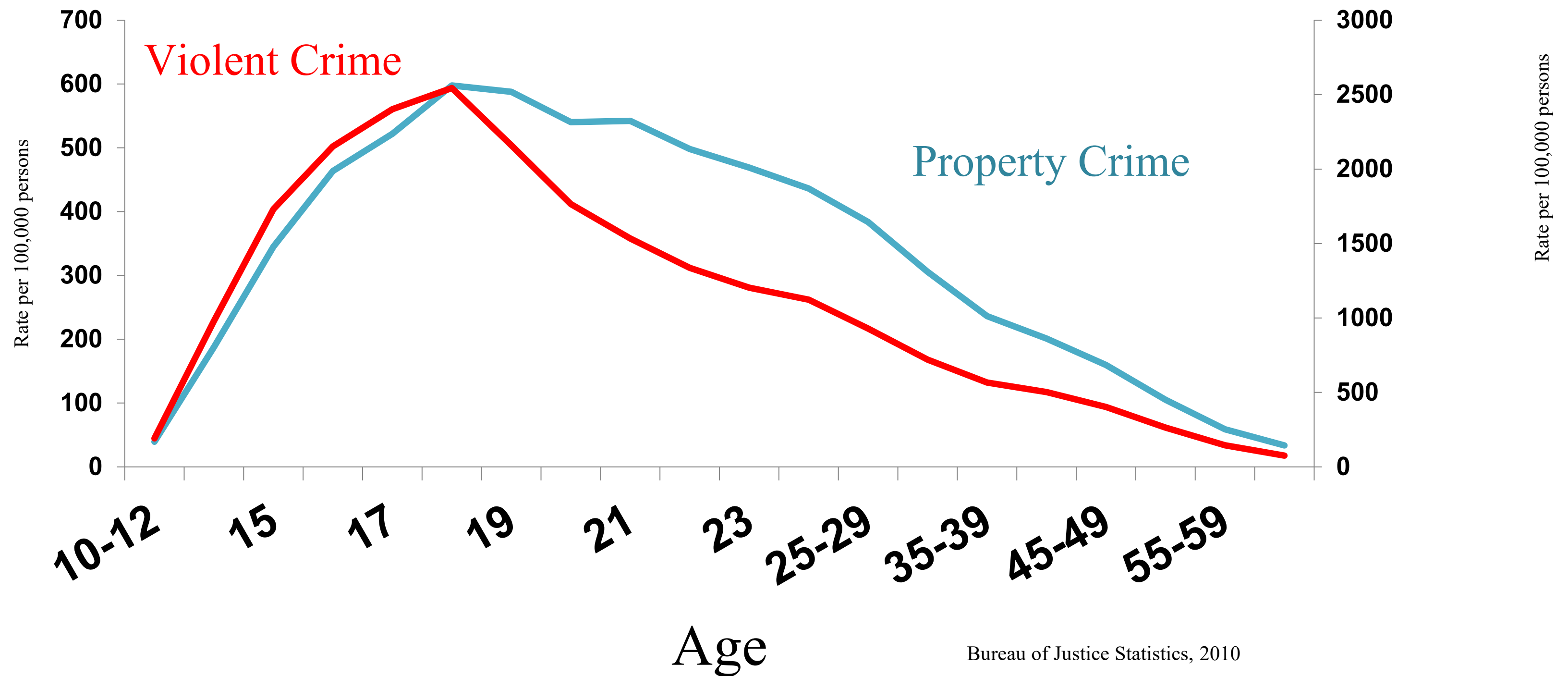
Two girls in the backseat, ages 15 and 16, were thrown from the vehicle. Myers, his front-seat passenger, and a 17-year-old boy remained in the vehicle. None of the teens were wearing seatbelts, deputies say.



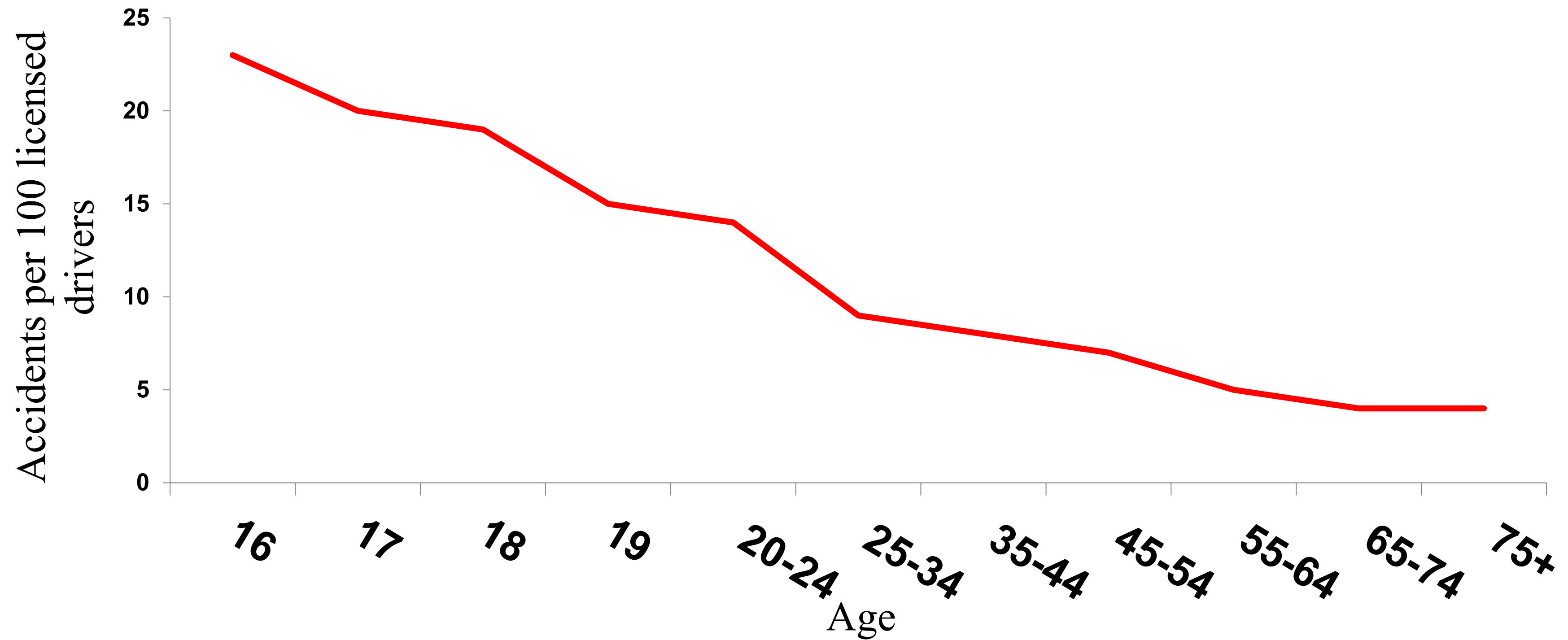
Compared to Adults, Adolescents...



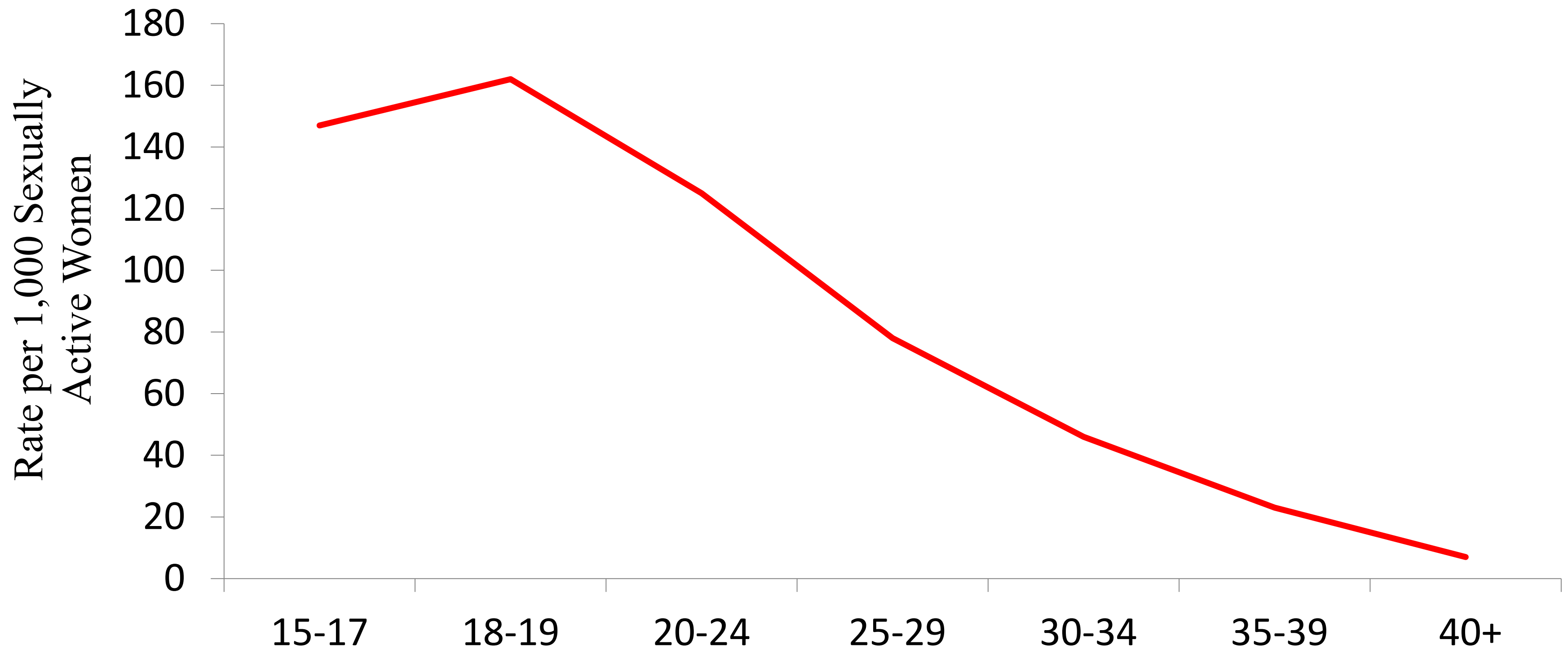
...commit more crimes



... HAVE MORE Automobile Crashes



... are more likely to have Unintended Pregnancies

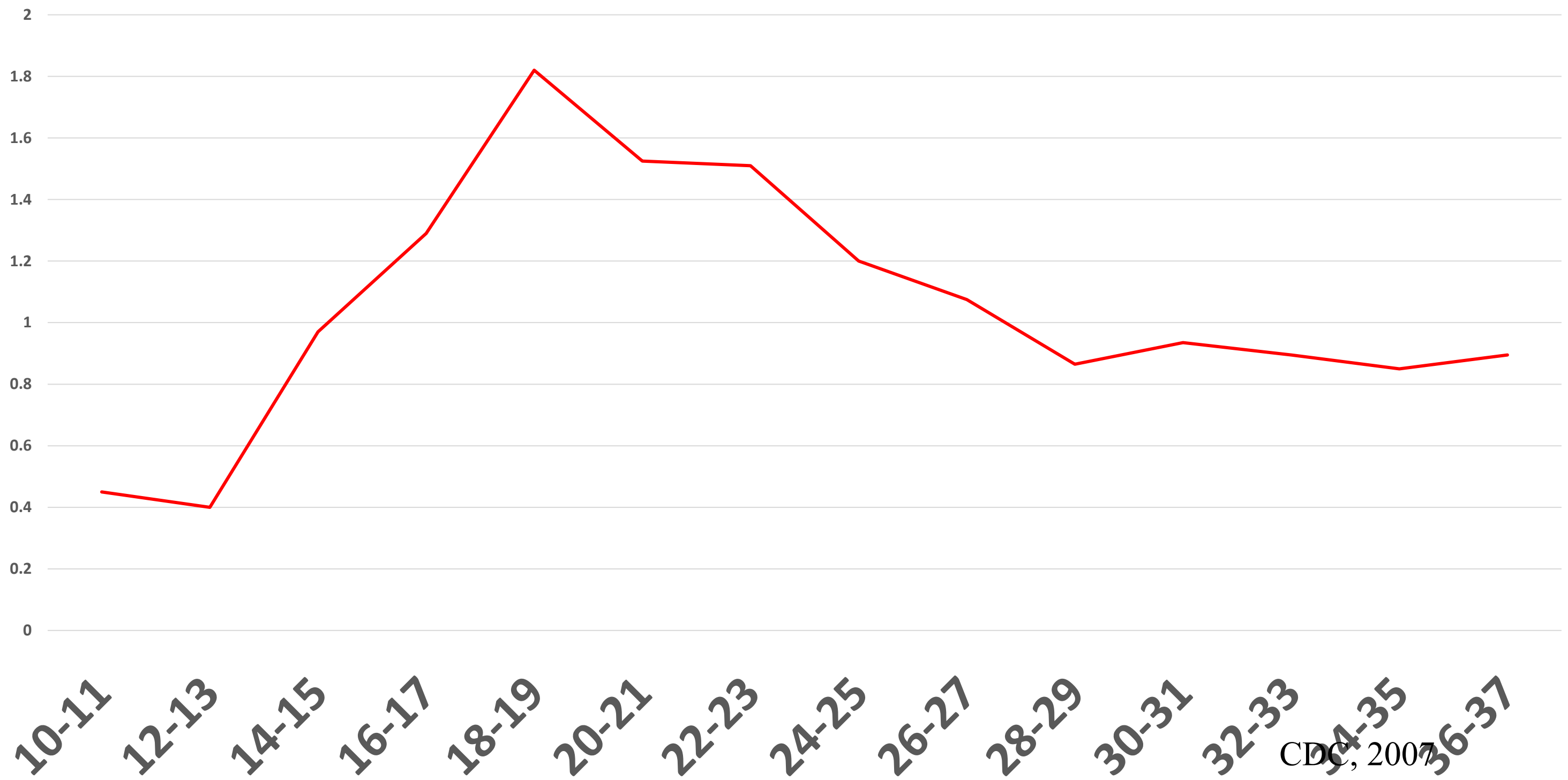


Finer, 2010



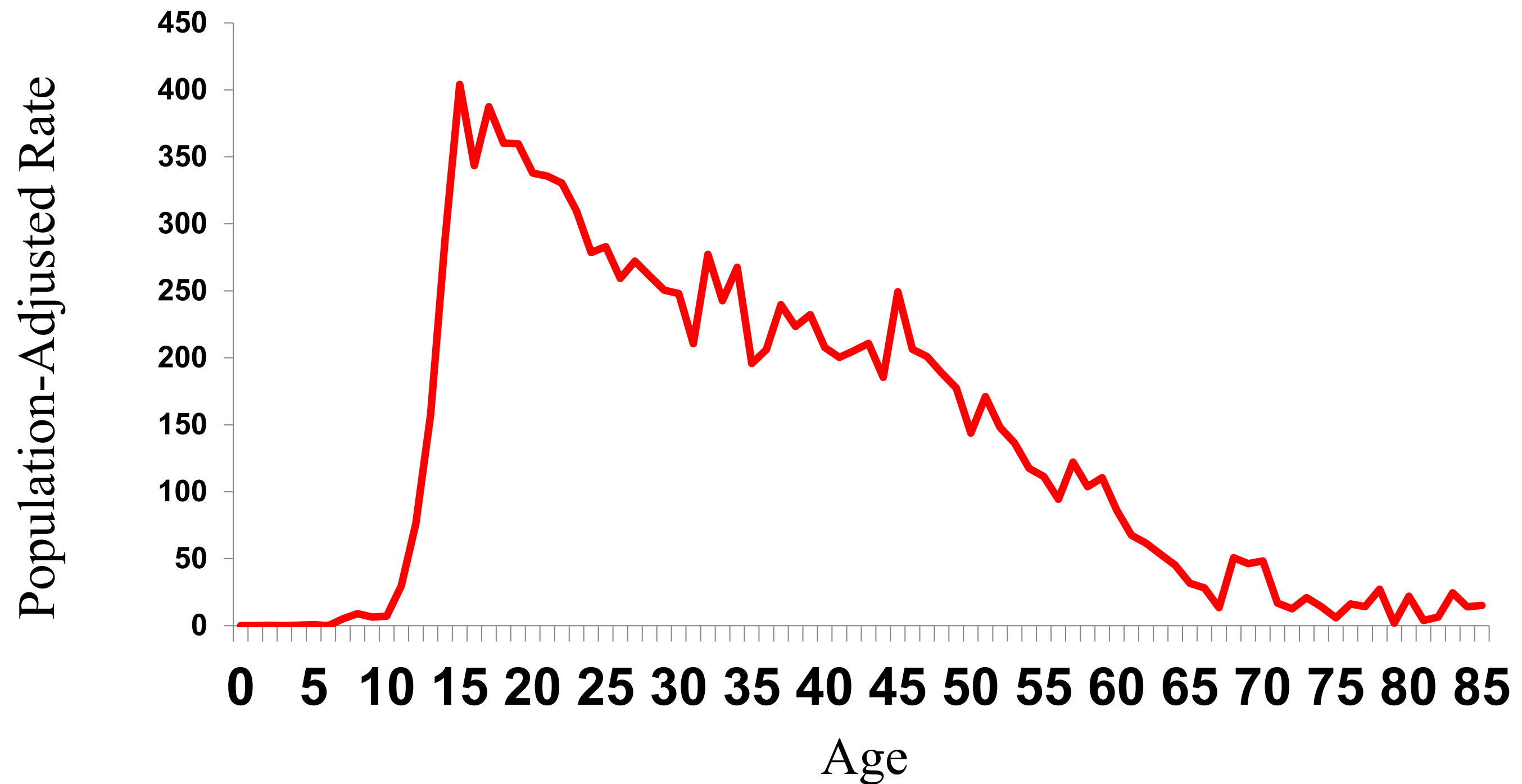
... DROWN more often

Population-Adjusted Rate



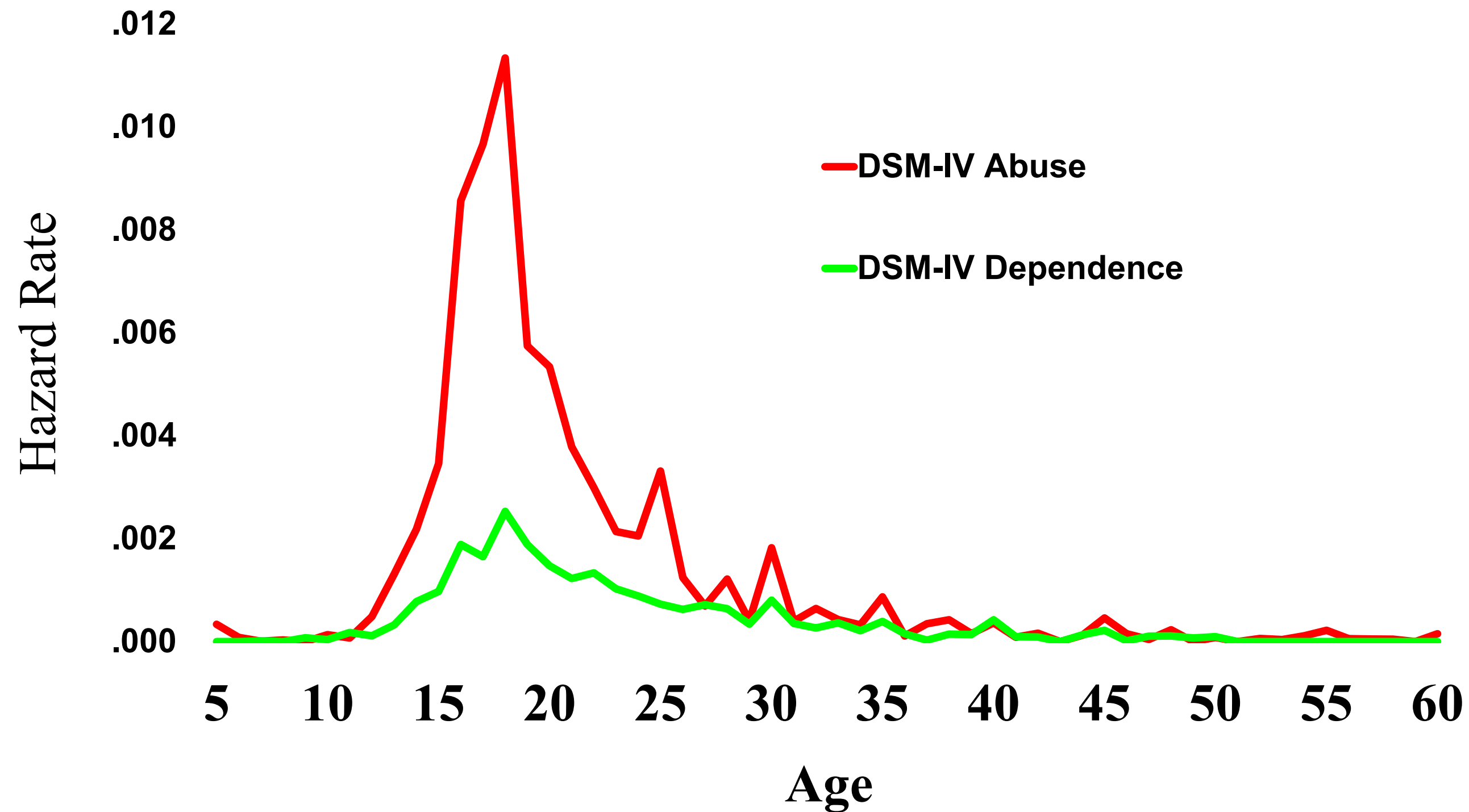
CDC, 2007

... HAVE MORE Non-Fatal Self-Inflicted Injuries

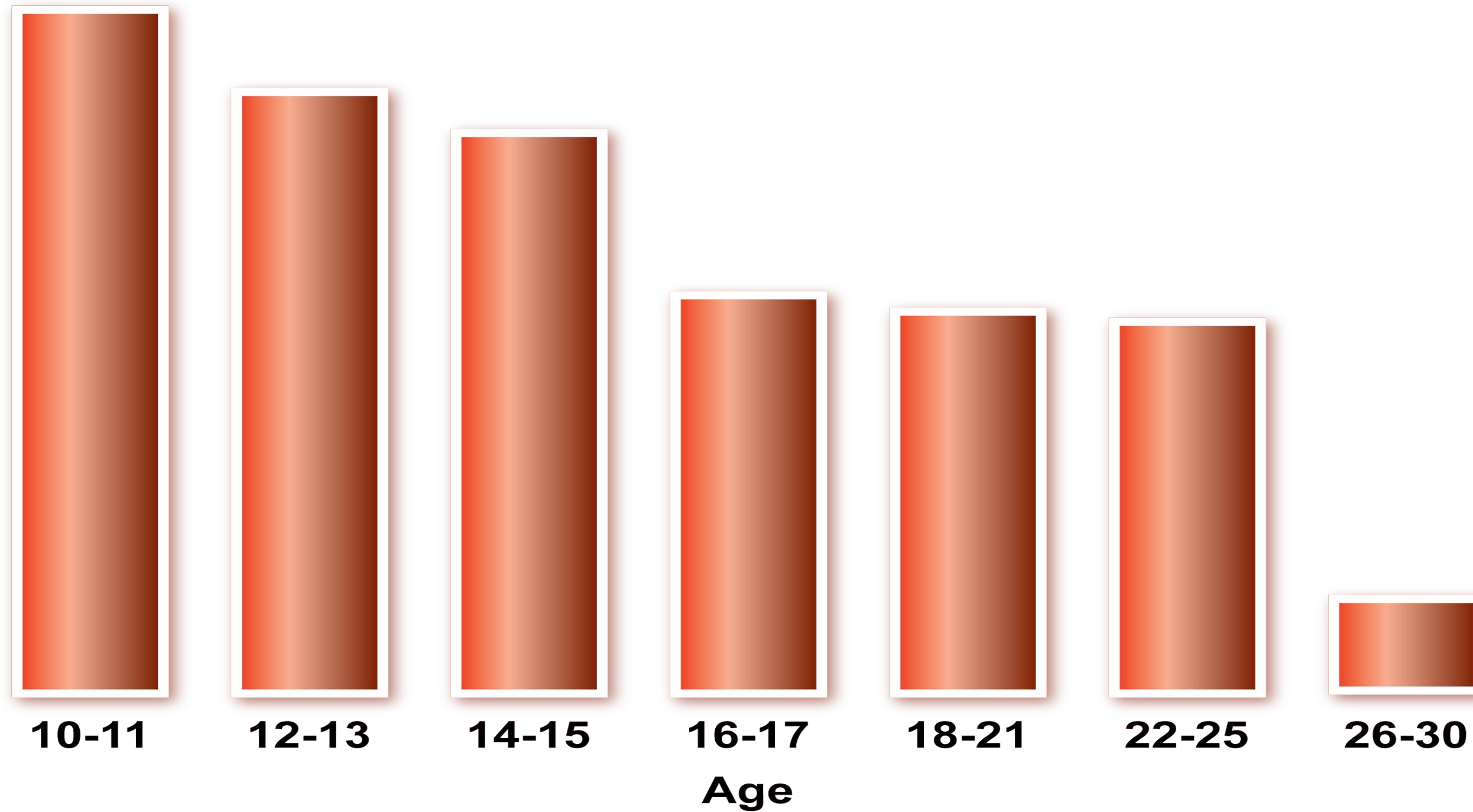


CDC, 2011

...are more likely to begin experimenting with drugs

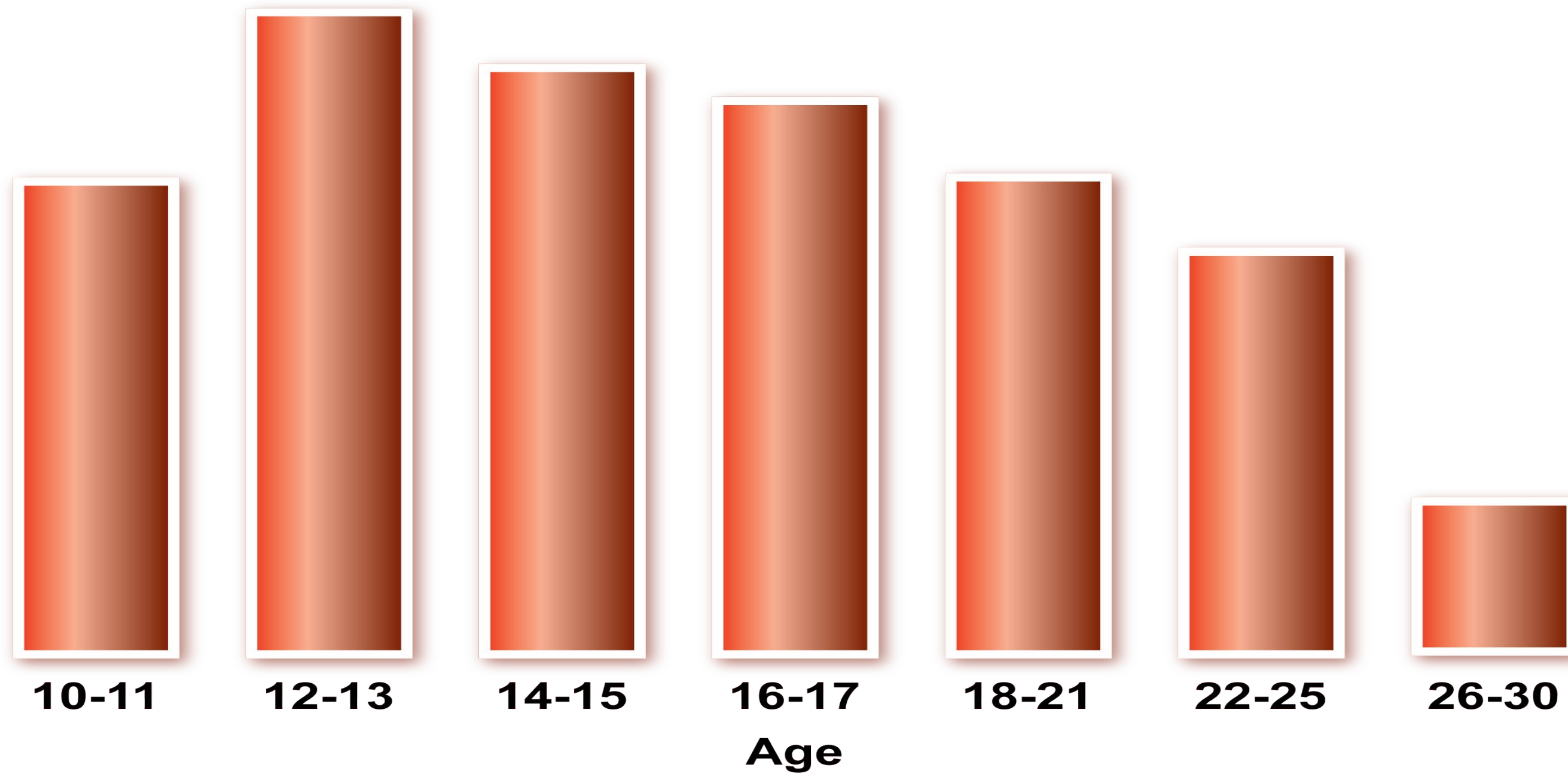


Impulsivity Declines with Age



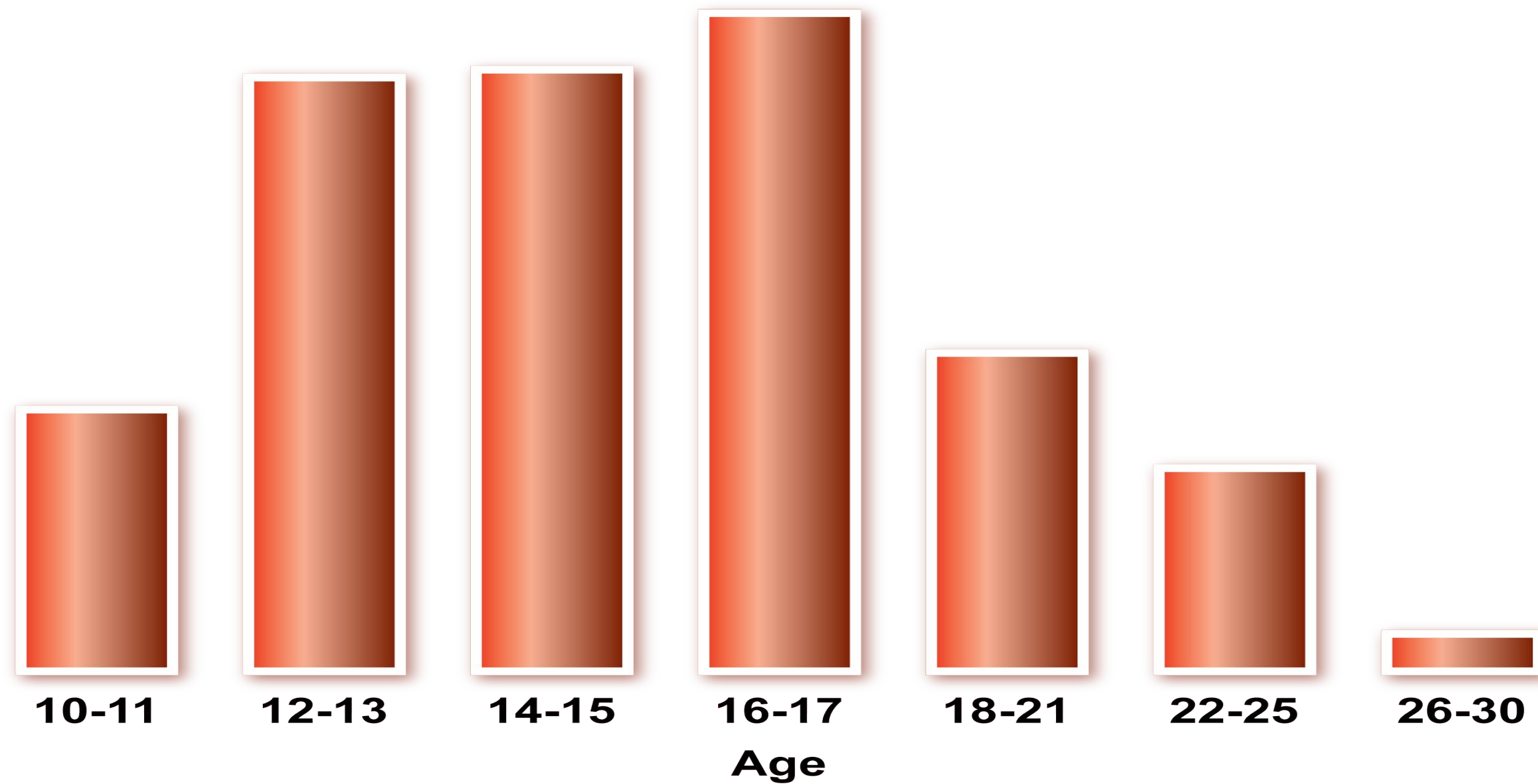
(Steinberg, et.al., 2008)

Sensation-seeking Declines with Age



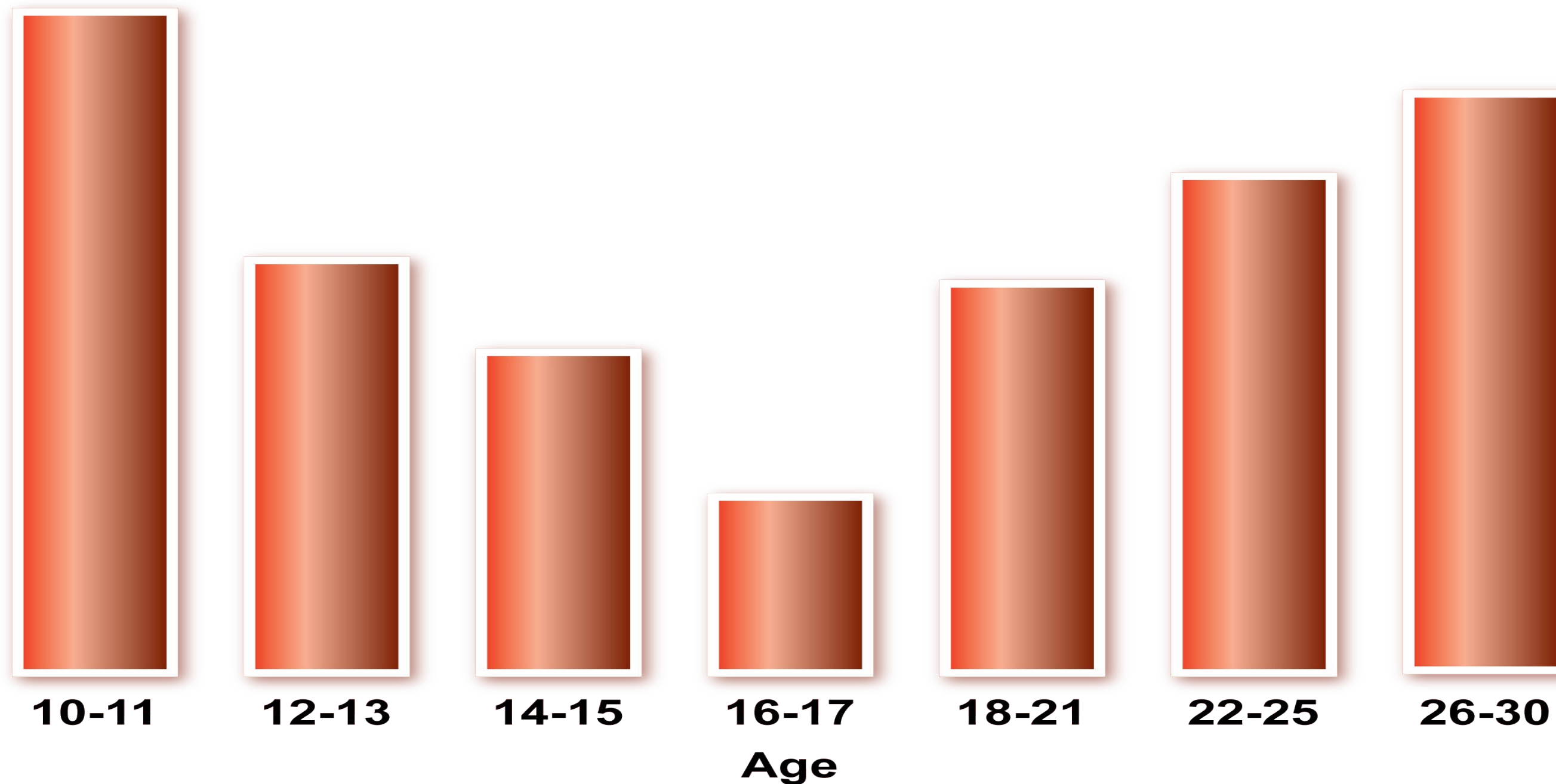
(Steinberg, et.al., 2008)

Risk Preference High in Mid-Adolescence



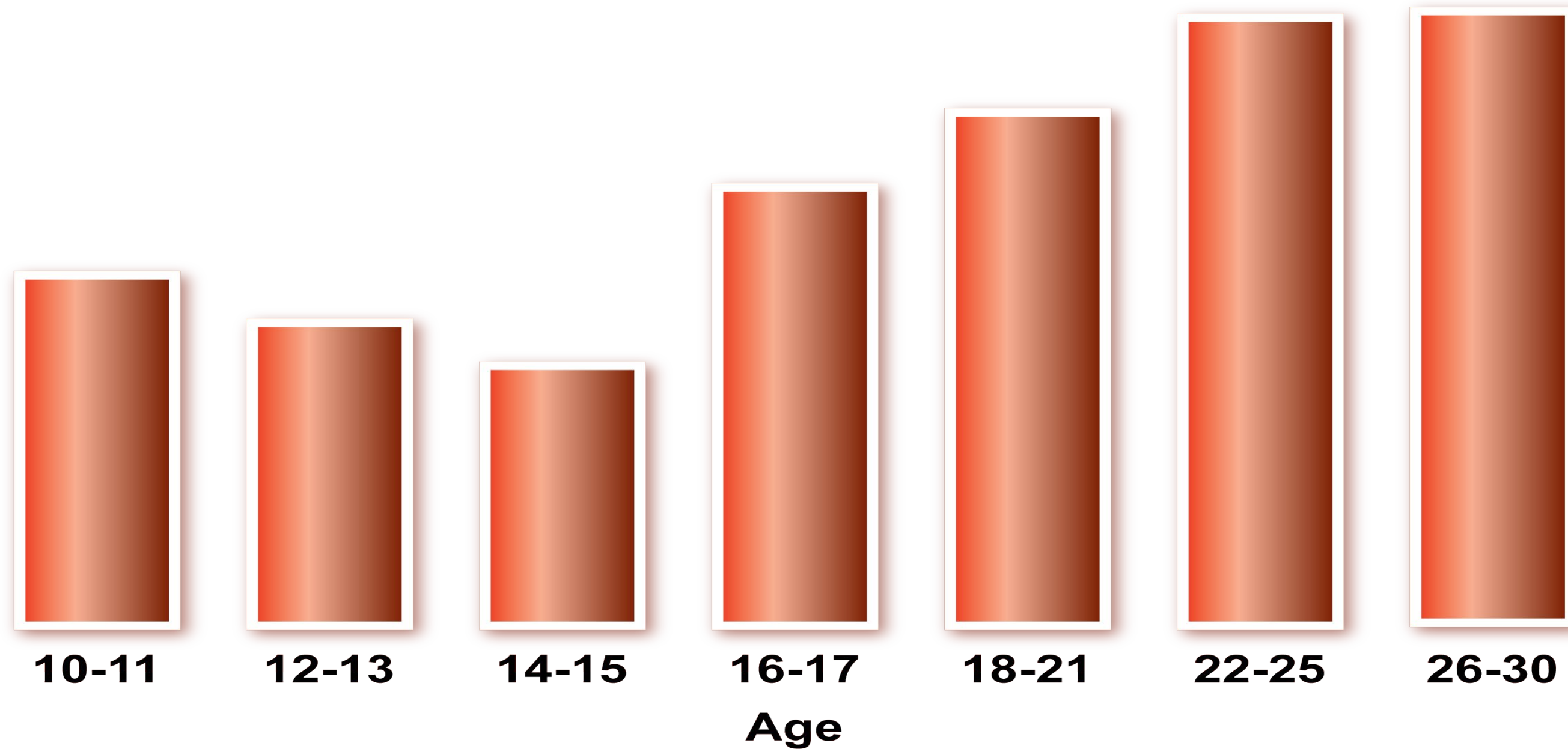
(Steinberg, et.al., 2009)

Risk Perception Declines and then Increases After Mid-Adolescence



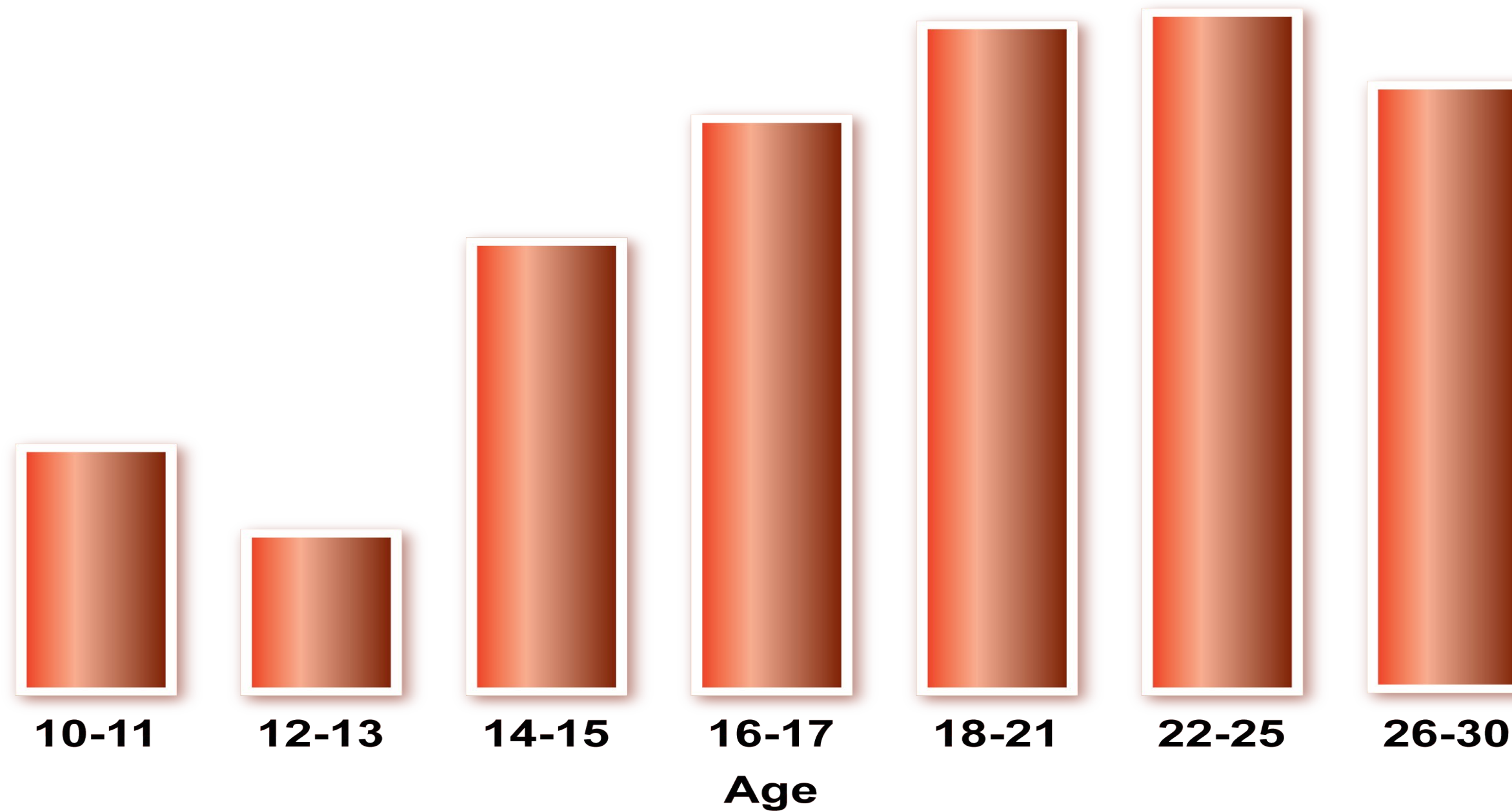
(Steinberg, et.al., 2009)

Future Orientation Increases with Age



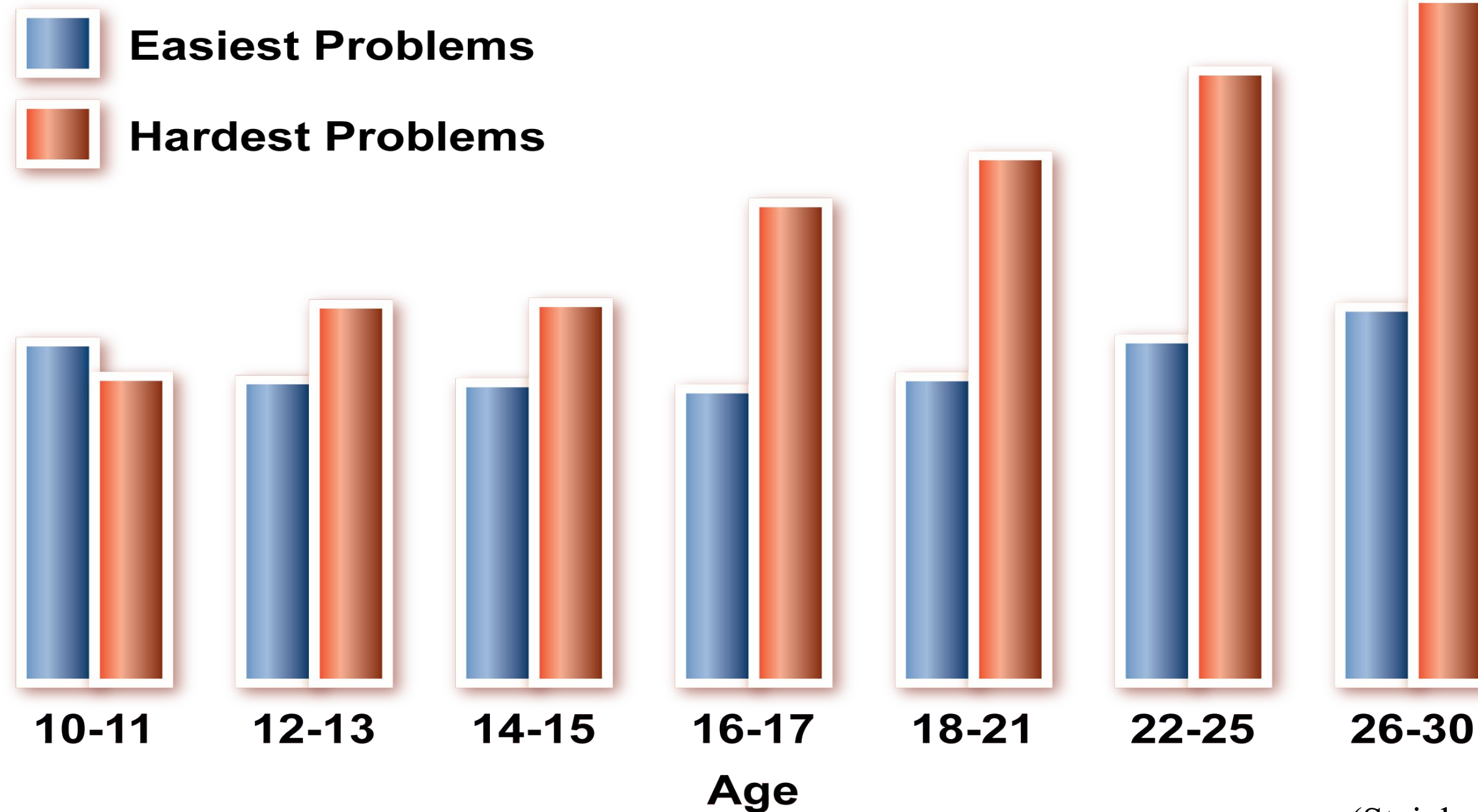
(Steinberg, et.al., 2009)

Older Individuals Are More Willing to Delay Gratification



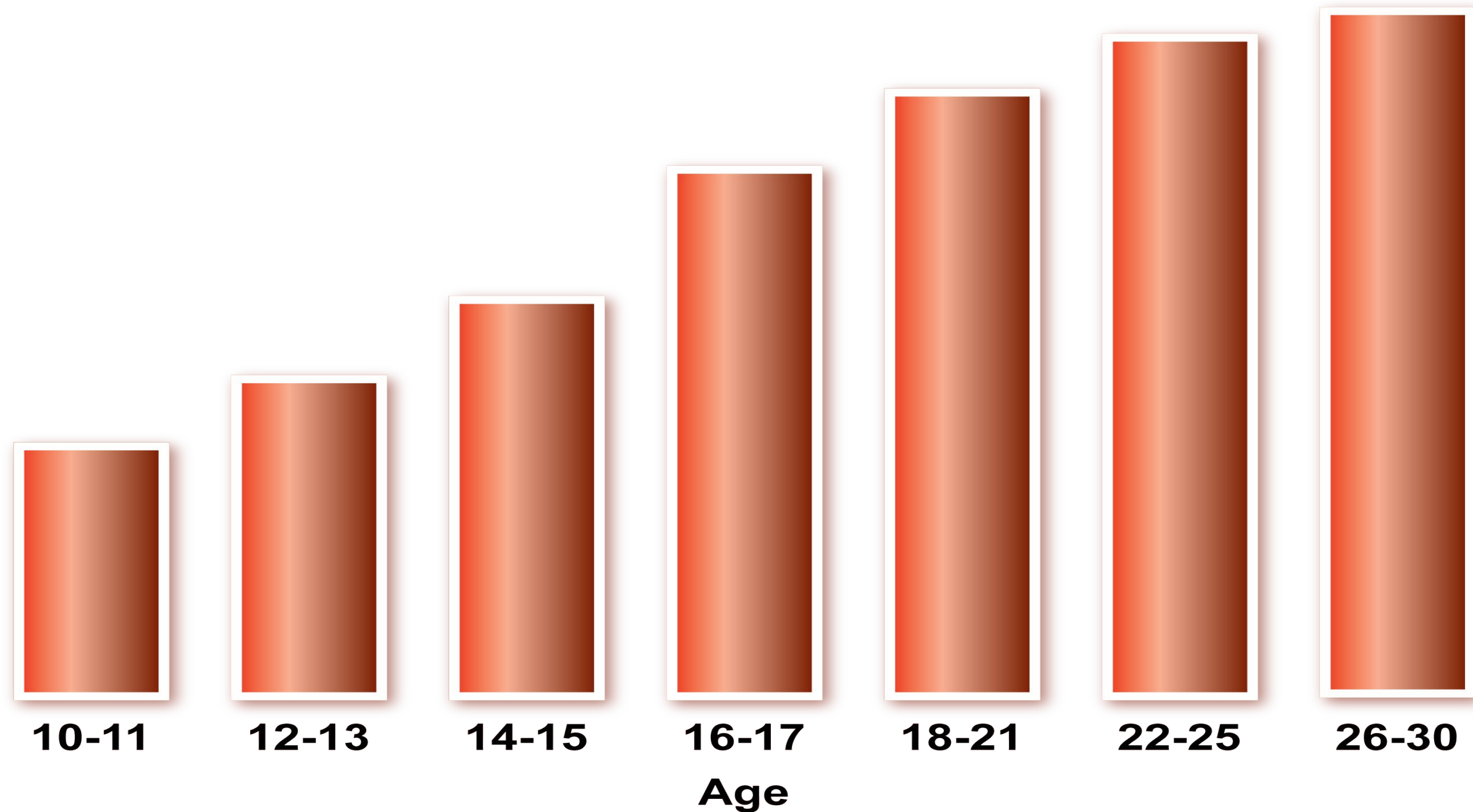
(Steinberg, et.al.,
2009)

With Age, Longer Time Spent Thinking Before Acting



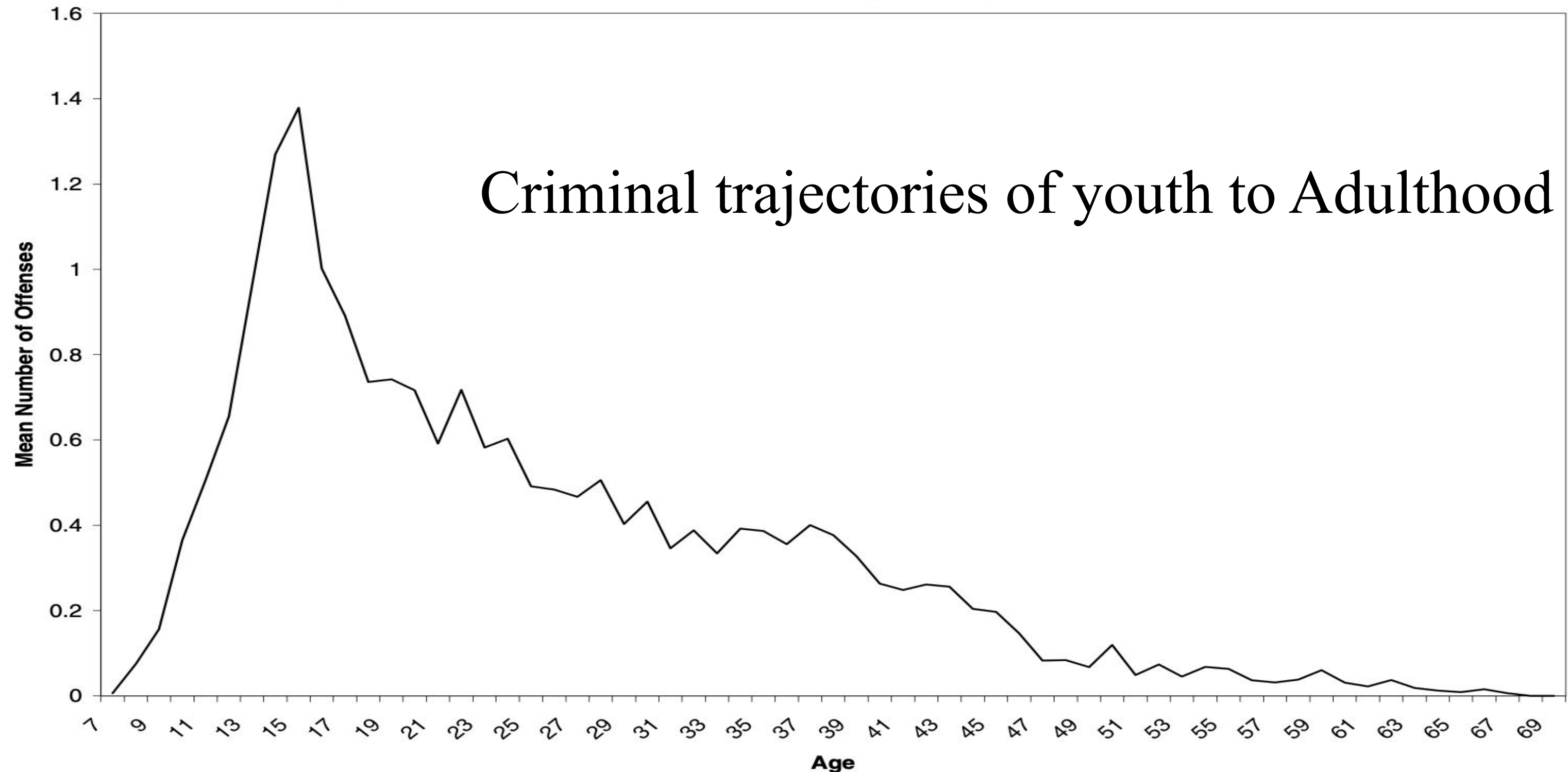
(Steinberg & Monahan, 2007)

With Age, Individuals Become More Resistant to Peer Influence



(Steinberg & Monahan, 2007)

**Figure 1. Actual Mean Number of Offenses for Total Crime
(Total Events = 9,548): Ages 7 to 70**





Criminal Trajectories of Youth to Adulthood

“We conclude that desistance processes are at work even among active offenders and predicted life-course persisters, and that childhood prognoses account poorly for long-term trajectories of offending”

Sampson, R. J & Laub, J. H. (2003)

But When is the Brain Finished developing?

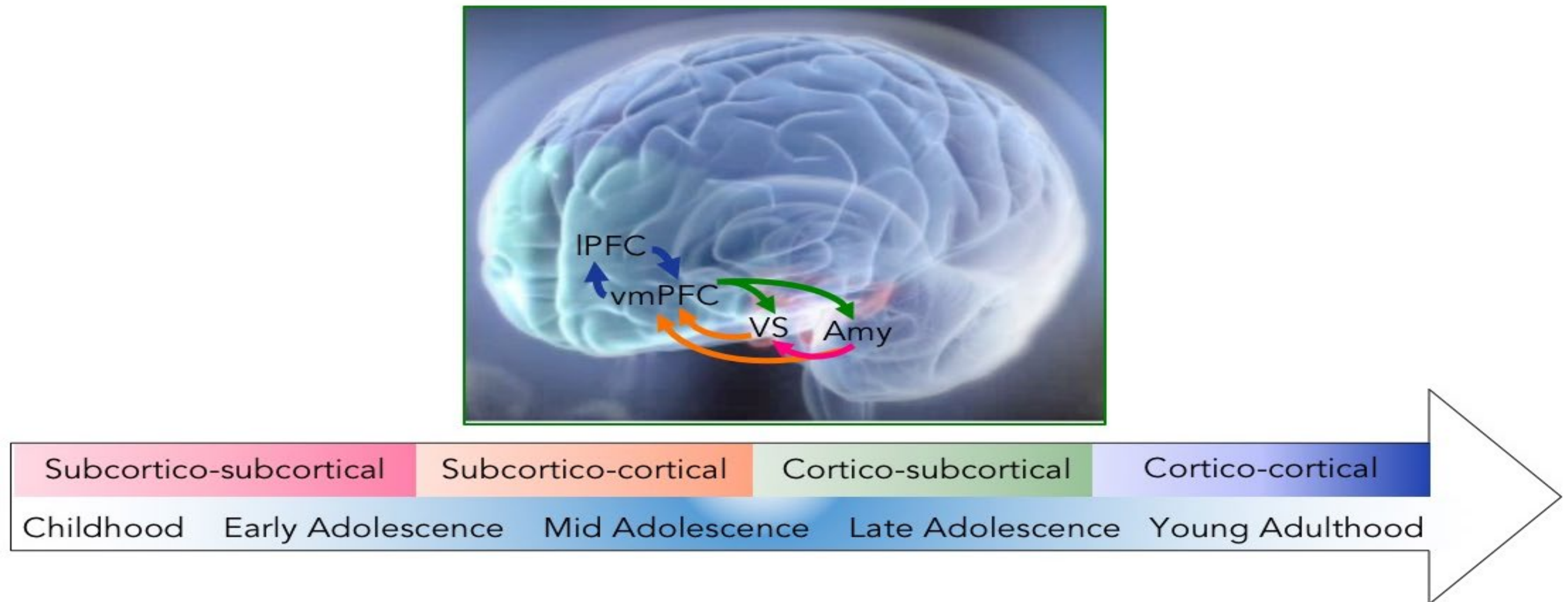


Figure 5: Casey 2020. Illustration of hierarchical development of brain circuitry. Amy is amygdala; VS is ventral striatum; vmPFC is ventromedial prefrontal cortex; IPFC is lateral prefrontal cortex.

But When is the Brain Finished developing?

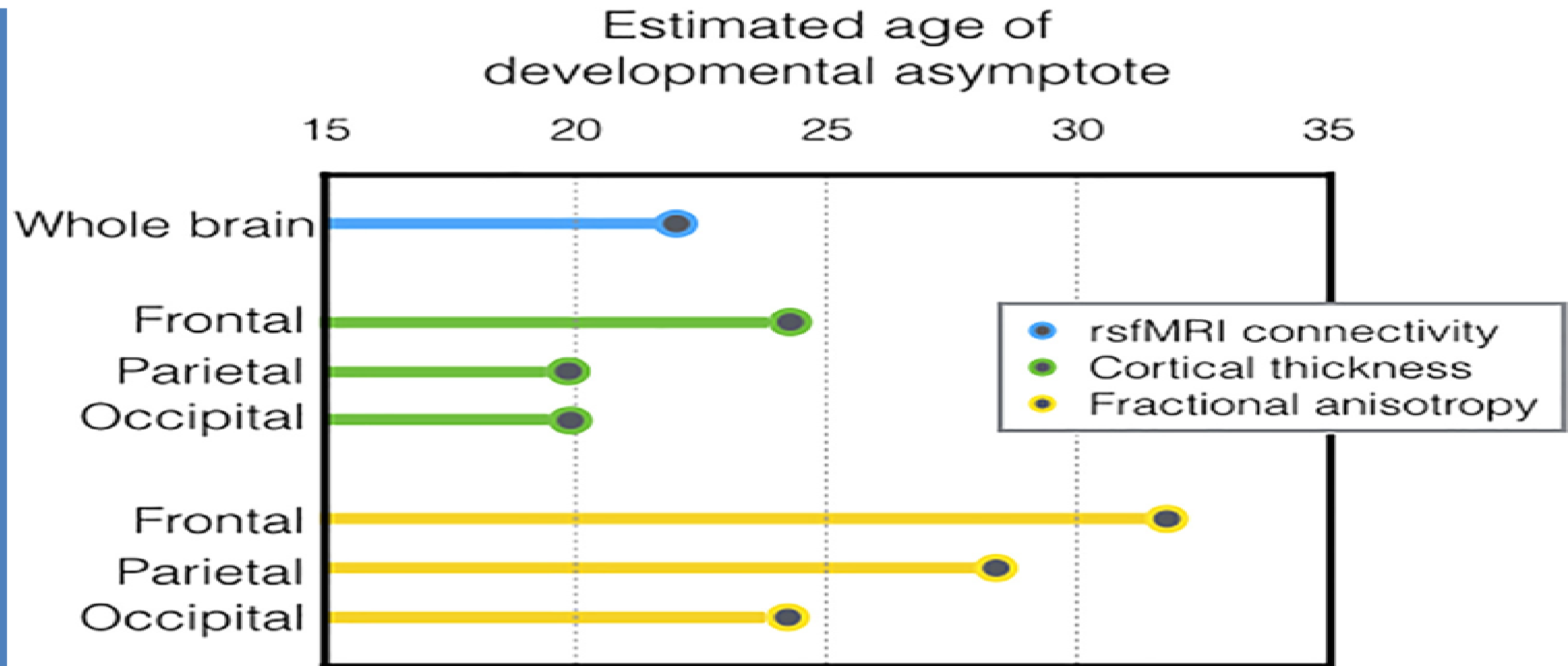
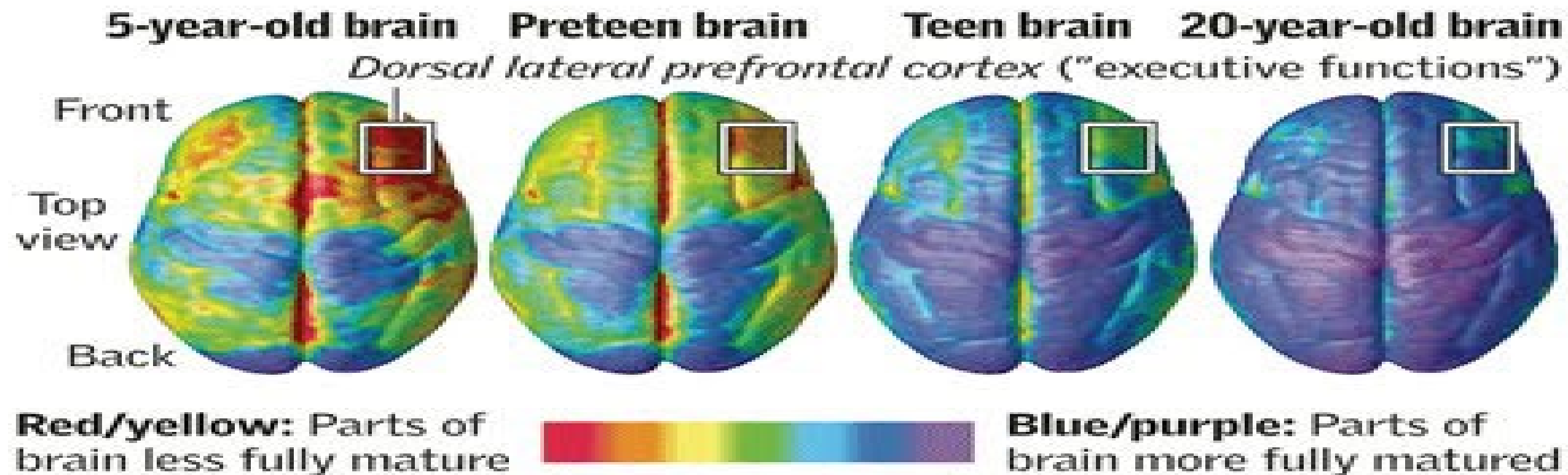


Figure 1: Somerville 2016. Age of developmental asymptote (plateau) for different brain measures. rsfMRI is a measure of whole brain connectivity; a cortical thickness is a measure of grey matter development; fractional anisotropy is a measure of white matter development

Judgment Last to Develop....

Judgment last to develop

The area of the brain that controls “executive functions” — including weighing long-term consequences and controlling impulses — is among the last to fully mature. Brain development from childhood to adulthood:



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

Thomas McKay | The Denver Post

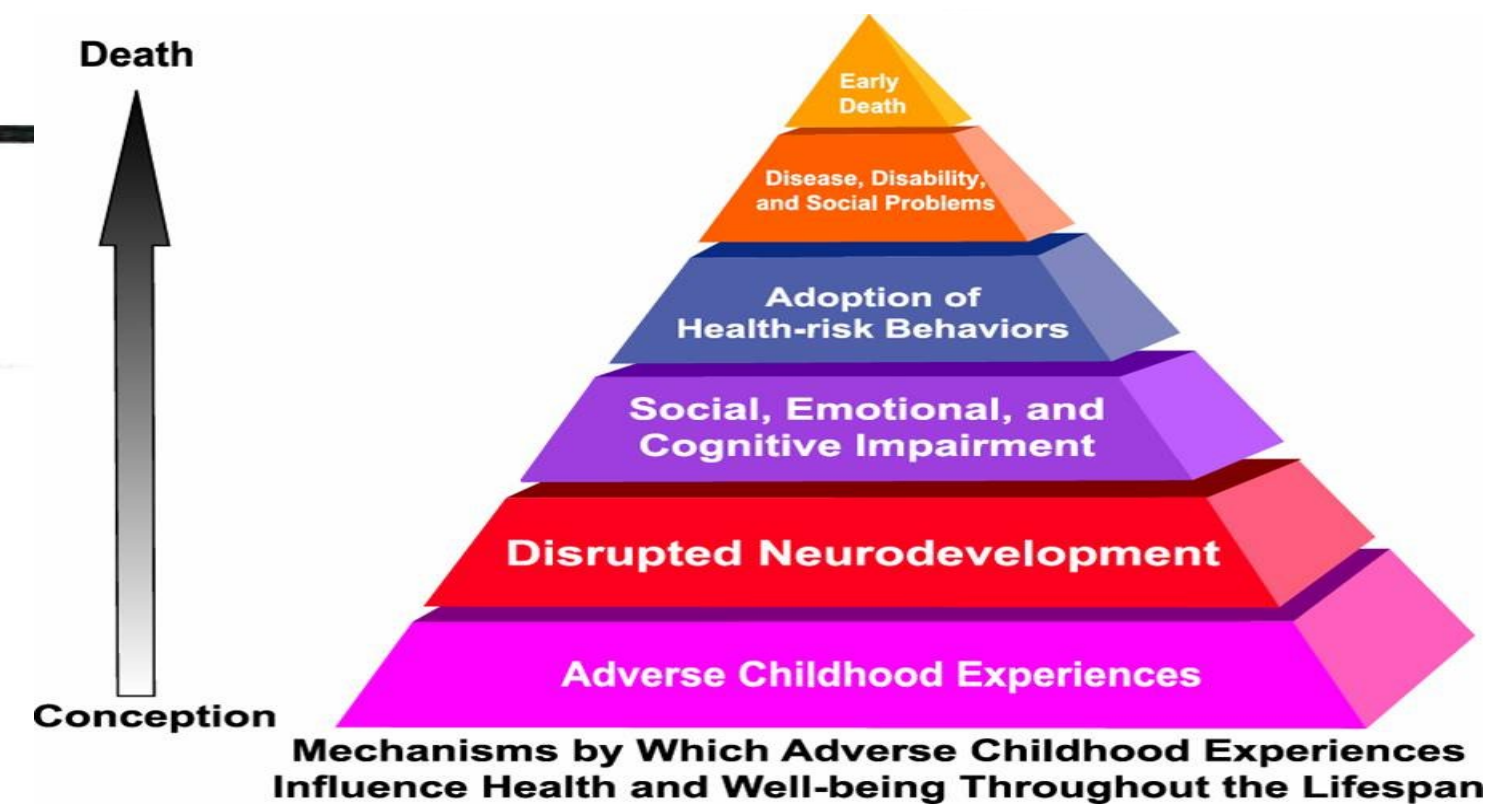
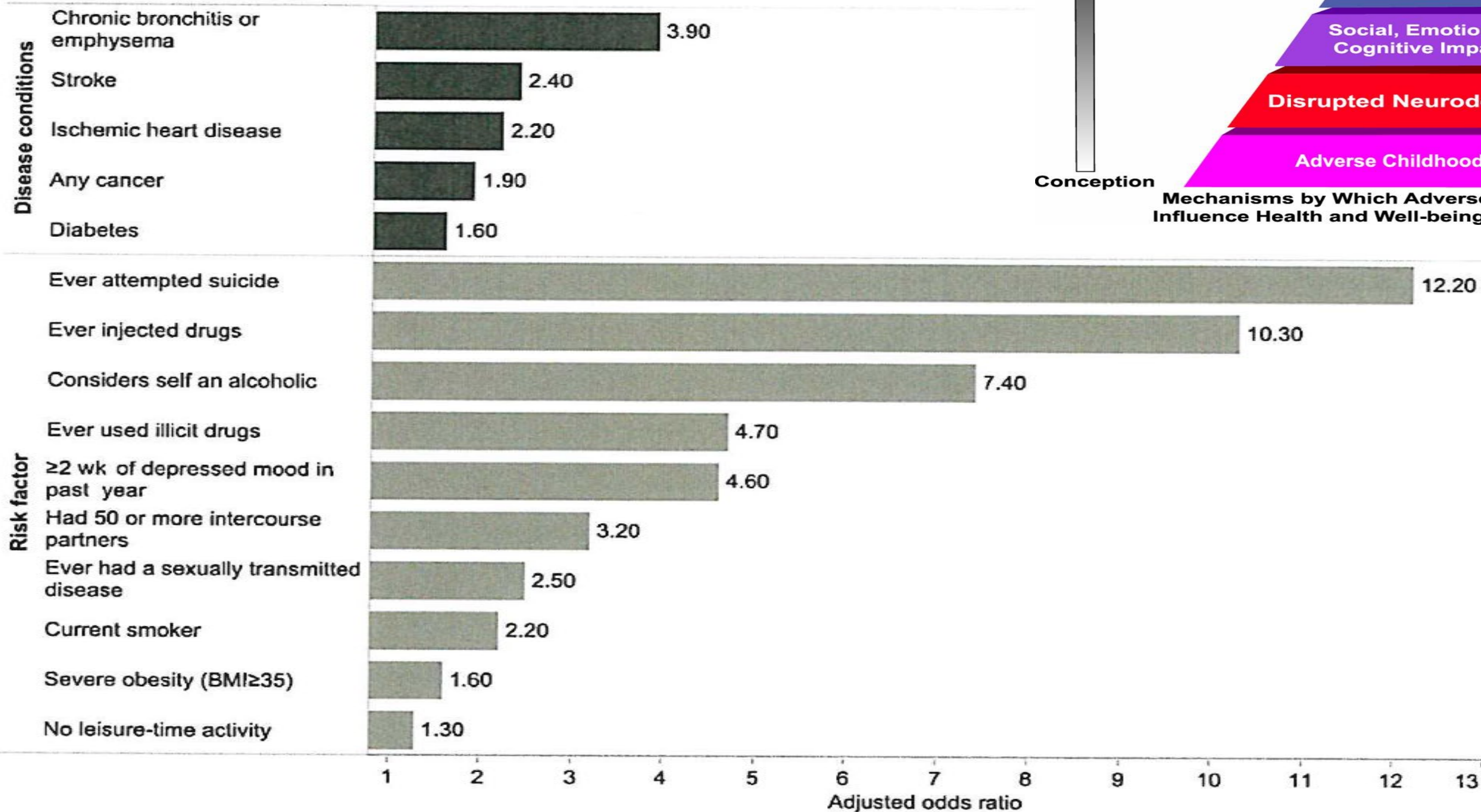
Trauma/Environment and the Teen Brain



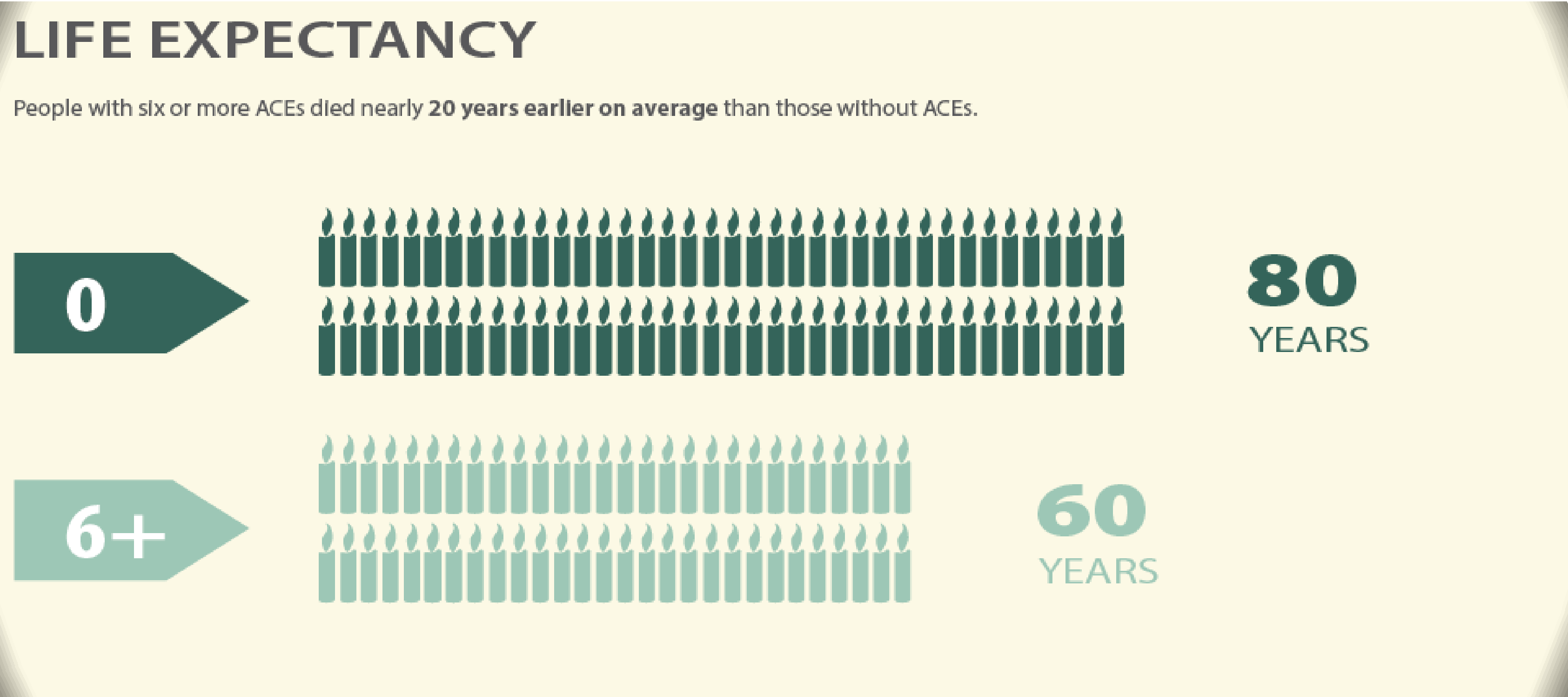
Effect on brain from toxic stress

Brain area	Function	Neuronal impact of toxic stress	Behavioral consequence
Amygdala	- Brain “alarm” - Responsible for emotional memory - Generates aggressive or impulsive behaviors to protect the body	Amygdala gets bigger	- Aggressive behavior with minimal threat - Impulsivity that can mimic ADHD
Hippocampus	- Brain “search engine” - Allows brain to access information from other brain centers - Role in learning and memory	Limits neuronal formation (normally neuron formation in hippocampus occurs throughout lifespan)	- Protective effect of some amnesia about prior trauma - Limits learning - Negatively impacts educational achievement
Prefrontal cortex	- Suppressing impulses and emotion generated by amygdala, hippocampus and other limbic structures - Executive function - Impulse control - Working memory - Cognitive flexibility	Slows connections between nerve cells	- Limited ability to suppress aggression - Limits ability to think through consequences of actions - Can look like ADHD, aggression or oppositional defiant disorder

TOXIC STRESS IN CHILDREN AND ADOLESCENTS



Effects of adverse childhood experiences





What Does It All Mean?

- Adolescence is a time characterized by a socio-emotional system that is easily aroused and highly sensitive to social feedback
- Reward-seeking increases when peers are present
- Less able or likely to:
 - control impulses
 - resist pressure from peers
 - think ahead
- More driven by the thrill of rewards
- We have a good understanding of the neurobiological underpinnings of these qualities

To summarize the neuroscience, it is like





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and Harvard Medical School

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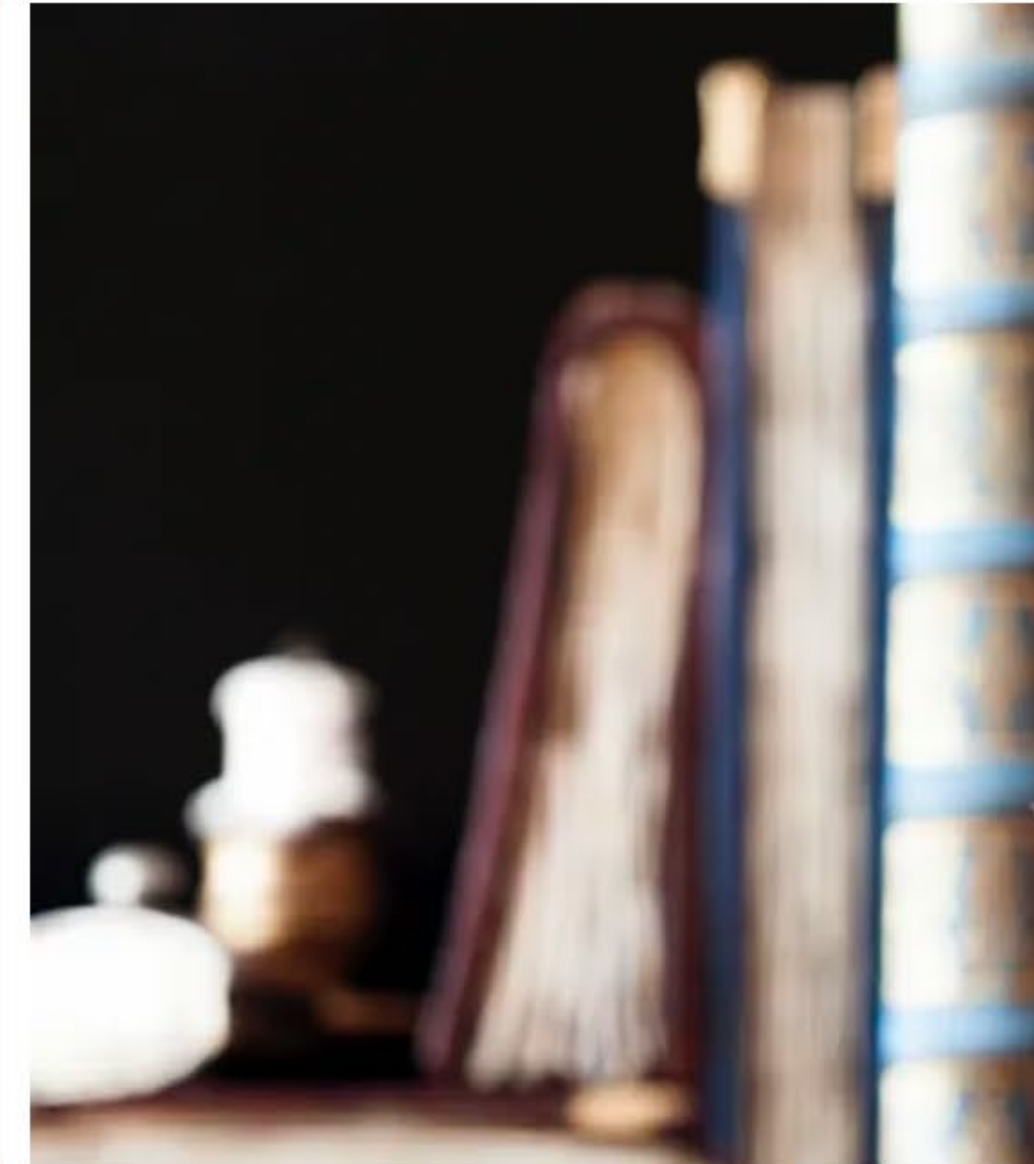
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Resource Library

People v. Rainer

Keywords juvenile LWOP; Eighth Amendment (U.S.); Miller v. Alabama; ineligibility for parole; aggregate sentence

People v. Walker

Keywords LWOP; Illinois Constitution; Miller v. Alabama ; juvenile life without parole; cruel and unusual punishment; Eighth Amendment (U.S.); Proportionate Penalties Clause

Estrada-Huerta v. People

Keywords juvenile offender sentencing; juvenile LWOP; Colorado Supreme Court; parole eligibility; consecutive sentences

Lucero v. People

Keywords juvenile LWOP; Eighth Amendment (U.S.); cruel and unusual punishment; consecutive sentencing; right to rehabilitation; parole eligibility; juvenile justice

People v. Ybanez

Keywords guardian ad litem; juvenile offender; LWOP; juvenile life without parole; youth tried as an adult; murder conviction

Watson v. Illinois

Keywords State of Illinois; aggravated vehicular hijacking; youth tried as an adult; first-degree murder

Armstrong v. People

Keywords juvenile offender; parole eligibility; Eighth Amendment (U.S.); cruel and unusual punishment; meaningful opportunity for release; Colorado Supreme Court; second-degree murder

Martinez v. United States of America

Keywords juvenile life sentence; RICO Act; RICO-murder; retroactive application of new law

Amicus Briefs

AI-mediated
comprehension
down to the sixth
grade reading level



Brief for Amicus Curiae Fair Punishment Project in Support of Petitioner, Willbanks and Nathan

Ronald Sullivan
Justin M. Sher
Noam Biale

COMPREHENSION

Simple Original

SUMMARY

This Court has recognized that it is unconstitutional to to confine children once they have been rehabilitated. It should hold that this principle applies with equal force to all juveniles sentenced in the system.

Cite

TIMOTHY S. WILLBANKS,

Petitioner,

v.

MISSOURI DEPT' OF CORRECTIONS,

Respondent.

LEDALE NATHAN,

Petitioner,

v.

STATE OF MISSOURI,

Respondent.

ON PETITION FOR A WRIT OF CERTIORARI
TO THE SUPREME COURT OF MISSOURI

BRIEF FOR *AMICUS CURIAE* FAIR PUNISHMENT PROJECT IN SUPPORT OF PETITIONER

RONALD SULLIVAN
FAIR PUNISHMENT PROJECT
HARVARD LAW SCHOOL
1563 Massachusetts Avenue
Cambridge, Massachusetts 02138
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JUSTIN M. SHER
Counsel of Record
NOAM BIALE
SHER TREMONTE LLP
90 Broad Street, 23rd Floor
New York, New York 10004
(212) 600-0000

Educational Courses

11 lessons on various aspects of juvenile justice and adolescent development

Lessons include:

- Educational videos
- Relevant articles, briefs, cases
- Additional resources



Understanding Adolescence in the Legal System

Judith Edersheim, JD, MD
Robert Kinscherff, PhD, Esq

SUMMARY

This course explores the unique aspects of adolescence, legal factors, and forensic psychology to better address juvenile justice issues.

Understanding Adolescence in the Legal System

Understanding Adolescence in the Legal System is an insightful course designed to delve into the complexities of adolescent development and its intersection with the criminal justice system. Participants will explore the science of adolescence, factors affecting criminal responsibility (like the Miller Factors), and the potential paths juvenile offenders might take. The course also covers essential topics such as trauma, substance use, false confessions, and the role of forensic experts. Emphasizing rehabilitation and positive youth development, this comprehensive course aims to equip legal...



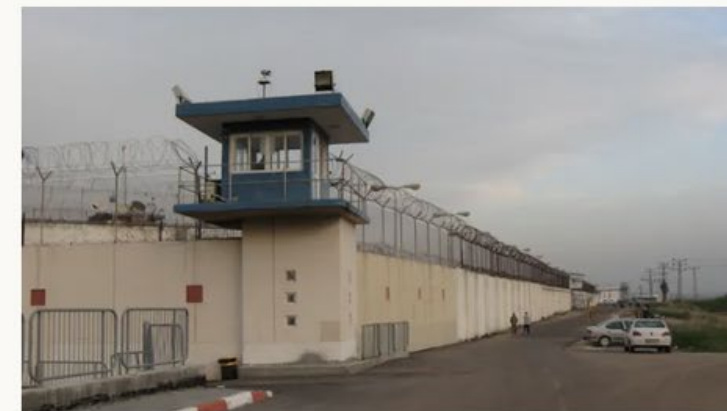
Lesson 1: Science of Adolescence

4 minutes to complete



Lesson 2: Miller Factors

7 minutes to complete



Lesson 3: Criminal Trajectories



Lesson 4: Working with Forensic Experts

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Case Law and Forensic Resentencing in Massachusetts



Commonwealth v. Mattis

July 2022: (Ullmann, J.) *Mattis* Decision

a. Six core findings of fact:

1. As a group, 18 through 20-year-olds have less “self-regulation, “ i.e., they are less able to control their impulses in emotionally arousing situations, than individuals age 21-22 and older;
2. As a group, 18 through 20-year-olds are more prone to “sensation seeking,” which includes risk-taking in pursuit of rewards, more so than individuals under age 18 and over age 21.

July 2022: (Ullmann, J.) *Mattis* Decision

3. As a group, 18 through 20-year-olds are more susceptible to peer influence than are individuals age 21-22 and older, and the presence of peers makes 18 through 20-year-olds, more likely to engage in risky behavior.
4. As a group, 18 through 20-year-olds have greater capacity to change than older individuals because of the plasticity of the brain during these years.

July 2022: (Ullmann, J.) *Mattis* Decision

5. Consistent and reliable results supporting the above findings have been obtained in many behavioral studies, sMRI studies and fMRI studies (based on blood flow).

6. The combination of heightened sensation seeking, less than fully developed self-regulation in emotionally arousing situations, and susceptibility to peer pressure, all of which are associated with a less than fully developed prefrontal cortex and less than fully developed brain connectivity, makes 18 through 20-year-olds as a group particularly vulnerable to risk-taking that can lead to poor outcomes.

July 2022: (Ullmann, J.) *Mattis* Decision

- mandatory LWOP sentences for 18 through 20-year-olds violate art. 26, i.e., *Miller v. AL* should be extended to 18 through 20-year-olds,
 - (i) why I did not decide whether any sentence of LWOP was cruel and unusual punishment, i.e., whether *Diatchenko* should be extended to 18 through 20-year-olds?
 - (ii) simple answer: it's not what the SJC ask me to do.

July 2022: (Ullmann, J.) *Mattis* Decision

- Making findings of fact is something trial judges do every day.
- Deciding a legal issue that a state high court had rejected 3 times was unusual (not cruel, but unusual), but that's what SJC directed me to do;
- Deciding a legal issue that the SJC had rejected 3 times and that I had not been asked to address by the SJC seemed ill advised.



July 2022: (Ullmann, J.) *Mattis* Decision

- brief comment on SJC majority and dissenting perspectives.



Recidivism Data Post-*Miller*

2025 Pennsylvania Study Outcomes

- Tracked **287 individuals** formerly sentenced to life without parole for **juvenile homicide convictions in PA** who were later resentenced and released under *Miller* and *Montgomery*.
- **5.2% (15 of 287)** were charged with a misdemeanor or felony.
- **Most new charges were non-violent:**
 - 6 were *contact offenses*
 - 4 were *drug-related*
 - 3 were *weapons charges*
 - 2 were *property crimes*

> J Res Adolesc. 2025 Mar;35(1):e12989. doi: 10.1111/jora.12989. Epub 2024 Jun 6.

**Life after life: Recidivism among individuals
formerly sentenced to mandatory juvenile life
without parole**

Colleen Sbeglia¹, Cortney Simmons², Grace Icenogle³, Marsha Levick⁴, Monica Peniche¹,
Jordan Beardslee¹, Elizabeth Cauffman¹

Sbeglia, C., Simmons, C., Icenogle, G., Levick, M., Peniche, M., Beardslee, J., & Cauffman, E. (2025). Life after life: Recidivism among individuals formerly sentenced to mandatory juvenile life without parole. *Journal of Research on Adolescence*, 35(1), e12989

2022 Philadelphia Study Outcomes

- Study of **112 individuals** released in Philadelphia after serving life sentences for **juvenile homicide convictions**.
- Reentry outcomes were highly successful:
 - 81%** secured stable housing
 - 75%** were employed at least part-time
 - 100%** reconnected with family

A First Look at the Reentry Experiences of Juvenile Lifers Released in Philadelphia

Tarika Daftary-Kapur, Tina M. Zottoli, Tristin Faust, Ryan Schneider

Justice Studies, Psychology

2023 California Study Outcomes

125 individuals sentenced to life without parole and later released through legal reforms or commutations between 2011 and 2019 in California.

- 3.2% (4 individuals) were convicted within three years.
 - 1 felony offense
 - 1 drug/alcohol misdemeanor
 - 2 minor, non-violent misdemeanors
- Community reintegration outcomes:
 - 94% volunteered regularly
 - 84% provided financial support to others
 - 90% were employed (full- or part-time)
 - 43% worked in the nonprofit sector

2023 California Study Outcomes

Contributing to Community

70% said they have stepped into a healthy adult role in the life of a young person

84% reported financially assisting other people since being released from prison.

94% reported volunteering with charities, community organizations, or nonprofit organizations since release.

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