

*Thank you for joining us.
The webinar will begin shortly.*

The Promise of Adolescence: *Developmental Science & Afterschool*

September 12, 2019

Housekeeping Notes:



Experiencing Delays?

Try closing out the other programs running on your computer.



Have a question or comment?

Use the group chat to interact with presenters and other participants.

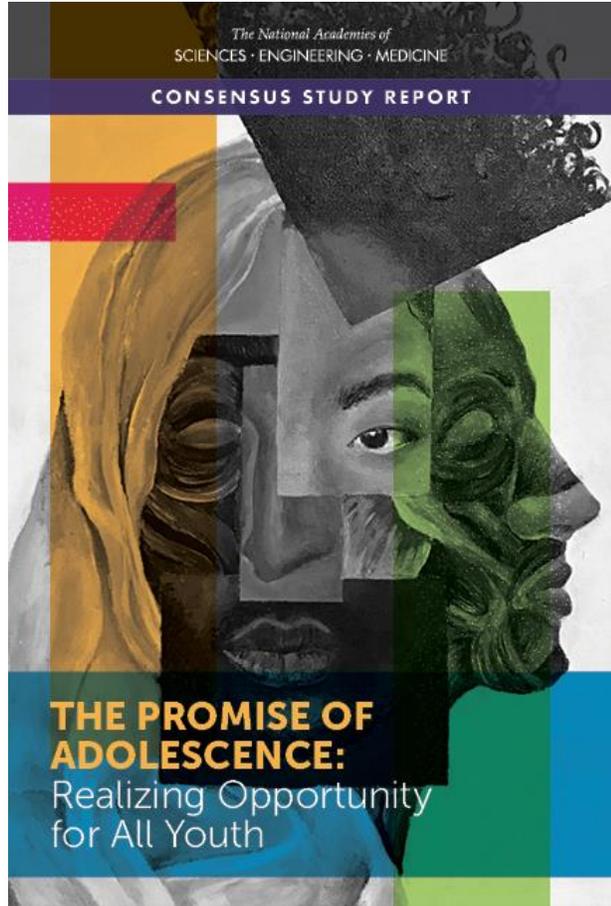
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National Academies of Science,
Engineering, and Medicine



Committee on the Neurobiological and Socio-behavioral Science of Adolescent Development and its Applications

Nancy E. Hill, Ph.D.

September 12, 2019

Study Sponsors

The Funders for Adolescent Science Translation (FAST)

- Annie E. Casey Foundation
- Bezos Family Foundation
- Chan Zuckerberg Initiative
- Ford Foundation
- Conrad N. Hilton Foundation
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Statement of Task

The study sponsors asked the National Academies of Sciences, Engineering, and Medicine to provide an evidence-based report that:

- Examines the neurobiological and socio-behavioral science of adolescent development, and
- Explores how this knowledge can be applied to institutions and systems so that adolescent well-being, resilience, and development are promoted and that systems address structural barriers and inequalities in opportunity and access.

Why Adolescence?

- Recent advances in neurobiology and neuroimaging have demonstrated the dramatic extent of brain maturation during adolescence.
- Because of the plasticity of the Adolescent brain, it can develop and optimize in ways that are responsive to the interactions of genes, environment and culture, in ways that meet the needs of this stage of life.
- The adaptability, plasticity, and heterogeneity of adolescence creates accompanying opportunities—and obligations—for society to help all adolescents flourish.

Why Adolescence?

- Adolescence is a sensitive period of neurodevelopment that is especially affected by the environment.
- Deeply rooted, and growing, structural inequalities curtail the promise of this developmental period.

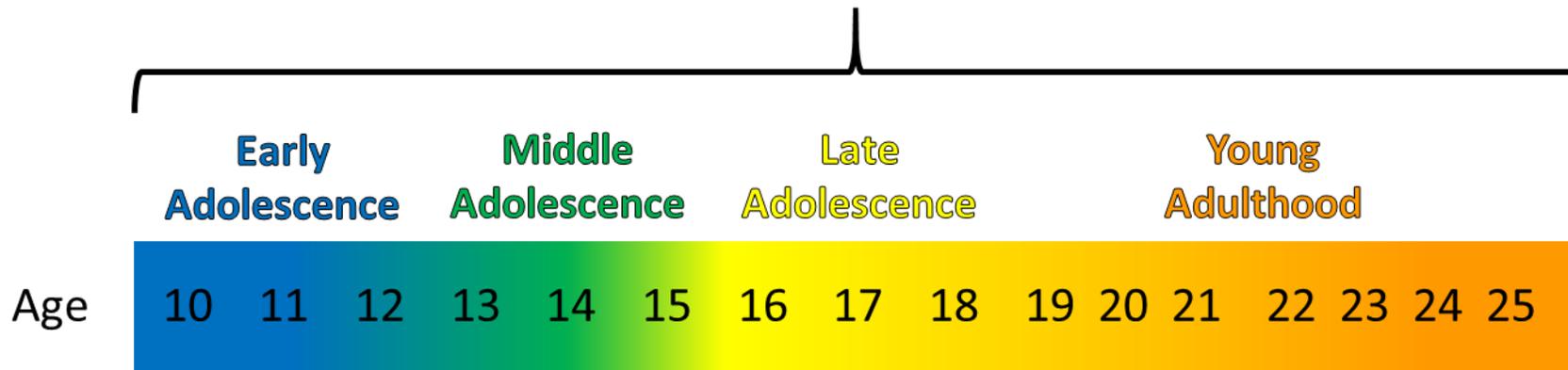
Why Adolescence?

- Policies and practices that capitalize on the promise of adolescence create contexts for discovery, learning from mistakes, experimentation, and innovation.
- The challenge is to take advantage of the developmental opportunities afforded by adolescence.

Defining Adolescence

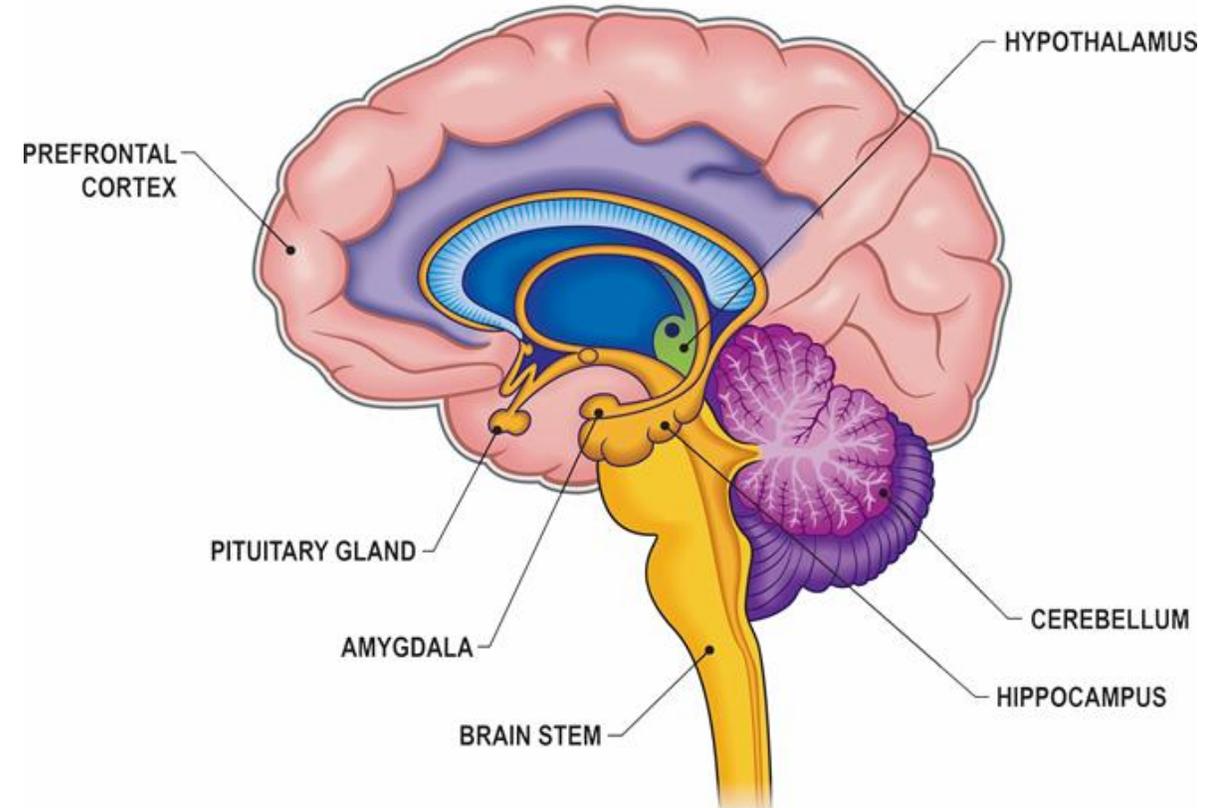


Developmental Periods of Adolescence



Adolescent Development: Insights from Neuroscience

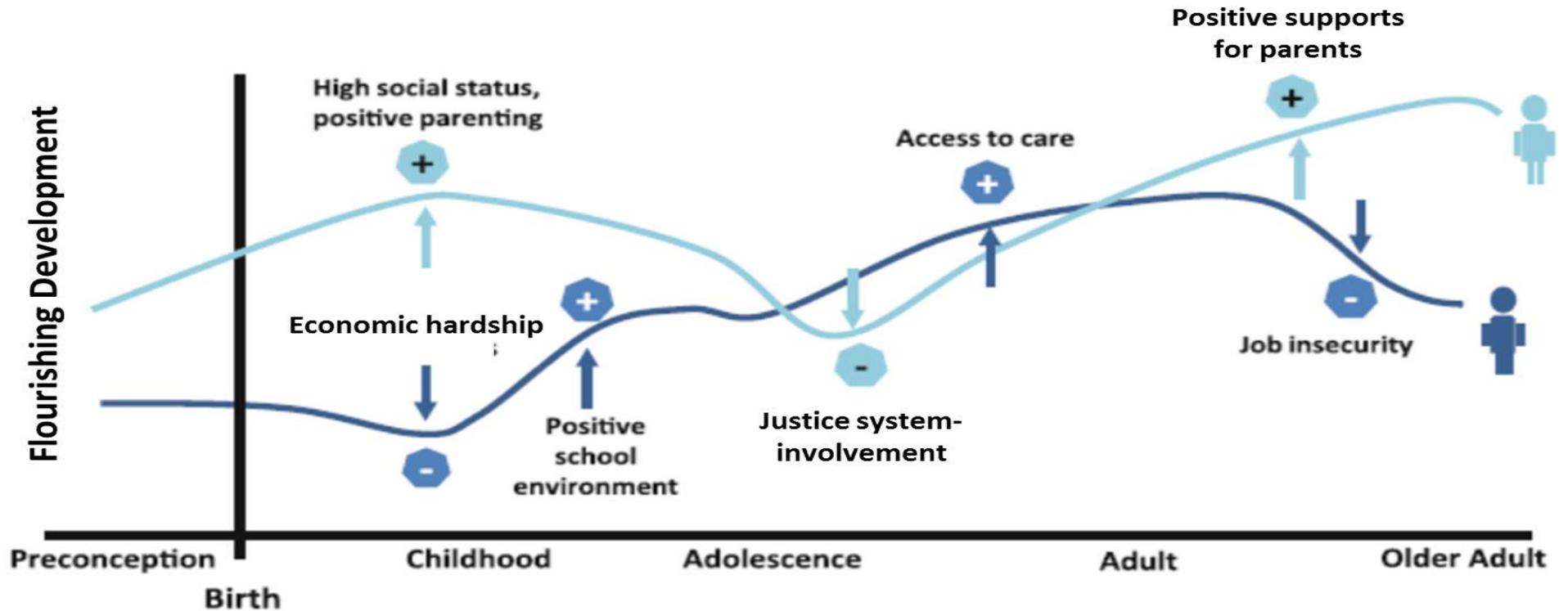
- The Adolescence reflects a unique period of heightened plasticity
 - Opportunity, but also risk
- Heightened curiosity and reward sensitivity
- Strengthening executive functions



Interplay between Biology and Environment

- Genes and environment interact: The way heredity is expressed in behavior depends significantly on influences in a person's environment.
- The trajectory of an individual's life may be changed, negatively or positively, at each life stage.

Interplay between Biology and Environment



Protective factors in the environment – such as supportive relationships with family and caretakers, and access to resources – support positive trajectories, while harmful experiences may lead to at-risk or poor trajectories.

Interplay between Biology and Environment

- Adolescents' **heightened sensitivity and responsiveness to environmental** influences implies creativity, adaptability, risk, and resilience.
- Adolescence provides an **opportunity for recovery**. Because of the malleability and plasticity of the adolescent brain, redirection, recovery, and resilience are possible.
- Investments in programs and interventions that capitalize on brain plasticity during adolescence can promote beneficial changes in developmental trajectories for youth who may have faced adverse experiences earlier in life.

Inequity and Adolescence

- Sources of Inequity in Adolescence:
 - Disparities in family and neighborhood resources and supports
 - Biased and discriminatory interactions with important social systems
 - Resulting inequalities in opportunity and access
- The result: Reduced access to opportunities and supports enjoyed by more privileged youth and exposure of less privileged youth to excess risks, stresses, and demands.

Inequity and Adolescence

- These excess pressures “get under the skin” and adversely affect the brain and body during this critical developmental period.
- But, these inequities are not immutable. Policies & programs can address disparities at the source.

Adolescent Development

- Adolescents are **active participants** in their own development.
- Increased cognitive abilities provide the capacity for psychosocial development, such as developing identity and capacity for self-direction.

Adolescent Development

- An **adolescent's identity** is an emerging reflection of one's values, beliefs, and aspirations, and it can be constructed and reconstructed over time and experience.
- Young people become increasingly **aware of and attuned to their social status** during adolescence, and institutions, policies, and practices may reinforce status hierarchies and stereotypes about members of groups that are nondominant or stigmatized in society.
- Adolescence is marked by a **growing capacity for self-direction**. Over the course of adolescence, youth gain the cognitive skills needed to reflect on complex questions about their role in the world.

Guiding Principles of Adolescent Development for Policy and Practice

- Adolescence is a **sensitive period** for discovery and learning, providing opportunities for life-long impact.
- Learning how to **make decisions** and to **take responsibility** for shaping one's own life are key developmental tasks of adolescence.

Guiding Principles of Adolescent Development for Policy and Practice

- **Forming personal identity** is another central task of adolescence. The increasing diversity of U.S. adolescents and the nation as a whole requires youth-serving systems to be culturally sensitive and to be attuned to the integrated needs of each adolescent.
- **Supportive familial, caregiver, and adult relationships** play a significant role in fostering positive outcomes for adolescents.

Guiding Principles of Adolescent Development for Policy and Practice

- Adolescence provides the **opportunity for ameliorating harmful effects** of childhood exposures.
- **Disparities** in family and neighborhood resources and supports, biased and discriminatory interactions with important social systems, and resulting inequalities in opportunity and access severely curtail the promise of adolescence for many youth.

Pause for Questions

Changing Developmental Trajectories



Scientific research suggests that adolescents have the capacity to overcome negative early experiences.

Interventions can redirect and remediate maladaptation in brain structure and have also shown promise in promoting emotional well-being through programs such as mindfulness and empathy-sensitizing work.

Decision-Making



Practical Knowledge



Adaptability



Psychosocial Skills



The Importance of Sleep



Key Recommendations

Recommendation 6-1: Rectify disparities in resources for least-advantaged schools and students.

Recommendation 6-2: Design purposeful but flexible pathways through education.

Recommendation 6-3: Teach practical knowledge and nonacademic skills, such as decision-making, adaptability, and psychosocial skills.

Key Recommendations

Recommendation 6-4: Protect the overall health and well-being of each student.

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Recommendation 6-5: Foster culturally sensitive learning environments.

Recommendation 6-6: Help adolescents and families navigate the education sector.

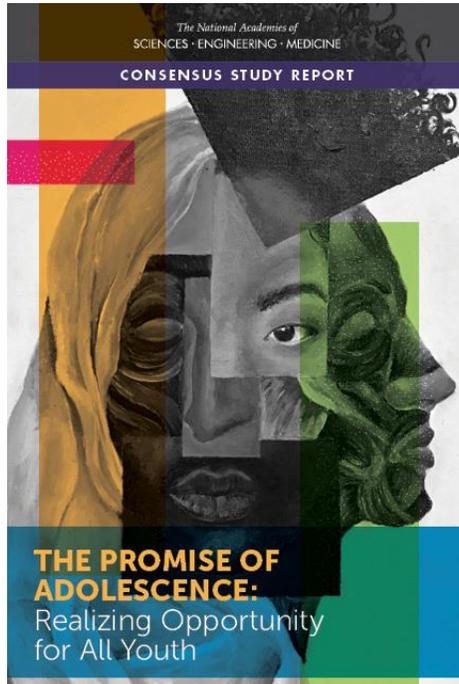
Conclusions

Society has a collective responsibility to build systems that support and promote positive adolescent development.

These systems should reflect a rich understanding of the developmental needs of adolescents and a specific recognition of adolescence as a time of great opportunity to promote learning and discovery and to remediate past developmental challenges.

Until society embraces this responsibility, the promise of adolescence will remain unfulfilled for millions of youth.

Thank you!



To read or download a copy of the report, please visit:

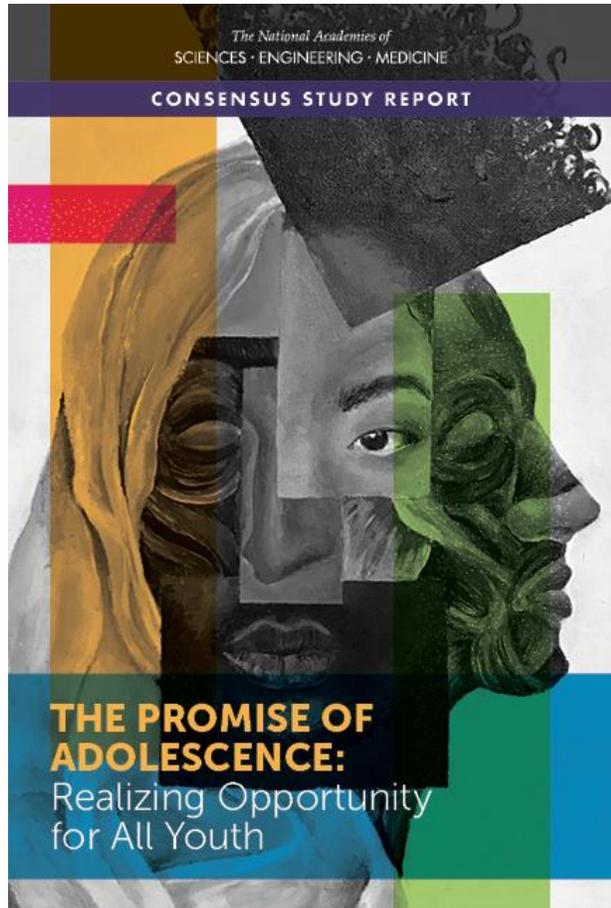
www.nationalacademies.org/adolescentdevelopment

For more information about the study or dissemination activities, please contact:

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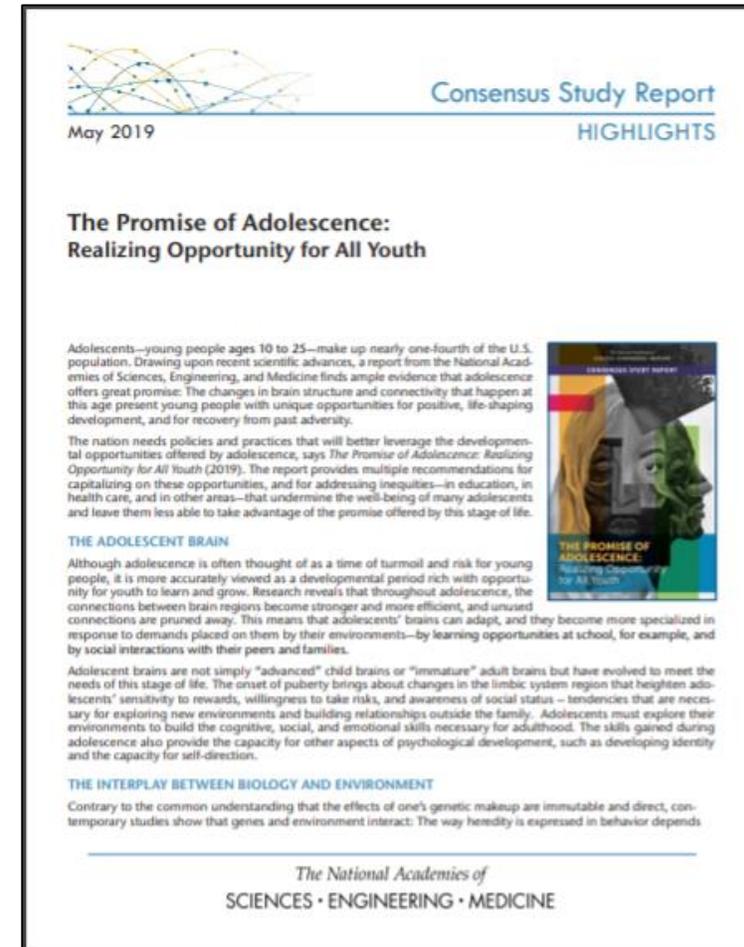
The Promise of Adolescence: Realizing Opportunity for All Youth

Resources

Report Highlights

4-page summary of the entire report:

- The Adolescent Brain
- Interplay between Biology and Environment
- Inequity in Adolescence
- Recommendations for Action in
 - Education
 - Health
 - Child Welfare
 - Justice



Resources Hub

Interactive webpage with streamlined information from the report and links to additional resources.



PRINCIPLES FOR POLICY & PRACTICE

In making its recommendations for the education, health, child welfare, and justice systems, the committee identified six cross-cutting principles for policy and practice. These principles are informed by the neurobiological and socio-behavioral science of adolescence and an understanding of the troubling and increasing disparities in opportunity among youth. Click on each principle to learn more, and see Chapter 5 for more information.

- 1** Adolescence is a time for development and learning and provides opportunities for life-long impact.
- 2** During adolescence, young people learn how to make decisions and take responsibility for shaping one's life.
- 3** Forming personal identity and a sense of self is a hallmark of adolescence.
- 4** Supportive relationships with adults (such as teachers, parents, and mentors) are critical for fostering positive outcomes for adolescents.
- 5** The adolescent brain has an exceptional capacity for resilience, meaning adolescents have the opportunity to develop neurobiological adaptations and behaviors that leave them better equipped to handle adversities.
- 6** Disparities in family and neighborhood resources and supports, biased and discriminatory interactions with important social systems, and resulting inequalities in opportunity and access severely curtail the promise of adolescence for many youth.

ADOLESCENT DEVELOPMENT

Adolescence begins with the onset of puberty (around age 10) and ends during the mid-20s (age 25). Unique changes in brain structure and function, make adolescence an exciting and important time for growth, learning, and discovery. Learn more about adolescent development in Chapter 2.

- Puberty
- Neurobiological Development
- Psychosocial Development

Targeted Sector Briefs

4-page summaries of report information pertinent to specific sectors.

- What is Adolescence?
- Creating Adolescent-Friendly Systems
- Recommendations for Action in
 - [Health](#)
 - [Education](#)
 - And more forthcoming!



Social Media Toolkit

Sample language, social media posts, and graphics, free for use

- Report Overview (for use in newsletters, blog posts, etc.)
- Twitter and Facebook Posts
- Graphics – for Twitter, Facebook, and Instagram



Supportive relationships with adults are critical for adolescents. These supportive relationships are as important for adolescents as they are for young children.

#PromiseofYouth

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Adolescence is a period of great opportunity to promote learning and discovery and to address the harmful effects of past negative experiences.

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Project Webpage

- Find all of the resources listed here, plus upcoming events, additional project information, and more!
- New resources added regularly – check back soon!

[NationalAcademies.org/
AdolescentDevelopment](https://www.nationalacademies.org/adolescentdevelopment)

The screenshot shows the website header for The National Academies of Sciences, Engineering, and Medicine, Board on Children, Youth, and Families, Division of Behavioral and Social Sciences and Education. The navigation menu includes BCYF HOME, ABOUT BCYF, NEWS AND EVENTS, TOPICS, PUBLICATIONS, and WORK WITH US. The main content area features the title 'The Promise of Adolescence: Realizing Opportunity for All Youth' and a description of the report. Below the description are links for 'Read the highlights', 'Read the summary', 'Read the full report', 'Read the press release', 'Public release webinar slides', and 'MyVoice Commissioned Paper'. There are also links for 'Briefs: Health | Education', 'Social Media Toolkit', and 'Interactive Webpage'. A 'Subscribe for Project Updates' button is visible on the right side of the page. The footer of the page includes the National Academies of Sciences, Engineering, and Medicine logo.

The Promise of Adolescence: Realizing Opportunity for All Youth

This new report from the National Academies of Sciences, Engineering, and Medicine finds ample evidence that changes in brain structure and connectivity that happen in adolescence present young people with unique opportunities for positive, life-shaping development, and for recovery from past adversity. The report provides multiple recommendations for policy and practice that capitalize on these developmental opportunities and address inequities—such as in health care and education—that undermine the well-being of many adolescents and leave them less able to take advantage of the promise offered by this stage of life.

[Read the highlights](#) | [Read the summary](#) | [Read the full report](#) | [Read the press release](#) | [Public release webinar slides](#) | [MyVoice Commissioned Paper](#)

Briefs: [Health](#) | [Education](#)

[Social Media Toolkit](#)

[Interactive Webpage](#)

Press Coverage

UVA Today - [UVA-led National Report Finds the Promise of Adolescence is Largely Untapped](#) (May 16, 2019)

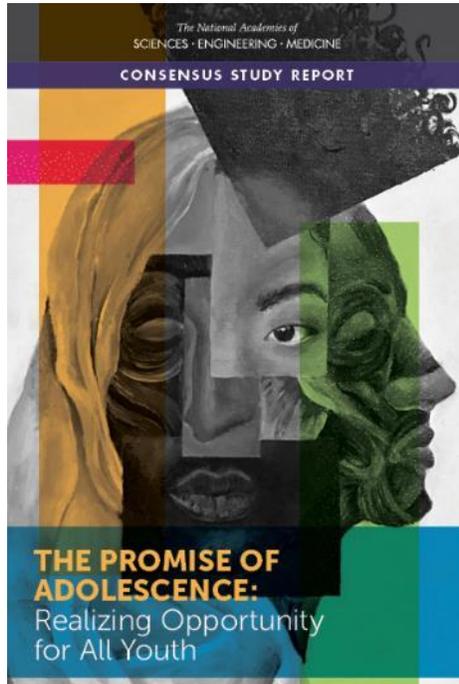
Education Week - [How To Turn Adolescence From a 'Missed Opportunity' to a Foundation for Learning](#) (May 18, 2019)

Subscribe for Project Updates

Activity Information

Type: Consensus Study

Thank you!



To read or download a copy of the report, please visit:

www.nationalacademies.org/adolescentdevelopment

For more information about the study or dissemination activities, please contact:

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Q&A