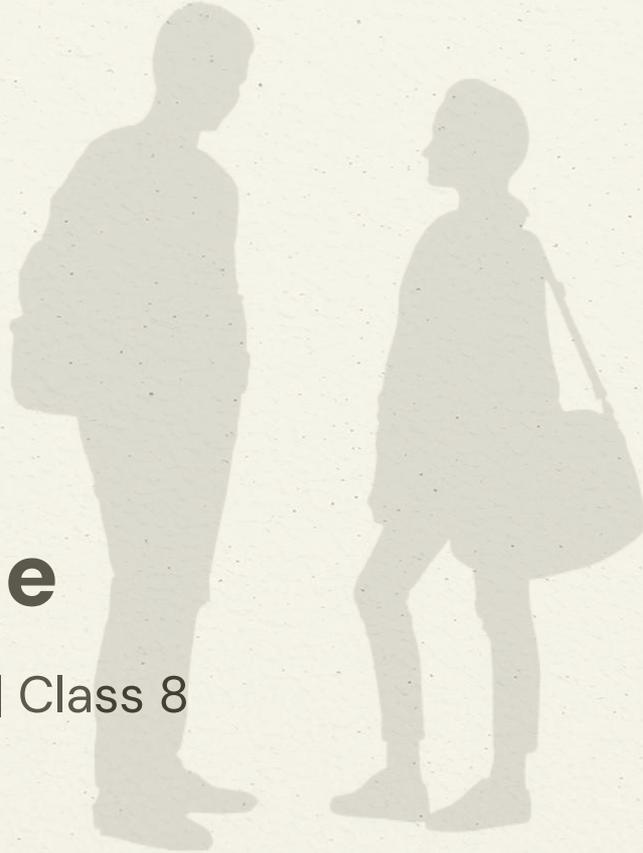
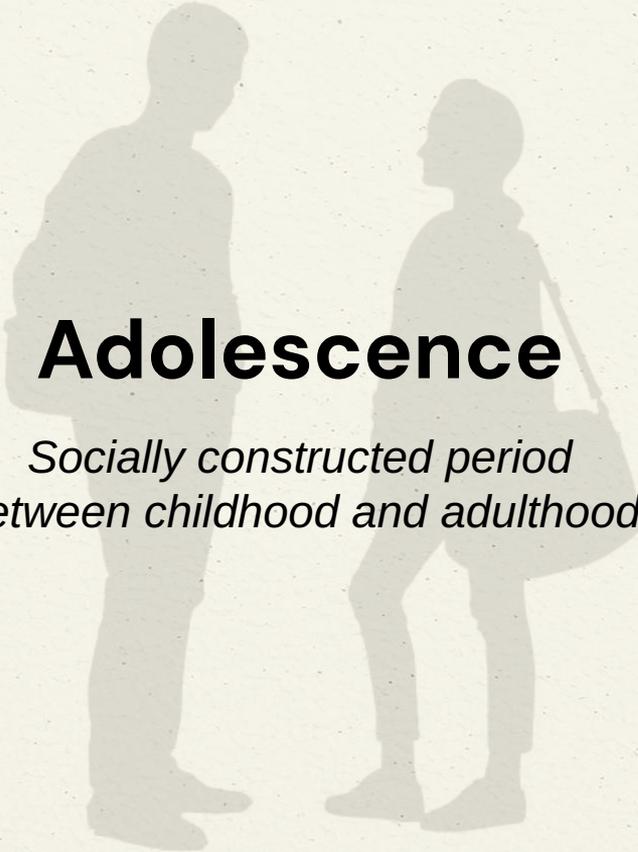


# Adolescence

HBSE 2 | Spring 2026 | Class 8

[Transcript](#)



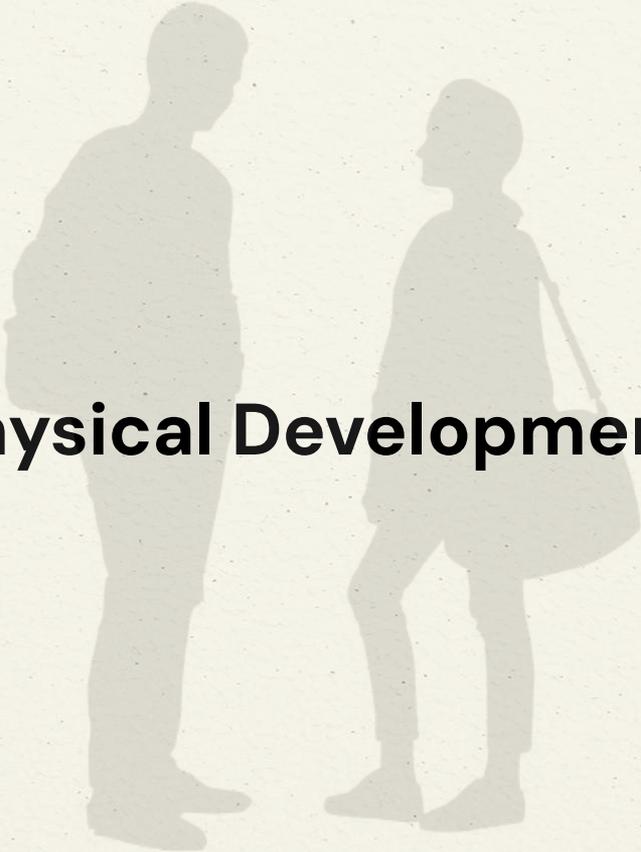
The image features two faint, grey silhouettes of a young man and a young woman standing and facing each other as if in conversation. The man is on the left, wearing a backpack, and the woman is on the right, carrying a shoulder bag. The background is a light, textured beige color. The word "Adolescence" is centered over the silhouettes in a large, bold, black font. Below it, a descriptive sentence is written in a smaller, italicized black font. There are also some faint white decorative lines on the left and right sides of the page.

# Adolescence

*Socially constructed period  
between childhood and adulthood*

# Stages of Adolescence

Stage	Biological changes	Psychological changes	Social changes
<b>Early (11-14)</b>	<ul style="list-style-type: none"> <li>• Hormonal changes</li> <li>• Beginning of puberty</li> <li>• Physical appearance changes</li> <li>• Possible experimentation with sex and substance</li> </ul>	<ul style="list-style-type: none"> <li>• Moodiness</li> <li>• Reactions to physical changes, including early maturation</li> <li>• Concrete/present-oriented thought</li> <li>• Body modesty</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in relationships with parents and peers</li> <li>• Less school structure</li> <li>• Seeking sameness</li> <li>• Distancing from culture/tradition</li> </ul>
<b>Middle (15-17)</b>	<ul style="list-style-type: none"> <li>• Completion of puberty and changes in physical appearance</li> <li>• Possible experimentation with sex and substances</li> </ul>	<ul style="list-style-type: none"> <li>• Reactions to physical changes, including late maturation</li> <li>• Increased autonomy</li> <li>• Increased abstract thought</li> <li>• Beginning of identity development</li> <li>• Preparation for college or career</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to re-negotiate family relationships</li> <li>• More focus on peer-group</li> <li>• Beginning of one-to-one romantic relationships</li> <li>• Moving toward greater community participation</li> </ul>
<b>Late (18-22)</b>	<ul style="list-style-type: none"> <li>• Slowing of physical changes</li> <li>• Possible experimentation with sex and substances</li> </ul>	<ul style="list-style-type: none"> <li>• Formal operational thought</li> <li>• Continuation of identity development</li> <li>• Moral reasoning</li> </ul>	<ul style="list-style-type: none"> <li>• Very little school/life structure</li> <li>• Beginning of intimate relationships</li> <li>• Renewed interest in culture/tradition</li> </ul>

The image features two dark silhouettes of people standing and facing each other. On the left is a man wearing a backpack. On the right is a woman carrying a shoulder bag. The background is a light, textured beige color. The text 'Physical Development' is centered between the two figures.

# Physical Development

# Physical Development

- Period of great physical change: rapid growth spurt in early years; maturation of reproductive system; redistribution of body weight
- Bodily changes due to hormones
- Psychological reactions to physical changes and appearance
  - Differences by age, gender, race
  - Reaction to menstruation mixed
  - Role of social media in development of negative body image perceptions  
Focus on gender identity & sexuality often escalates with physical changes

# Physical Development



**The 3 Pillars of Health**

- National data is “not promising” adolescents are not sleeping, exercising, eating well enough
- Importance of *sleep*
  - Changes in circadian rhythm triggered by hormonal changes → tendency to be more alert late at night and wake later in the morning
  - Lack of sleep associated with impaired academic performance, increased risk for depression, anxiety and substance use

# Physical Development: The Brain

- Second burst of brain plasticity
  - “Age of opportunity” – Laurence Steinberg
- Brain becomes powerful, faster, quicker
  - “Upgrade” happens from back to front, with emotion centers (back) upgraded first
  - Reasoning, perspective maintaining in front upgraded after
  - Tricky juncture (“neurological mismatch”): emotions are superpowered and ability to maintain perspective is weak relatively ([Dr Damour describes @ 19:25](#))

## A “neurological mismatch”



# Risk-taking & decision-making

- Adolescents vs. Adults
  - Cognitive abilities in calm situations can be as developed as adults'
  - Maturity, impulse control, and self-regulation are still developing
  - Less capable of weighing potential consequences in high-emotion situations
  - More susceptible to outside pressure
- Hot vs. Cold Cognition
  - **COLD**: Low emotional context → level-headed, reasoned decision making; problem solving similar to adults
  - **HOT**: High emotional context → emotional arousal, peer influence, risk-taking; decisions more impulsive

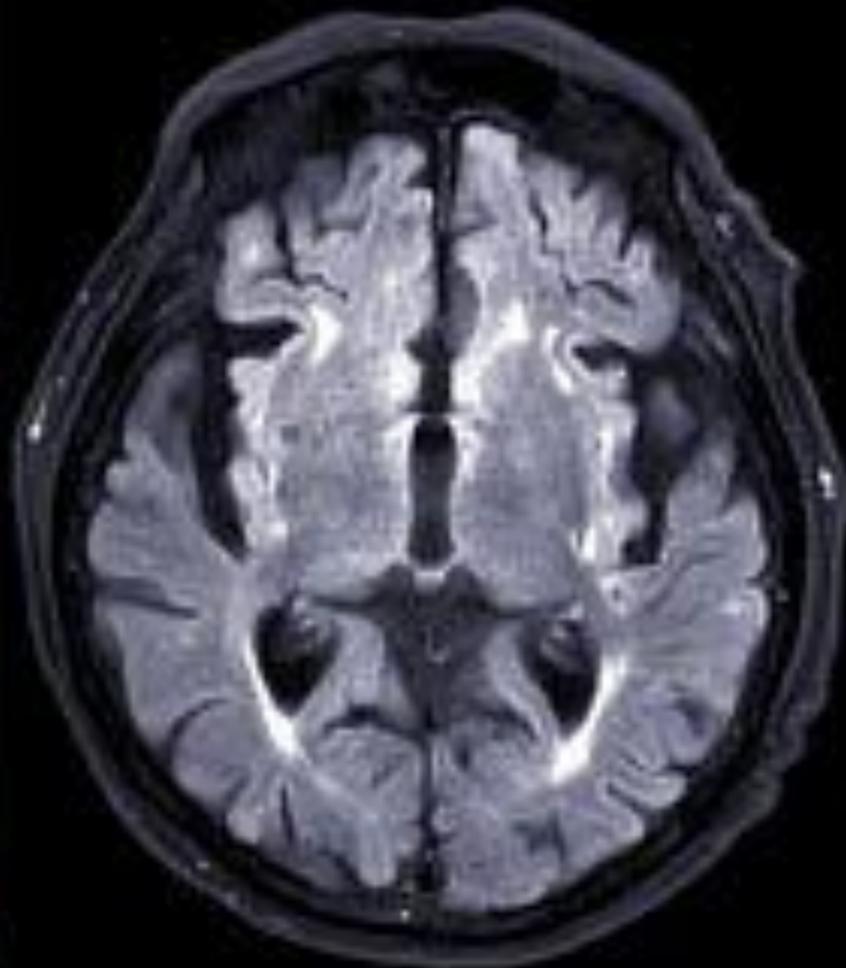
Adolescents' reasoning skills are strong -- but in emotionally charged or high-pressure situations, their judgment is more likely to be influenced by emotion and context.



NOW

THIS

# How U.S. Laws Contradict Brain Science





# Cognitive Development

# Cognitive Development:

## Piaget's Formal Operations Stage (ages 11+)

- Adolescents can hypothesize beyond present circumstances, apply reasoning to different situations
  - Engage in decision making based on cost-benefit analysis
  - This type of thinking is important for long-term planning
- Problem-solving
  - No longer using trial-and-error; able to systematically solve problem in logical and methodical way
- Capable of thinking about abstract and hypothetical ideas (hypothetical-deductive reasoning)
  - What if? – thinking about multiple solutions or possible outcomes

Development in 3 areas:

**Abstract thinking** – imagine things not seen or experienced

**Improved reasoning** – consider range of possibilities, engage in logical analysis, hypothetical thinking

**Metacognition** – think about thinking



Profound advancements in social cognition: processing, storing information about other people, & mentalizing – ability to think about mental states and intentions of others

# Cognitive Development: Adolescent Egocentrism (David Elkind)

**Imaginary audience:** belief that they are constantly being assessed, judged, and scrutinized by everyone around them.

**Personal fable:** belief that they are unique, special, and exempt from rules or consequences

The image features two faint, light-colored silhouettes of a man and a woman walking towards the right. The man is on the left, wearing a long-sleeved shirt and trousers, with a backpack. The woman is on the right, wearing a short-sleeved top and shorts, carrying a shoulder bag. The background is a light, textured beige. The title 'Psychological Development' is centered in a bold, black, sans-serif font.

# Psychological Development

# Identity Development: Erikson's Stage of *Identity vs Role Diffusion* (11-20)

Age	Conflict	Major Question	Successful Outcome	Unsuccessful Outcome
0-1 years	Trust vs mistrust	Can I trust the world?	Sense of trust in the world and the people who are supposed to care for them.	Sense of distrust in the world and belief that others are not dependable
1-3 years	Autonomy vs shame & doubt	Can I do things by myself or must I always rely on others?	Sense of independence and personal control over physical skills	Feelings of doubt and shame
3-5 years (preschool)	Initiative vs guilt	Am I good or bad?	Initiative, sense of purpose	Lack of initiative, feelings of guilt
5-11 years (school age)	Industry vs inferiority	Am I capable?	Feelings of competence	Feelings of inferiority
11-20 years (adolescence)	Identity vs Role Diffusion	Who am I?	Coherent sense of identity	Confusion about identity

# Identity Development: Marcia's 4 Identity Statuses

4 identity statuses based on 2 aspects of identity development:

- 1) the amount of **exploration** being done toward development
- 2) the amount of **commitment** to a particular identity

		COMMITMENT	
		YES	NO
EXPLORATION	YES	Achievement	Moratorium
	NO	Foreclosure	Diffusion

# Identity Development

## Gender Identity

- Gender identity (how one perceives one's gender) begins in EC but is elaborated on/ revised during adolescence
- Gender identity does not always develop in accordance with physical sex characteristics
  - Youth may describe being uncomfortable with gender roles (societal expectations) expected based on biological sex or being uncomfortable in their bodies
  - *Gender dysphoria*: clinically significant distress that a person may feel when sex assigned at birth is not same as their identity
    - NB children vulnerable to negative social experiences (eg rejection, violence, substance use; suicide\*)
    - Gender-affirming care (puberty blockers, HRT) can protect self esteem and MH

## Sexual Orientation

- Youth coming out at earlier ages than in previous eras
- LGBTQ+ youth using internet for info about sexual orientation & coming-out process
- Racial/ethnic differences in experiences coming out
- LGBTQ+ youth more likely to experience bullying, dating violence, suicide attempts
  - Protective factors: supportive relationship, positive connections with school, spirituality/religiosity

## Cultural identity

- Evaluation and exploration of ethnic background & identity
- Wider experience with multicultural groups → ethnic discrimination
- Achieving a “positive ethnic identity” associated with higher levels of self-esteem, lower levels of depression, buffers against experiences of adversity & discrimination
- Family conflict can arise when there are discrepancies in cultural identity between adolescents and parents

# Relationships in Adolescence

## with Family

- Begin process of **individuation**: development of a self/identity that is unique and separate from family of origin
- Systems changes – renegotiation of roles, opening of boundaries
- Family remain major source of support, connectedness is a protective factor heading into adulthood

## with peers

- Peers have profound impact on adolescent identity & behavior (influence strongest during early adolescence)
- Friends similar in gender & interests (early adol) → other- & same-sex friends (mid adol)
- “Cliques” (early adol) → “crowds” organized around common interests (mid adol)
- Peer groups can have negative influence on behavior (eg pregnancy status, substance use)

## with romantic partners

- Interest in sexual gratification and emotional union with a partner
- Most research (all recent) has been on heterosexual romantic relationships; focus on same-sex attractions from a risk perspective

