

Inter-American Drug Abuse Control Commission



Adolescent Development





Methodology:

Active discussion
Case Study
Role Play



Required Materials:

Easel Pad
Participant Manual
Notepad for each participant
Pens & Pencils



Duration: 4 hours

ADOLESCENT DEVELOPMENT

ADOLESCENT DEVELOPMENT

Learning Objectives

- To conceptualize the adolescence experience.
- To learn about stages of adolescent development at the physical, emotional, cognitive, mental, and psychological levels.
- To learn about the adolescent brain and most recent research on development.

ADOLESCENT DEVELOPMENT

Learning Objectives continued...

- To review the bio-psychosocial model
- To understand the impact of substance use/abuse's on neurological development.
- To learn about developmental factors that promote wellness in youth.

ABOUT ADOLESCENT DEVELOPMENT

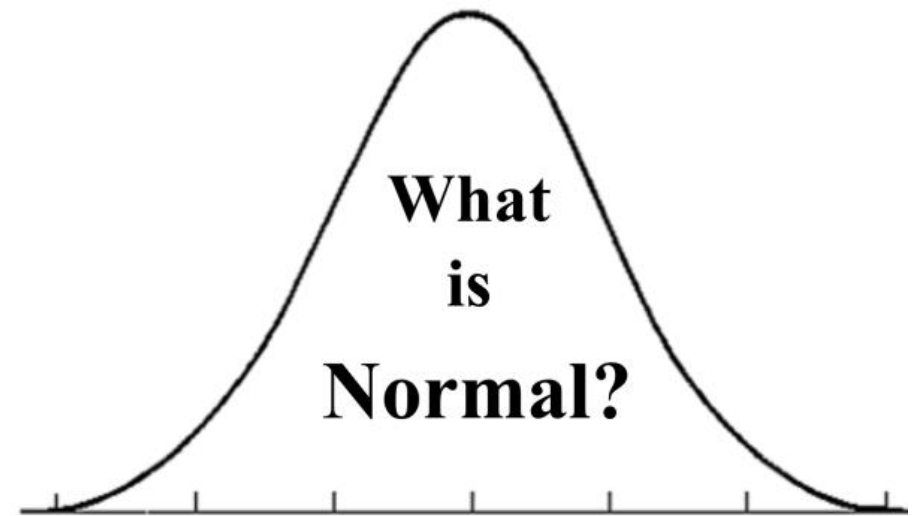
- Adolescence is a period of transition between childhood to adulthood.
- “Window of opportunity” concept.
- Cultural expression of adolescent development.
 - Examples: Quinceañeras in the Americas.



Let's discuss some examples of rite of passages in your context and other cultures

ADOLESCENT DEVELOPMENT EXERCISE

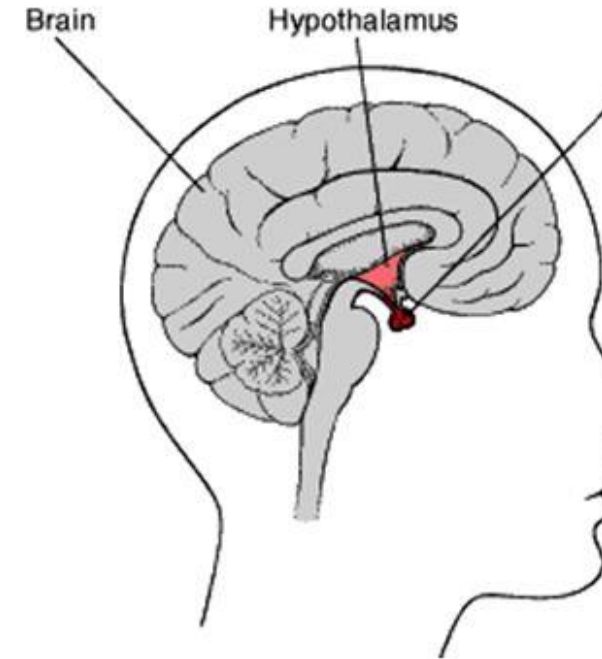
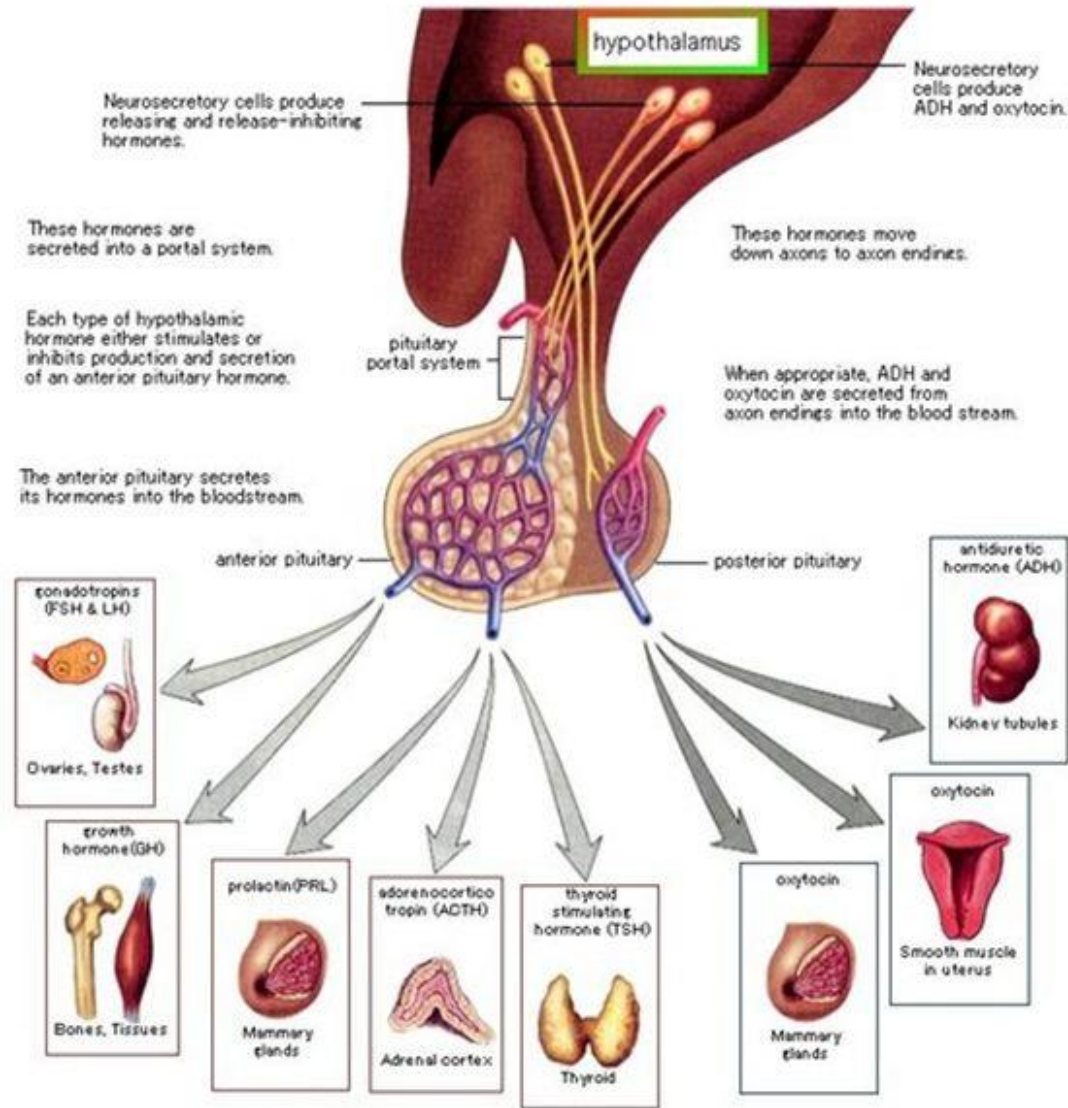
- Is it normal that adolescents to...
 - Argue just because they want to?
 - Jump to conclusions?
 - Be self-centered?
 - Constantly find adults wrong?
 - Be dramatic?



PHYSICAL DEVELOPMENT

- There is rapid physical growth during this period of time.
- Body changes
- Gender Hormones
- Gender Differences
- Sexual Development Vs. Gender Identity

Puberty



SEXUAL DEVELOPMENT

- Adolescence prepares the body for reproduction.
- Sexual Development Vs. Gender Identity.
- Sexuality is a complex and fluid concept.

EMOTIONAL/COGNITIVE DEVELOPMENT

- Areas of major development:
 - Abstract thinking
 - Sense of identity
 - Independence
 - Responsibility
 - Moral reasoning

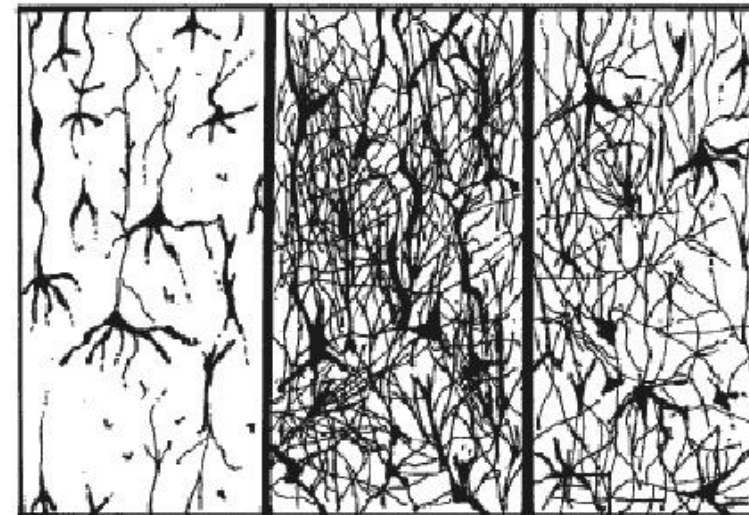
STAGES OF ADOLESCENCE

EARLY ADOLESCENCE

Early Adolescence occurs between the ages of 10 – 14

- Fast physical growth.
- Brain begins intense shaping.
- Black and white thinking.
- Sense of identity
- Strongly identifies with peers.
- Higher need for privacy.

Synaptic Pruning



at a child's birth at 7 years of age at 15 years of age

The first change after this synaptic growth spurt is a selective pruning which takes place.

In adolescence, most of this pruning is taking place in the frontal lobes.

The adolescent loses approximately 3 percent of the gray matter in the frontal lobes.

MIDDLE ADOLESCENCE

Middle Adolescence occurs between
the ages of 15 - 17

- Physical changes continue.
- Brain continues to change
- Interest in romantic and sexual relationships.
- Child-parent conflict
- Higher concern for others & empathy



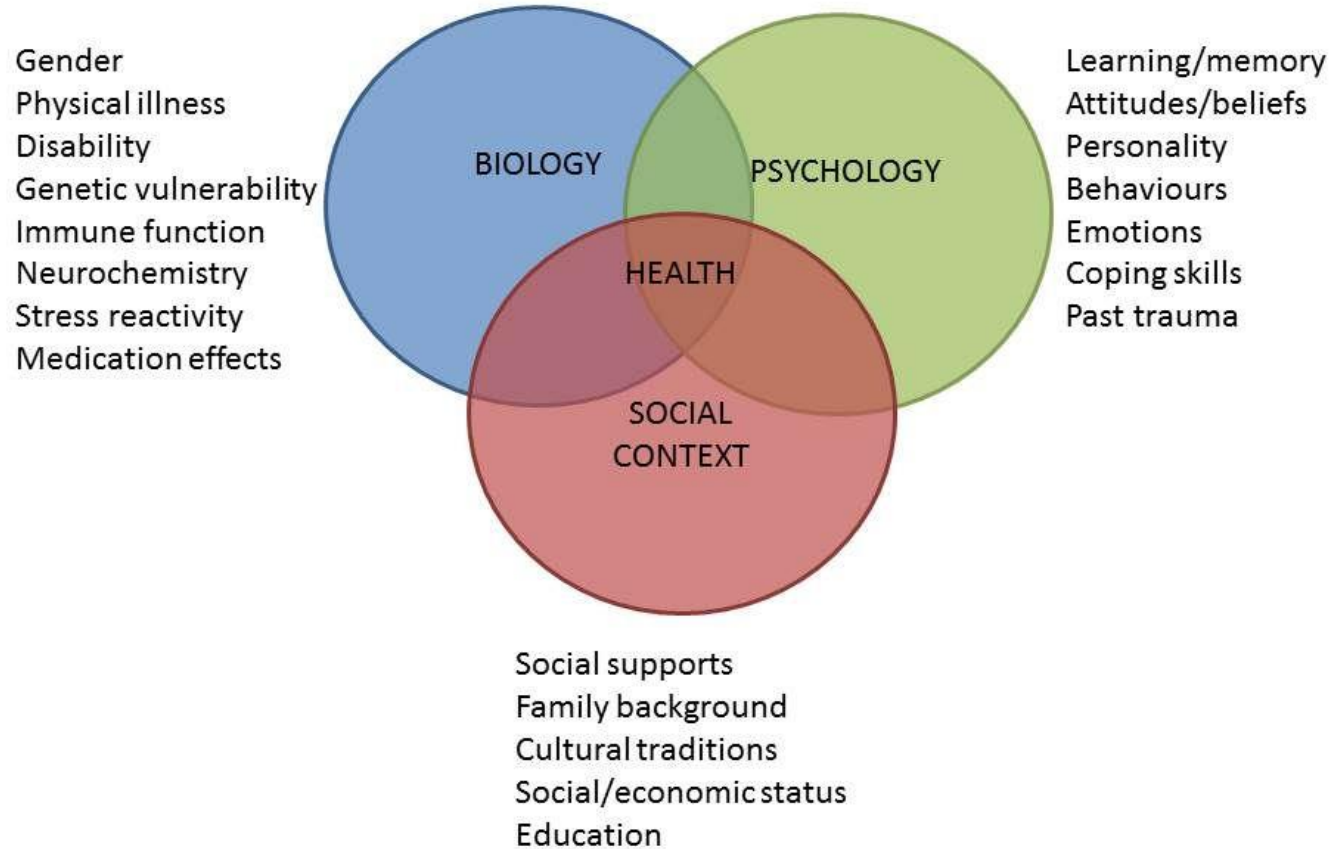
LATE ADOLESCENCE

Late Adolescence occurs between
the ages of 18 – 24

- Firmer sense of identity
- Developed bodies
- Invincible complex
- Brain changes



BIOPSYCHOSOCIAL APPROACH TO UNDERSTANDING HEALTH

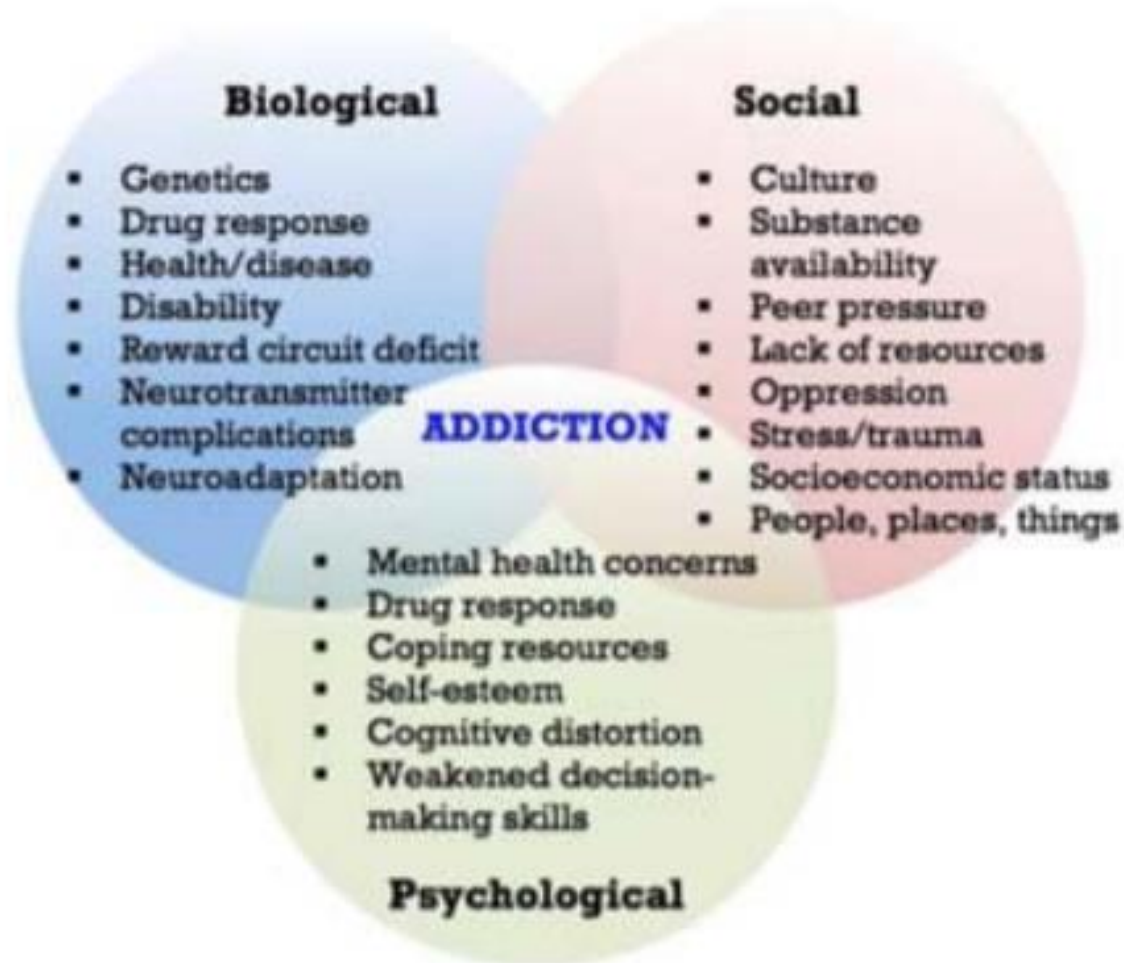


BIO- PSYCHO- SOCIAL MODEL

The Biopsychosocial Model

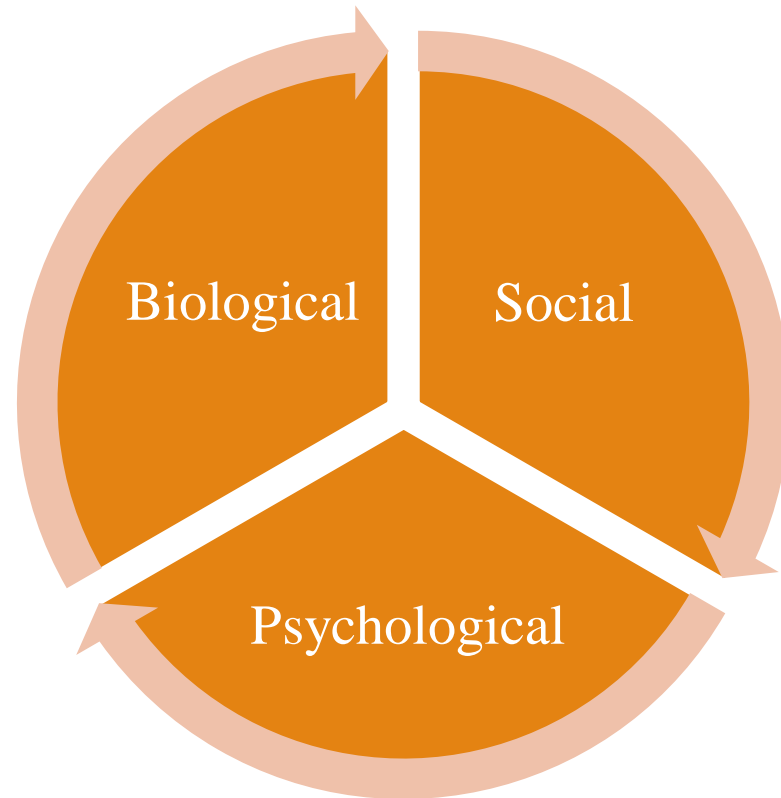


CAUSES OF SUBSTANCE USE THROUGH THE LENS OF THE BIO-PSYCHOSOCIAL MODEL



- Biological
- Psychological
- Social

CONSEQUENCES OF SUBSTANCE ABUSE



CASE STUDY

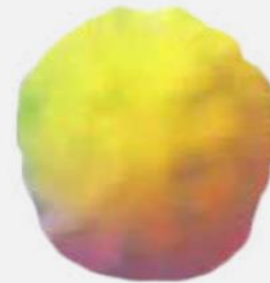
In your small groups, analyze your case study of an adolescent in early stages of substance use, and identify all of the bio-psychosocial risk factors that are associated with this young person, including cultural issues.

THE ADOLESCENT BRAIN ON DRUGS

THE ADOLESCENT BRAIN ON DRUGS: ALCOHOL

- It is paramount to discourage substance use until neurobiological development is complete.
- Underage drinking can wire the brain for alcoholism.
- Prolonged alcohol use during adolescent can cause irreversible damage.

**Drinking alcohol can cause a decrease
in brain activity**



Non-Drinker

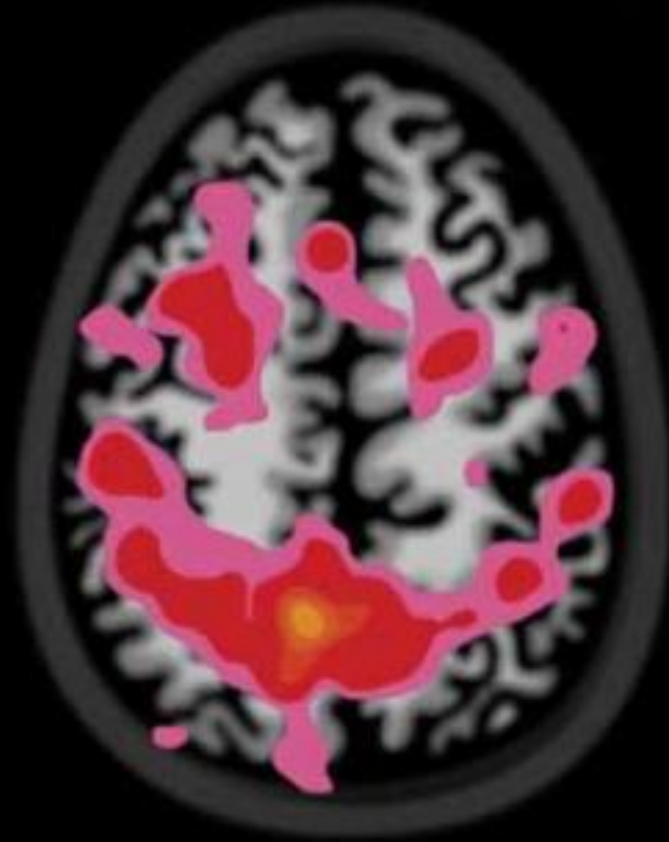


Heavy Drinker

These brain scans show functional activity levels in the brain of a healthy non-drinker (left), and a sober 21-year-old with a four-year history of heavy alcohol use (right). The "holes" indicate areas of reduced brain activity.

© Dr. Daniel Amen; www.amenclinic.com

The Effects of Heavy Drinking on the Teen Brain



15 Year-old Non-Drinker

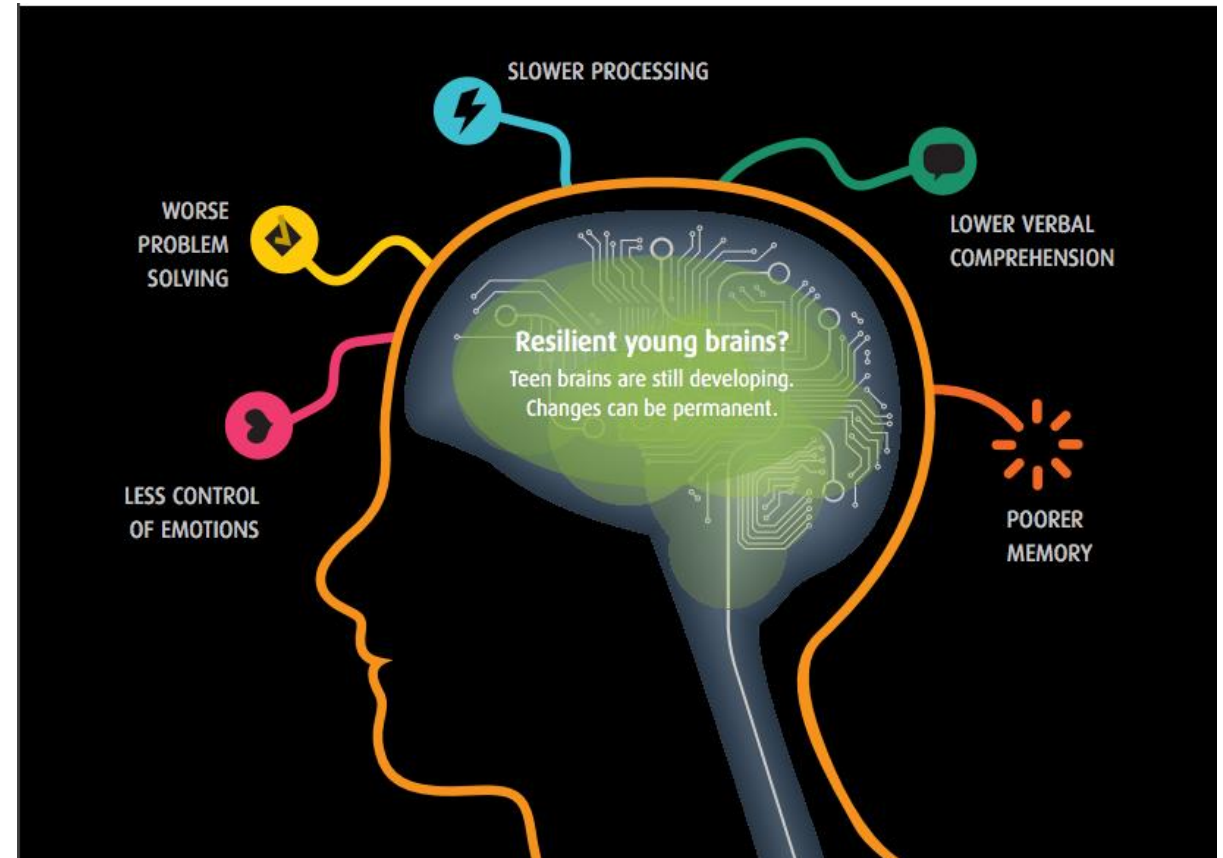


15 Year-old Heavy Drinker

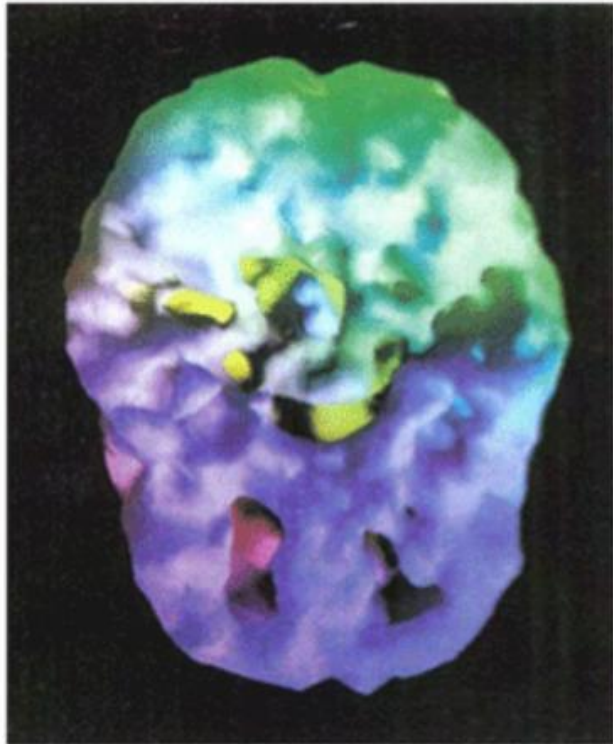
Functional MRI scans of two teens while they took a working memory test. The images show that the heavy drinker isn't using those brain areas normally used to complete a memory test, while the non-drinker is. Researchers suggest that in school, heavy drinkers may not be activating those regions of the brain required to remember a lesson.

THE ADOLESCENT BRAIN ON DRUGS: MARIHUANA

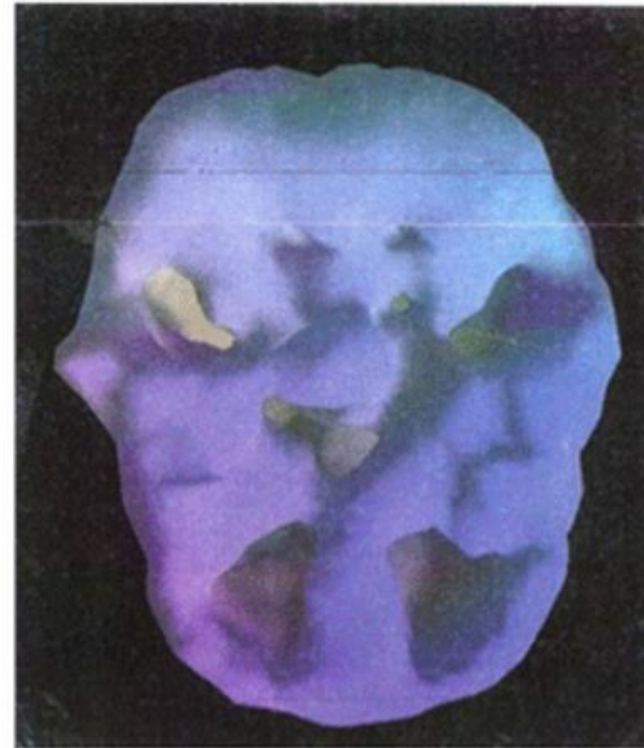
- Most utilized illicit drug.
- Impairs brain systems.
- Poor mental health
- Gateway drug.



Brain on Marijuana



**16 Years Old
2 Years of Daily Use**



**18 Years Old
3 Years of Use 4x per Week**

PREFRONTAL CORTEX AFFECTED AREAS

- Controlling impulses
- Inhibiting inappropriate behavior
- Initiating appropriate behavior
- Stopping an activity on completion
- Shifting/Adjusting behavior when situation changes
- Providing a temporary workspace for working memory
- Organizing things
- Planning behavior
- Setting priorities among tasks and goals
- Making decisions
- Empathy
- Sensitivity to feedback (reward and punishment)
- Insight

DEVELOPMENTAL WELLNESS IN YOUTH

DEVELOPMENTAL ASSETS

[The Developmental Assets](#)[®] are 40 research-based, positive qualities that influence young people's development, helping them become caring, responsible, and productive adults.

Based in youth development, resiliency, and prevention research, the Developmental Assets framework has proven to be effective and has become the most widely used approach to positive youth development in the United States and, increasingly, around the world.

The framework has been adapted to be developmentally relevant from early childhood through adolescence.

DEVELOPMENTAL ASSETS

SUPPORT:

- Family Support
- Positive Family Communication
- Other Adult Relationships
- Caring Neighborhood
- Caring School Climate
- Parent Involvement in Schooling

EMPOWERMENT:

- Community Values Adolescents
- Youth as Resources
- Service to Others
- Safety

DEVELOPMENTAL ASSETS

BOUNDARIES AND EXPECTATIONS:

- Family Boundaries
- School Boundaries
- Neighborhood Boundaries
- Adult Role Models
- Positive Peer Influence
- High Expectations

CONSTRUCTIVE USE OF TIME:

- Creative Activities
- Youth Programs
- Religious Community
- Time at Home

DEVELOPMENTAL ASSETS

COMMITMENT TO LEARNING:

- Achievement Motivation
- School Engagement
- Homework
- Bonding to School
- Reading for Pleasure

POSTIVE VALUES:

- Caring
- Equality and Social Justice
- Integrity
- Honesty
- Responsibility
- Restraint

DEVELOPMENTAL ASSETS

SOCIAL COMPETENCIES:

- Planning and Decision Making
- Interpersonal Competence
- Cultural Competence
- Resistance Skills
- Peaceful Conflict Resolution

POSITIVE IDENTITY:

- Personal Power
- Self-Esteem
- Sense of Purpose
- Positive View of Personal Future

Research-based factors that promote youth wellbeing & development

- Recent research has identified five core spheres that significantly improve youth's wellbeing and development.



YOUTH RESILIENCE

Stress Management and responding to crises well (stressors, challenges, or adversity) while at the same time building on individual characteristics, strengths, and interests aids the adolescent in gaining resiliency.

SOCIAL CONNECTIONS

Networks of support and having healthy, sustained relationships with people, institutions, the community, and a higher power that promote a sense of trust, belonging, and a belief that one matters

KNOWLEDGE OF ADOLESCENT DEVELOPMENT

Learn about the physical changes during adolescence, especially about physical and neurological development, the impact of trauma, and identity development.

CONCRETE SUPPORT IN TIMES OF NEED

Understanding the importance of asking for help and advocating for oneself; receiving quality services (e.g., health care, housing, education) designed to preserve youths' dignity, provide opportunities for skill development, and promote healthy development

COGNITIVE AND SOCIAL EMOTIONAL COMPETENCE

Acquiring skills and attitudes that are essential for forming an independent identity and having a productive, responsible, and satisfying adulthood

SUMMARY

- Adolescence is a confusing and stressful time for children.
- Adolescent development is a process that begins roughly at 10 and ends in the mid-20s.
- Substance abuse during adolescence has a negative impact on brain development.
- Adolescents are still highly dependent in environmental factors to support them and teach them good choices.