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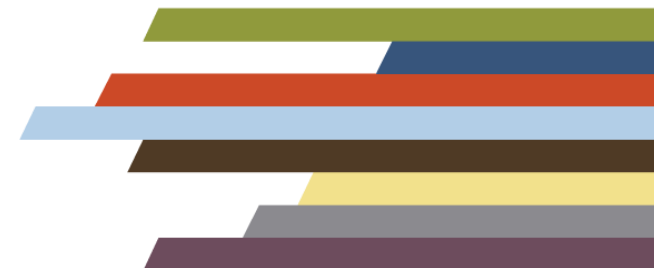
ADOLESCENTS:
Development Issues and Behavior

Diana Padilla
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Equity & Inclusion / SBIRT
December 2021

SAMHSA
Substance Abuse and Mental Health
Services Administration

Certificate of Completion

- At the end of the session, you will complete an online evaluation prior to closing and going offline (instructions to follow).

- Certificates will be sent out within a week or so along with a copy of the slides.

- This webinar is approved for 2 hours of CASAC, CPP, CPS, credentialing.

- You must attend the entire session.

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SAMHSA Disclaimer

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Purpose of SAMHSA's Technology Transfer Centers

The purpose of the Technology Transfer Centers (TTC) program is to **develop and strengthen** the **specialized behavioral healthcare and primary healthcare workforce** that provides substance use disorder (SUD) and mental health prevention, treatment, and recovery support services.

Help people and organizations incorporate **effective practices** into substance use and mental health disorder prevention, treatment and recovery services.
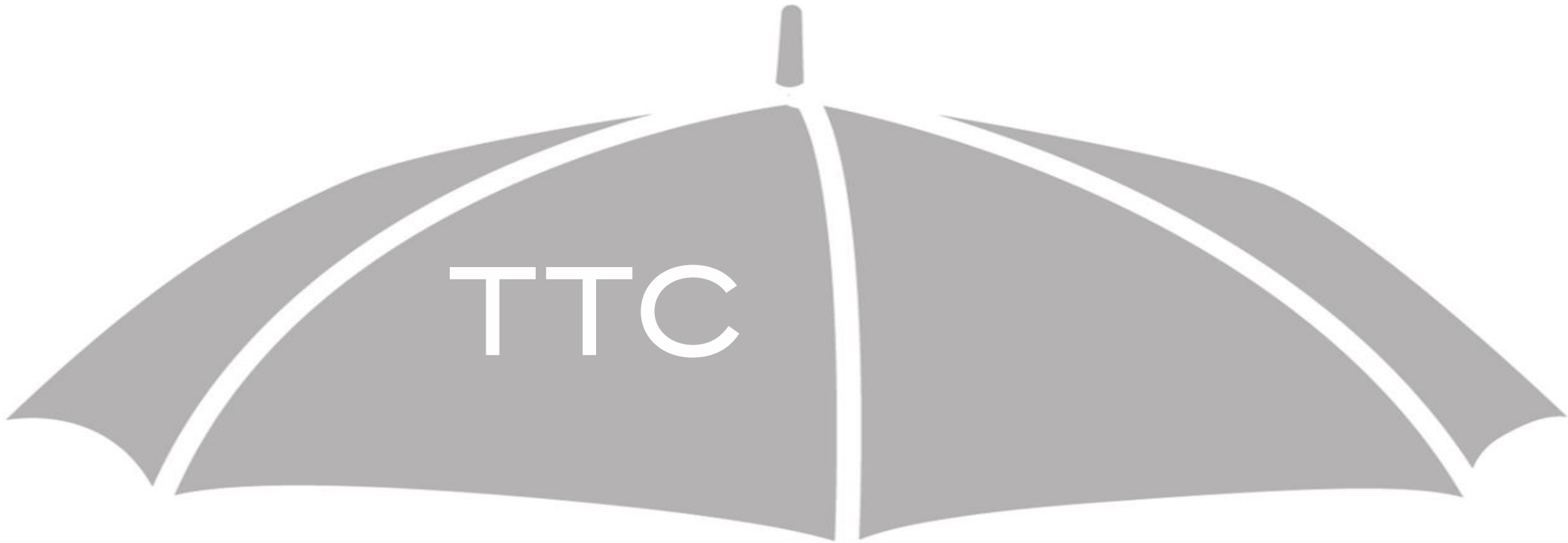
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10 Regional Centers

HHS Regions

REGION 10
REGION 8
REGION 5
REGION 1
REGION 2
REGION 3
REGION 9
REGION 4
REGION 6
REGION 7

Virtual Platform Logistics

- Chat box

- Raise your hand feature

- Muting and unmuting

- Camera visual and participation

The use of affirming language inspires hope and advances recovery.

LANGUAGE MATTERS.

Words have power.

PEOPLE FIRST.

The ATTC Network uses affirming language to promote the promises of recovery by advancing evidence-based and culturally informed practices.

Goal

Provide participants with a fundamental understanding of the developing adolescent brain; review influences and vulnerabilities that can affect behavior; strategies to help promote healthy development in youth.

Kevin

Kevin is 15 years old and pretty much keeps to himself at home, spending time in his room when he does schoolwork.

One day, he promised to go home directly after school so that he can sit with his younger brother who's nursing a cold, while his mother attends a medical appointment. On the way, Kevin walks by the basketball courts where his friends are watching a game. He greets them and while he lingers talking, he begins to play with some weights the players had on the side court. Kevin at one point is flexing a dumbbell and joking when he turns his face and hits his mouth with the weight, cracking his front tooth.

His friends heard the noise and warned him of the broken tooth, and Kevin couldn't believe what he just did! Worse, how is he going to tell his mother and he's already a half hour late from stopping to say hi to his friends!

Development Stages

- Early adolescence: 11-13 years

- Middle adolescence: 14-17 years

- Late adolescence: 18-21 years

Common Adolescent Problems

- Growth and development

- School related challenges

- Childhood illnesses that continue into adolescence, mental health disorders

- Consequences of risky or illegal behaviors, including injury, legal consequences, pregnancy, infectious diseases, and substance use disorders

Others Include…

- Attention-Deficit/Hyperactivity Disorder(ADHD)

- Eating disorders

- Co-occurring disorders

- Self injury: offers relief (feelings are getting out); trying to stop feeling painful emotions, like rage, loneliness, or hopelessness, or distraction

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Genes and Environment

- Both nature and nurture influence brain development. Hence, genetics plays a role in developmental tasks.

- Events and circumstances during infancy and childhood can also have a powerful impact.

- Genetic predispositions combined with environmental influences impact pathways of risk and resilience.

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Brain Development

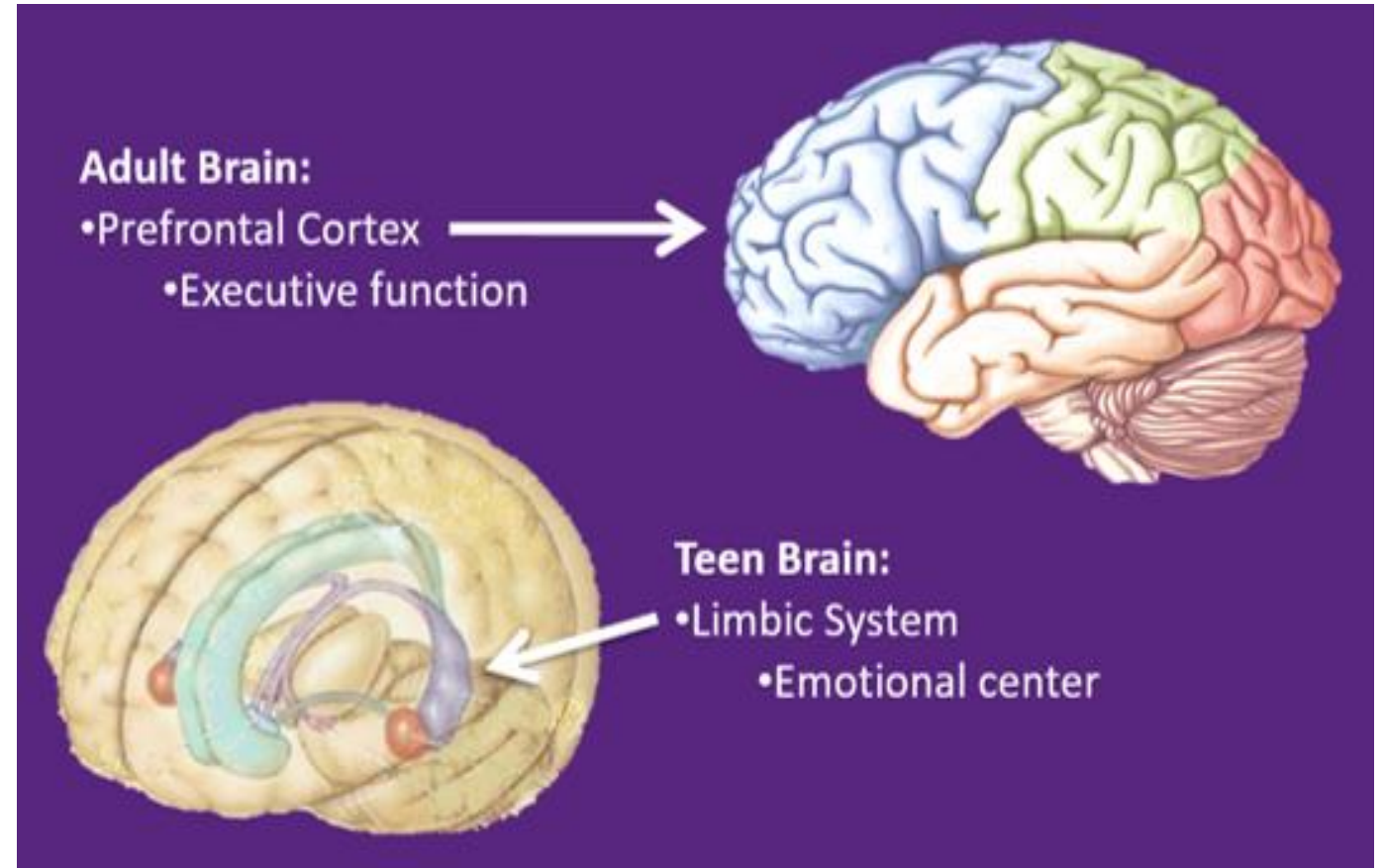INSIDE THE TEENAGE BRAIN
Adolescents are prone to high-risk behaviour

Parietal Lobe
Responsible for touch, sight, language; grows till early 20s
Adults Fully developed
Teens Do not process information effectively

Prefrontal Cortex
Its functions include planning and reasoning; grows till 25 years
Adults Fully developed
Teens Immature, prone to high-risk behaviour

Ventral Striatum
Reward centre, not fully developed in teens
Adults Fully developed
Teens Are more excited by reward than consequence

Amygdala
Emotional core for passion, impulse, fear, aggression.
Adults Rely less on this, use prefrontal cortex more
Teens More impulsive

Hippocampus
Hub of memory and learning; grows in teens
Adults Fully functional; loses neurons with age
Teens Tremendous learning curve

Adult vs Teen Brain

Adult Limbic system

- Raw emotions are kept "in check" by the prefrontal cortex

Adolescent limbic system

- Raw emotions can be overwhelming since the prefrontal cortex is not developed and can't mitigate emotional reactions, over reactions, momentary decision making

Adult Brain:
- Prefrontal Cortex
  - Executive function

Teen Brain:
- Limbic System
  - Emotional center

Arain, M., Haque, M., Johal, L., Mathur, P., Nel, W., Rais, A., … Sharma, S. (2013). Maturation of the adolescent brain. Neuropsychiatric disease and treatment, 9, 449–461. doi:10.2147/NDT.S39776 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3621648/
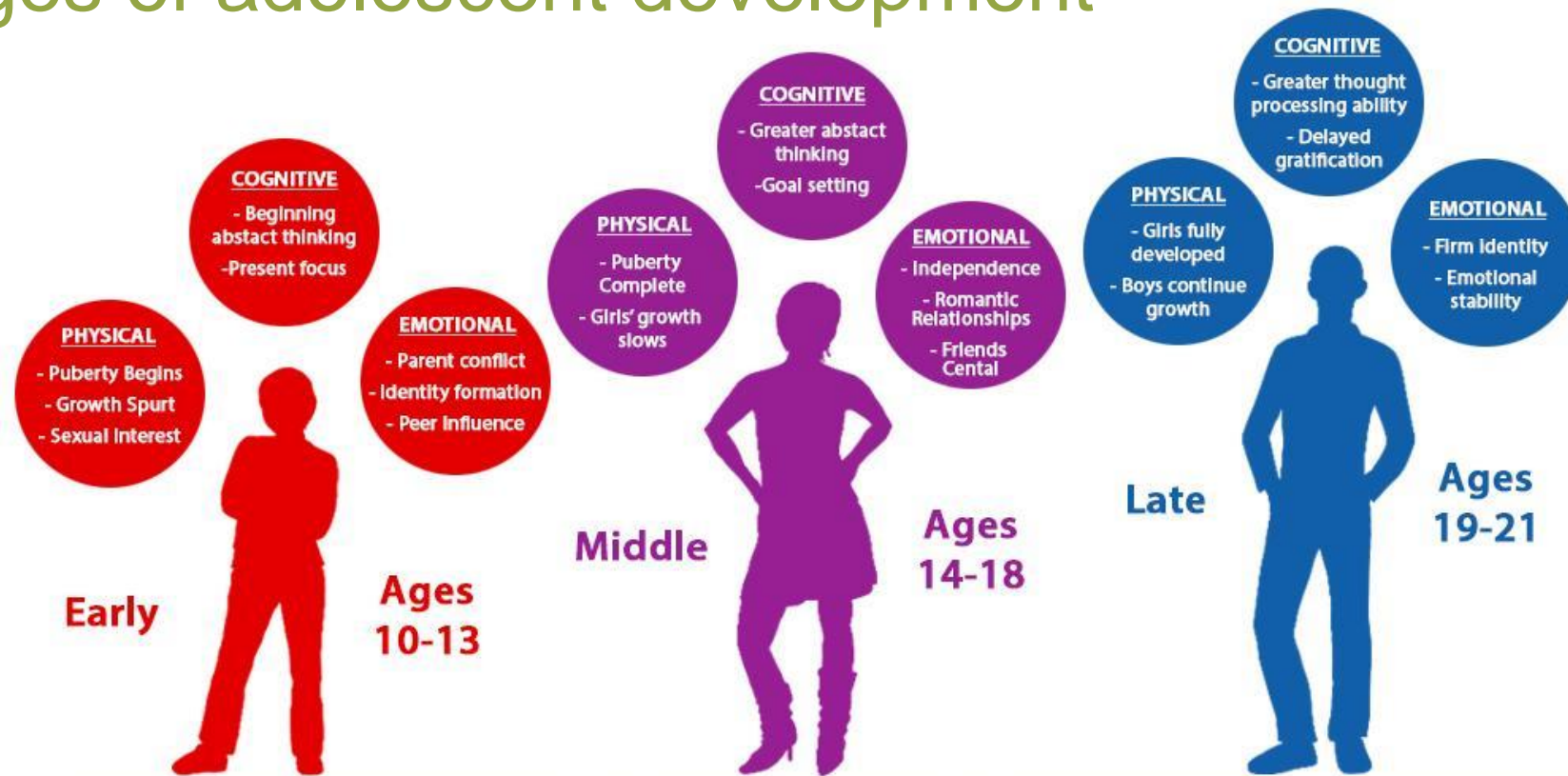
Stages of Development

Adolescent Development Tasks

- The basic tasks which must be mastered at each stage of life if the individual is to achieve normal development and healthy adjustment.

- The major developmental tasks are *physical, motor* or *cognitive skills* that are considered vital to physical and mental health.

Development Over 3 Stages of Adolescence

Physical, cognitive, and social-emotional changes occur over the 3 stages of adolescent development

Early — Ages 10-13

PHYSICAL
- Puberty Begins
- Growth Spurt
- Sexual Interest

COGNITIVE
- Beginning abstact thinking
- Present focus

EMOTIONAL
- Parent conflict
- Identity formation
- Peer Influence

Middle — Ages 14-18

PHYSICAL
- Puberty Complete
- Girls' growth slows

COGNITIVE
- Greater abstact thinking
- Goal setting

EMOTIONAL
- Independence
- Romantic Relationships
- Friends Cental

Late — Ages 19-21

PHYSICAL
- Girls fully developed
- Boys continue growth

COGNITIVE
- Greater thought processing ability
- Delayed gratification

EMOTIONAL
- Firm identity
- Emotional stability

CDC STD@CDCSTD, Aug 18, 2015, #DYK adolescents have 3 stages of development? Learn more via #CDCGrandRounds, http://go.usa.gov/3HtFC@CDCgov

Early Adolescence: 11-13 years

Physical Development	Cognitive Development	Social-Emotional Development
• Puberty: grow body hair, increase perspiration and oil production in hair and skin, Girls – breast and hip development, onset of menstruation Boys – growth in testicles and penis, wet dreams, deepening of voice • Tremendous physical growth: gain height and weight • Greater sexual interest	• Growing capacity for abstract thought • Mostly interested in present with limited thought to the future • Intellectual interests expand and become more important • Deeper moral thinking	• Struggle with sense of identity • Feel awkward about one's self and one's body; worry about being normal • Realize that parents are not perfect; increased conflict with parents • Increased influence of peer group • Desire for independence • Tendency to return to "childish" behavior, particularly when stressed • Moodiness • Rule- and limit-testing • Greater interest in privacy

Morris, S., Wagner, E., Adolescent Substance Use: Developmental Considerations, Florida Certification Board/Southern Coast ATTC Monograph Series #1,
http://www.yodaa.org.au/sites/default/files/Adolescent%20development%20issues%20in%20AOD.pdf

Gender Differences in Timing of Puberty

Psychological Impact

- Early developing males – high rates of self confidence, athleticism, academic achievement compared to later developing males.

- Early development in girls is correlated with lower self esteem and body image concerns

Need to Sleep

9 to 9 ½ hours of sleep essential to healthy development

- Increased academic demands
- Fatigue, impaired performance in school
- Potential risk of health issues, (i.e., obesity)

20.6% OF ADOLESCENTS
aged 12 to 19 have obesity

1 IN 4 STUDENTS
has a chronic condition

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Middle Adolescence: 14-17 years

Physical Development	Cognitive Development	Social-Emotional Development
• Puberty is completed • Physical growth slows for girls, continues for boys	• Continued growth of capacity for abstract thought • Greater capacity for setting goals • Interest in moral reasoning • Thinking about the meaning of life	• Intense self-involvement, changing between high expectations and poor self-concept • Continued adjustment to changing body, worries about being normal • Tendency to distance selves from parents, continued drive for independence • Driven to make friends and greater reliance on them, popularity can be an important issue • Feelings of love and passion

Morris, S., Wagner, E., Adolescent Substance Use: Developmental Considerations, Florida Certification Board/Southern Coast ATTC Monograph Series #1, http://www.yodaa.org.au/sites/default/files/Adolescent%20development%20issues%20in%20AOD.pdf

Development Tasks

Social transformations

- Peer, parent-child, sibling, parental influence and control

- Sense of identity: gender roles, media and information sources

- Social skills: interpersonal negotiation, social problem solving

Morris, S., Wagner, E., Adolescent Substance Use: Developmental Considerations, Florida Certification Board/Southern Coast ATTC Monograph Series #1, http://www.yodaa.org.au/sites/default/files/Adolescent%20development%20issues%20in%20AOD.pdf

Part of Healthy Development

- Need for autonomy

- Desire for privacy

- Greater investment in their peers

- Need to try on different identities

- Huge physiological changes

Late Adolescence: 18-21 years

Physical Development	Cognitive Development	Social-Emotional Development
• Young women, typically, are fully developed • Young men continue to gain height, weight, muscle mass, and body hair	• Ability to think ideas through • Ability to delay gratification • Examination of inner experiences • Increased concern for future • Continued interest in moral reasoning	• Firmer sense of identity • Increased emotional stability • Increased concern for others • Increased independence and self-reliance • Peer relationships remain important • Development of more serious relationships • Social and cultural traditions regain some of their importance

Morris, S., Wagner, E., Adolescent Substance Use: Developmental Considerations, Florida Certification Board/Southern Coast ATTC Monograph Series #1, http://www.yodaa.org.au/sites/default/files/Adolescent%20development%20issues%20in%20AOD.pdf

Adolescent Challenges of Risk Taking

Girl makes extreme selfie on the pier against the background of waves with a risk to life in a storm

- Sexual risk-taking

- Substance use
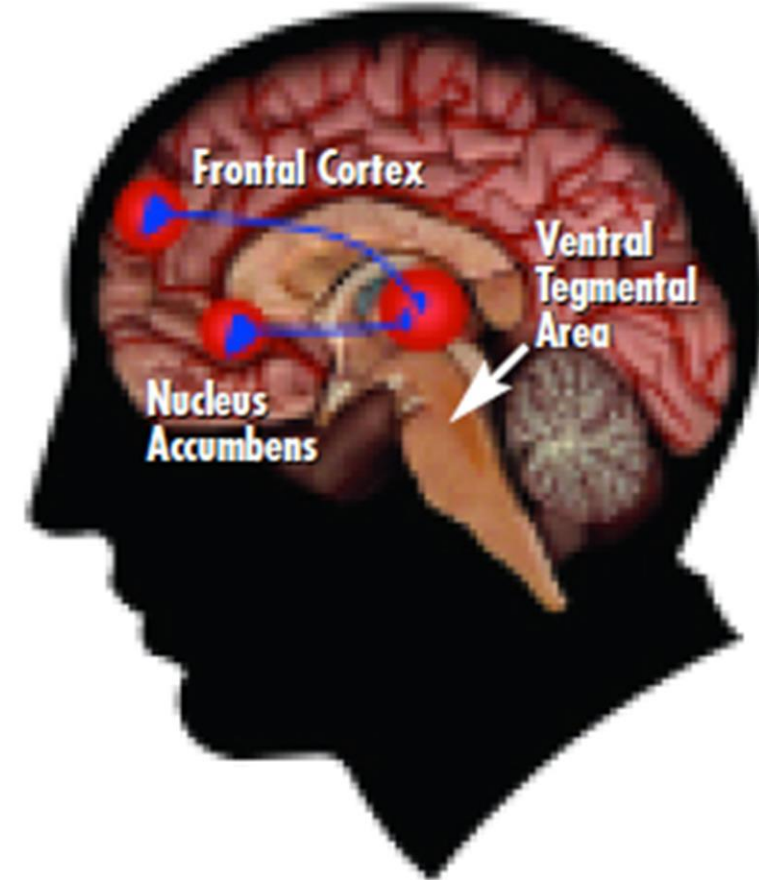
- Illegal behavior

- Risky driving

Reward Pathways

DOPAMINE has been thought to be associated with:

- Risky behaviors
- Novelty seeking
- Impulsiveness

This reward pathway is also activated by drugs and alcohol

Brain reward (dopamine) pathways

Frontal Cortex

Ventral Tegmental Area

Nucleus Accumbens

These brain circuits are important for natural rewards such as food, music, and sex.

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Risk and Reward

16-year-old Cynthia had planned to be "*completely smashed*" at the school dance. She brought alcohol with her despite knowing that she can be suspended if school staff found out. Cynthia was caught with alcohol at the party and was suspended pending investigation.

According to Cynthia, "*it seemed like too much of a fun idea to turn down.*"

Dana Foundation, Carl Sherman, A Delicate Balance: Risks, Rewards, and the Adolescent Brain, July 10, 2019, https://www.dana.org/article/a-delicate-balance-risks-rewards-and-the-adolescent-brain/

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Developmental Challenges

Cultural Influences on Adolescent Behavior

- Peer

- Sex in Popular Culture

- Family Cultural Traditions

- Violence in Television and Film

- Coping processes

- Bullying Versus Teasing

- Social Influence

- Cyberbullying

- Gender and Sexuality

Bronfenbrenner's Ecological Theory
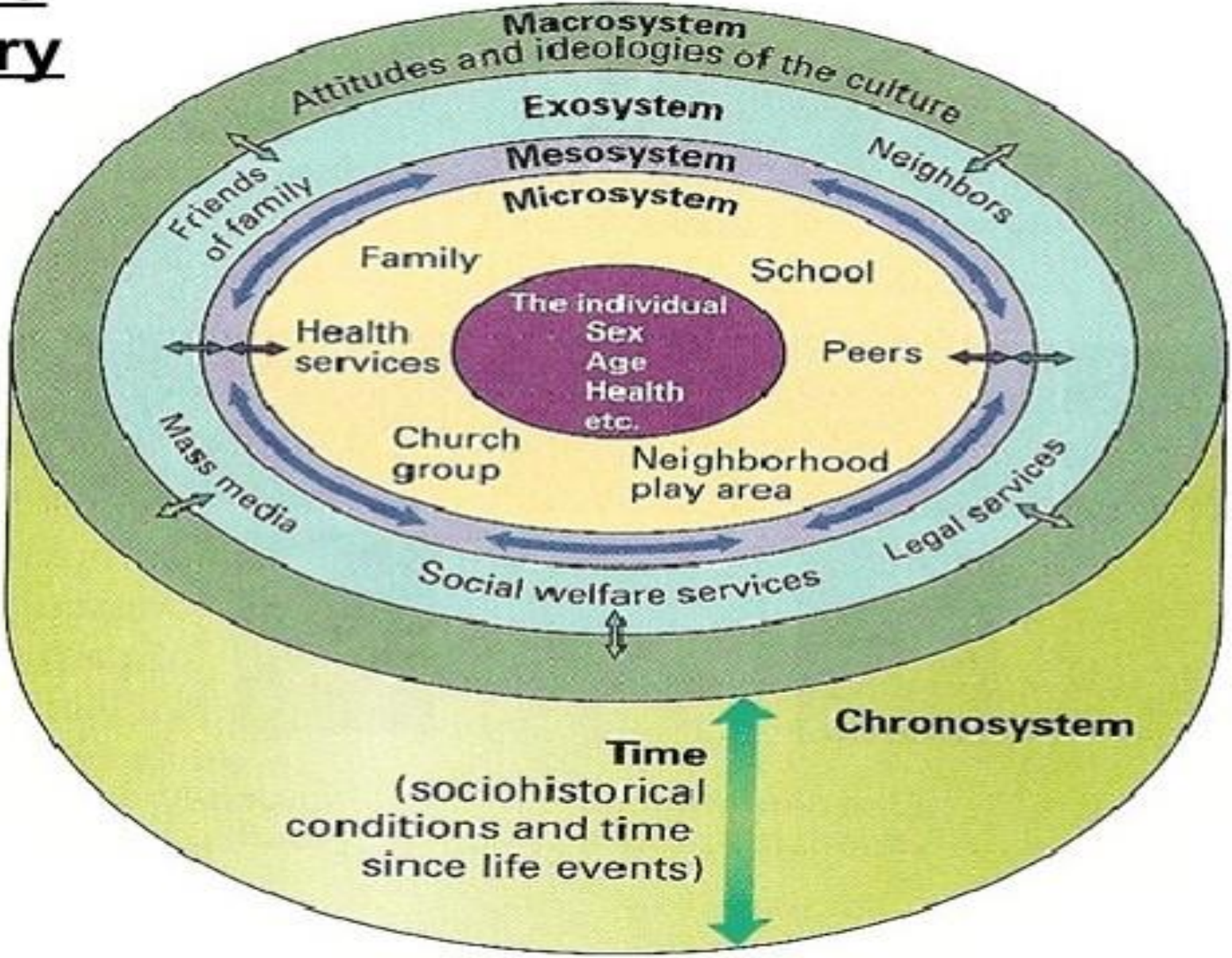
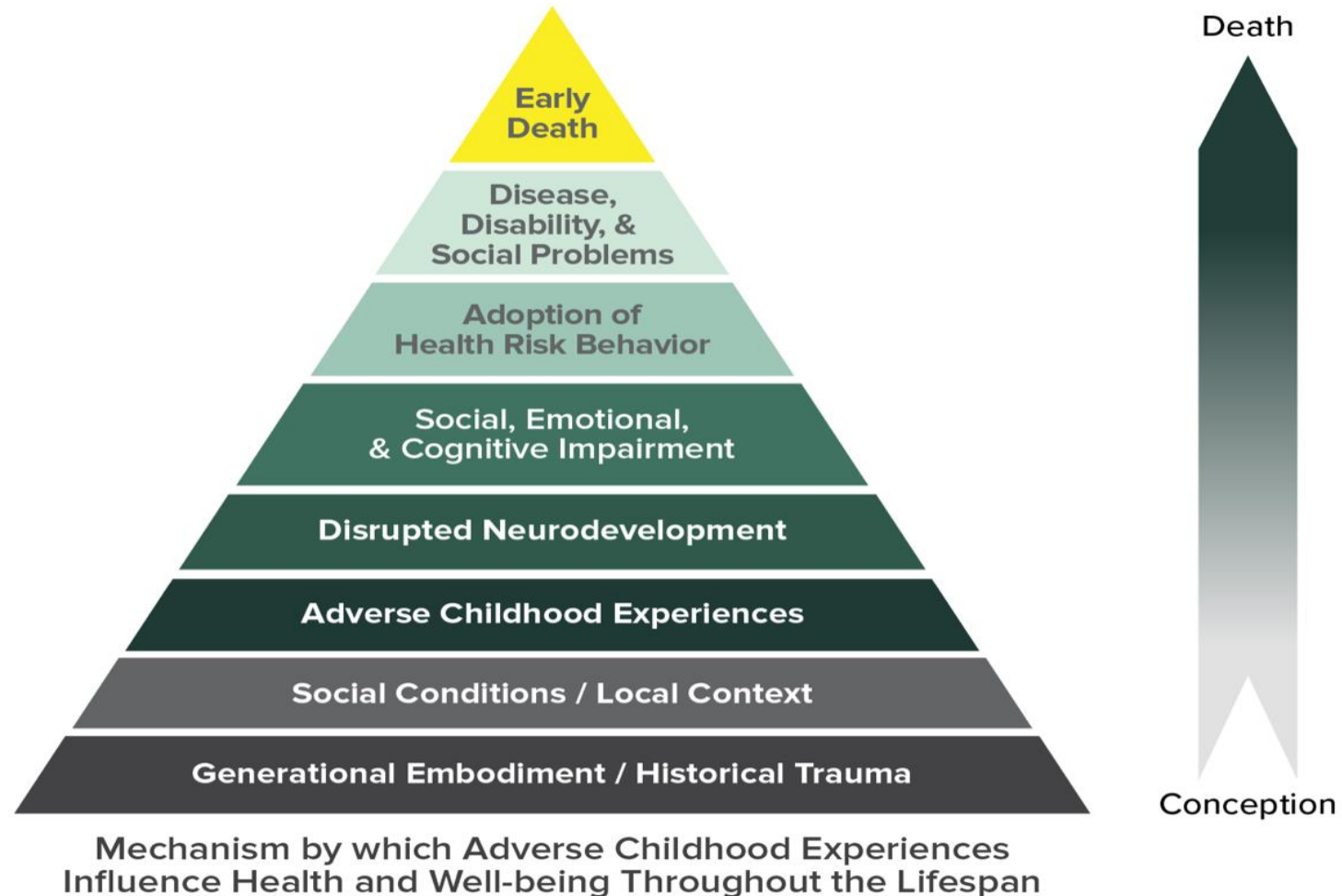# Risk Factors

Adverse Childhood Events (ACE) Study

- This study examined the impact of a person's health and social effects throughout the lifespan.

- The study followed 17,421 people who were members of the Kaiser Health Plan in San Diego County.

Outcome

- The more adverse childhood experiences, the more likely they will suffer a range of negative health and social outcomes during adulthood.

- These include depression, substance use, smoking, suicide, lung disease, injuries, HIV/STD, and impaired work performance.

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Adverse Childhood Experiences (ACEs)

Mechanism by which Adverse Childhood Experiences Influence Health and Well-being Throughout the Lifespan

Neglect and Abuse

- Neglect disrupts attachment and changes the development of the brain

- Lack of empathy

- Creates frustration and anger

Teenage Anxiety a Rapidly Growing Mental Health Concern, Retrieved January 2020 at:
http://www.westernyouthservices.org/teenage-anxiety/

Trauma Impacts on Child Development

- Trauma causes brain to adapt in ways that contributed to their survival (i.e., constant fight/flight/freeze).

- These adaptations can look like behavior problems in "normal" contexts, such as school or family environments.

- The normal developmental process is interrupted, and teens may exhibit internalizing or externalizing symptoms

Developmental and Behavioral Health Screening Tools

- Bright Futures Pocket Guide
- CES-DC
- CRAFFT Screening - English / Spanish
- Adolescent Supplemental Questionnaire (ASQ)
- Bright Futures ASQ 15-17yr
  - Bright Futures ASQ 18-21
  - Bright Futures ASQ Early Adolescent
  - Bright Futures ASQ Older Child
- Developmental & Behavioral Screening
- Edinburgh Postnatal Depression Scale
- M-CHAT Screening - English / Spanish / Scoring
- Guidelines for Adolescent Preventative Services (GAPS)
  - Younger Adolescent Questionnaire
  - Middle-Older Adolescent Questionnaire – English / Spanish
  - Parent/Guardian Questionnaire – English / Spanish

- Pediatric Intake Form
- Patient health Questionnaire (PHQ-9)
  - PHQ-9 Instructions
  - PHQ-9 Pocket Guide
  - PHQ-9 Teen Brochure
  - PHQ-9 Teen Screen
  - PHQ-9 English / Spanish
- Pediatric Symptom Checklist (PSC-17) – Scale / English / Spanish
- Screen for Child Anxiety Related Disorders (SCARED)
- Strengths and Difficulties Questionnaire (SDQ)
- NICHQ Vanderbilt Assessment Scale – Parent / Teacher

Social, Emotional, and Behavioral Delays

- Neurobehavioral disorders such as autism spectrum disorder and attention deficit hyperactivity disorder, often also have social, emotional, or behavioral delays, impacting ability to learn, communicate, and interact with others.

- Social and emotional skills can result in difficulty understanding social cues, initiating communication with others, or carrying on two-way conversations.

David

14-year-old David was coming home late from school almost every day for the last several weeks. He seemed moody and distracted and his parents have a difficult time engaging him in conversations. He has begun to do poorly at school and eats very little. When his mother found a cigarette in his jacket, she knew there was a problem.

Teen Stress

A "pile-up" of many stressful life events in a small amount of time, or ongoing, day-to-day stresses and strains are harder on adolescents than major life events.

- Problems with peers (including "romances")

- Family issues or problems with parents

- School-related problems or pressures

- Their own thoughts, feelings, or behaviors (feeling depressed or lonely, getting into trouble because of their behavior)

Risk Factors for Mental Illness

Almost all adolescents and teens experience periods of moodiness, crankiness, and/or angst, but there are certain indicators that could demonstrate the presence of a more serious issue including

- Becoming socially withdrawn
- Pervasive moodiness, lasting more than a few days
- Dramatic changes in eating habits (including changes in weight)
- Ongoing anger, irritability, or hopelessness

Adolescent Mental Illness

- 50% of all lifetime cases of mental illness will develop by age 14, and 75% by age 24.

- The most common mental health disorders in adolescents and teens are *anxiety disorders*, *stress-related disorders*, *mood disorders*, *obsessive-compulsive disorders*, *eating disorders*, and *disruptive-behavioral disorders* (i.e. attention-deficit/hyperactivity disorder or oppositional defiant disorder).

https://polaristeen.com/articles/what-causes-mental-illness-adolescence/

Anxiety Disorders

Affects 32% of 13 to18 year-olds and characterized by feelings of excessive uneasiness, worry, and fear.

- Emotional changes
- Social changes
- Sleep disturbances
- Poor school performance
- Panic attacks

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Depression

Affects about 13% of 13 to17 year-olds, impacting on thoughts, feelings, daily activities, eating, sleeping.

- To be diagnosed with depression, the symptoms must be present for at least two weeks.

Some symptoms include:

- Persistent sad, anxious, or "empty" mood
- Feelings of hopelessness, or pessimism
- Irritability
- Feelings of guilt, worthlessness, or helplessness
- Loss of interest or pleasure in hobbies and activities
- Decreased energy or fatigue

Pandemic Related Youth Challenges

- Change in regular routines

- Break in continuity of learning

- Missing significant life events

- Loss of security and safety

ZOOM Fatigue

Coping with pandemic and staying connected to loved ones

Weariness and burnout of overusing technology

Risk and Resiliency

Risk Assessments

- The Rapid Assessment for Adolescent Preventive Services (RAAPS) is one risk screening tool recommended by the Society for Adolescent Health and Medicine.

- The Child and Adolescent Needs and Strengths (CANS) is a multi-purpose tool developed to support care planning and level of care decision-making, to facilitate quality improvement initiatives, and to allow for the monitoring of outcomes of services.

Risk Scenario – Protective Approach

Risk factor example
A 16-year-old adolescent who drives recklessly with a group of joyriding friends because they were all drinking and all agreed to move the party elsewhere

Protective factor example
This same teen may decide to be more careful and not drive, calling a taxi when with friends who disapprove of unsafe driving, in part because youth are highly sensitive to their image among peers, and the acceptance of these peers is also important

Risk Scenario – Protective Approach (cont.)

Risk factor example
A 14-year-old adolescent spends a lot of time with the neighborhood teens who aren't going to school and often smoke marijuana and maybe other drugs, mimicking what they are doing in efforts to be part of the crew, to be accepted. It's also possible that there's no positive role model at home or in the family (uncle, older cousin, etc.)

Protective factor example
This same teen may participate in different activities if he/she is engaged in after school initiatives, sports, school clubs, and hobbies. This is more likely if he/she interacts with other teens whose interests are also in extracurricular activities. They may have a positive role model at home, parental/provider support that can promote and help them access these experiences.

How Can Providers Help?

- Practitioners should be trained in adolescent development and dysfunction specifics, multiple systems of influence, and adolescent drug abuse treatments.

- Understand that the foundation of potential intervention or treatment is the <u>therapeutic alliance</u> with the teen and/or parent.

Part of Healthy Development

- Need for autonomy

- Desire for privacy

- Greater investment in their peers

- Need to try on different identities

- Huge physiological changes

Promote Youth Health

- Reducing obesity risk for children in early care and education (ECE) facilities.

- Improving healthy food options and nutrition education in school.

- Improving physical education and physical activity opportunities in school.

- Preventing use of all tobacco products.

- Helping children and adolescents manage their chronic health conditions in school.

- Promoting the use of dental sealants to prevent cavities.

- Promoting adequate sleep.

Talking with Adolescents: Do's & Don'ts

Do's

- Talk with them, not at them
- Be a good listener
- Respect their privacy
- Autonomy
- Respect their feelings and perspectives
- Apologize when you're wrong

Don'ts

- Avoid lecturing, nagging, guilt trips
- Don't reveal confidences
- Reframe questions

Purcell, M. (2018). How to Talk With Your Teenagers, Not at Them. Psych Central. Retrieved on January 12, 2020, from https://psychcentral.com/lib/how-to-talk-with-your-teenagers-not-at-them

Resources

- **CDC, Brief Facts on the Risks of Electronic Cigarettes to Children, Adolescents, and Young Adults, Electonic Cigarettes,** https://www.cdc.gov/tobacco/basic_information/e-cigarettes/spanish/los-riesgos-de-los-cigarrillos-electronicos-para-jovenes.html

- **Vaping, young people, and COVID-19**, https://positiveparentingnews.org/news-reports/el-vapeo-los-jovenes-y-el-covid/?lang=es

- **Why is vaping so dangerous to teenagers** https://cnnespanol.cnn.com/2019/01/17/por-que-el-vaping-es-tan-peligroso-para-los-adolescentes/?

- **DrugFacts in Spanish, e-cigs - DrugFacts,** https://www.drugabuse.gov/es/publicaciones/drugfacts/cigarrillos-electronicos-e-cigs.

Thank You!

Certificate of Completion

- Complete an online evaluation by scanning the code (on next slide) with the camera on your phone, click on the link in the chat, write down the link and type in your browser, or email for the link.

- Certificates will be sent out within a week along with a copy of the slides.

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Contact and Survey

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If you are sharing a computer with others, please type your names in the chat box.

Please fill out your evaluation forms – it will only take a couple of minutes! Just scan the code with the camera on your smart phone, click on the link in the chat box, or type the link into your browser: https://ttc-gpra.org/P?s=452537

Don't worry if you can't – an email with the link will be sent to you tomorrow, along with a copy of the slides.

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