

Adolescent Psychology and How It Connects to Prevention

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* The primary reference for each section provided in each subtitle slide (as seen in next slide). Additional references noted on individual slides.

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The Four Features of Adolescence

(Seigel, 2013)

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Novelty Seeking

- Increased drive for rewards
- Open to change
- Sense of adventure



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Social Engagement




- Peer connectedness
- New friendships
- Separation from adults

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Increased Emotional Intensity

- Moodiness
- Impulsivity
- Zeal for life



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Creative Exploration



- New conceptual thinking
- Abstract reasoning
- Question/explore identity

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Neuroscience of Adolescence

National Research Council (U.S.), & Institute of Medicine (U.S.) (2011)

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Brain Remodeling and Integration in Adolescence

Pruning

Reduction of neurons and synapses in brain

- Shaped by experience, environment
- Intensified by stress
- Responds to where you focus your attention



Courtesy of OSA Student Chapter at UCI Art in Science Contest. Photo by: Ardy Rahman

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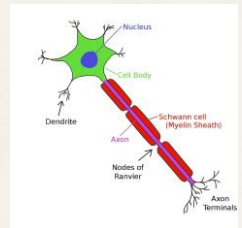
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Brain Remodeling and Integration in Adolescence

Myelination

The brain lays down myelin, a sheath covering the membranes among interlinked neurons

- Allows for faster, more synchronized information to flow



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The Changing Prefrontal Cortex

- Integrative hub of brain – coordinates and balances other regions of the brain
- Integration increases self-awareness, reflection, planning, decision making, and empathy
- Development is gradual - not finished developing until well into adulthood (around age 25)

(Siegel, 2013)

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The Changing Prefrontal Cortex

- Since the prefrontal cortex is under construction during adolescence, emotions can arise suddenly and intensely
- Positive social interactions and self-reflection can help promote prefrontal integration

(Siegel, 2013)

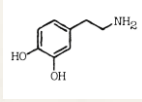
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Adolescents and Dopamine

- Dopamine creates our drive for reward
- Baseline dopamine is lower in teens, but its release is higher
- Increased dopamine release causes teen to have a positive bias – activated especially when they are with peers



(Siegel, 2013)

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Effects of Increased Dopamine Activity

Impulsiveness

Behaviors that occur without thoughtful reflection

Vulnerability to addiction

Adolescents respond stronger to the dopamine release associated with addictive substances

Hyperrationality

Thinking in literal terms

Adolescents puts more emphasis on potential benefits, even when aware of risks

(Siegel, 2013)

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Adolescent Reasoning

(Swift, n.d.)

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Fuzzy Trace Theory and Adolescent Decision Making

(Swift, n.d.)

Gist-Based Reasoning

- Common in adults
- Intuitive
- Bottom-line meaning
- Develops with age

"It's not worth the risk"

Verbatim Reasoning

- Common in adolescence
- Specific facts and details
- Think about the odds and take a calculated risk

"It won't happen to me"

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About 1 in 6 people who start using marijuana as teens become addicted.

© National Institute on Drug Abuse



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Role of Environment

(Spear, 2010)

Cold cognitions

Thinking rationally: low arousal environments



Hot cognitions

Thinking irrationally: high arousal environments



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Primary Psychosocial Tasks Adolescents Must Accomplish

National Research Council (U.S.), & Institute of Medicine (U.S.) (2011)

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Psychosocial Tasks

- To Stand Out**
Develop identity and autonomy
- To Fit In**
Find affiliations, acquire acceptance from peers
- To Measure Up**
Develop competence and achievement
- To Take Hold**
Make commitments to goals, activities, and principles



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Identity Development

Individual

Process of distancing oneself from others, especially parents



Social


Individuals create identity from their social world



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Peer Influences

- Adolescents more influenced by peers than any other age group
- Drive for affiliation (close relationships with individuals or groups) and acceptance from peers
- Peak of openness to antisocial influences at about 9th grade – transition period



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Peer Influences on Risky Behaviors

Being with friends or imagined presence of friends increases risk-taking

Risky behaviors correlated with:

- Association with permissive peer groups or older peers
- Lax adult supervision
- Positive perception of risky behavior (Hawkins & Catalano)
- Perception of peer engagement (Hawkins & Catalano)

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Social Competence

The capacity to engage effectively in social relationships

Important for developing identity and gaining acceptance with preferred peer group

Two Essential Factors

- Impulse control
- Regulation of emotions



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Emotional Competence

- Communicating emotions constructively
- Accurately perceiving others' emotions
- Awareness that emotions have a big impact on relationships
- Self-regulation - adaptatively coping with negative emotions



(Santrock, 2004)

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Risk and Psychosocial Tasks

Positive risky (high intensity) behaviors help adolescents accomplish these tasks



Adolescents may turn to maladaptive risky behaviors to help them cope with not accomplishing one or more of these tasks



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Individual/Peer Protective Factors

- Skills to cope with anxiety, stress, and adversity
- Healthy autonomy
- Relationships with prosocial peers
- Developing commitments, e.g. religious or civic involvement
- Having values, goals and a positive outlook



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Other Protective Factor Domains

Community

- Opportunities for community involvement
- Laws consistently enforced
- Resources are available

Family

- Clear Expectations involving drug use
- Family responsibilities
- Family members nurturing and supportive

School

- Encourages goal setting, academic achievement, and positive social development
- Sponsors substance-free events

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(Hawkins & Catalano, 2005)

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Positive Risk-Taking

It is important for adolescents to master high-intensity situations to help them prepare them for adult responsibilities



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Conclusion

- Prevention efforts should consider both adolescent's psychological development and the psychosocial tasks adolescents must accomplish
- Helping to strengthen adolescents' social and emotional competence protects against unhealthy risk-taking
- Encouraging and providing opportunities for positive risk-taking reduces negative risk-taking such as substance misuse

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Discussion

- Turn to you neighbor and share something that stuck out to you in this presentation
- Why did it resonate with you?
- How can this apply to the work your doing?

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