



Healthy Connections: Understanding the Relationship Between Adolescents and Addiction

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Overview

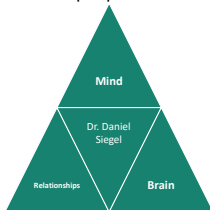
Goals for today:

- Have a general understanding of what is happening in the brain during adolescent development.
- Be able to identify how there can be a relationship between adolescents and substance use.
- An introduction to the risks and protective factors that can foster or prevent the development of an addiction.
- Understand how addiction is a disease.
- Identify signs of struggle related to addiction.
- How to talk about addiction with our loved ones.
- Know where to look for help, and what it looks like to get help.

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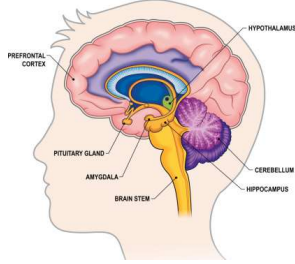
Quick Background: Interpersonal Neurobiology

IPNB is an interdisciplinary field that utilizes the common findings across multiple areas of study to understand how we develop as people.



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The Adolescent Brain



What's so different?

- **Brain** – Physically we get a burst of new neurons, puberty is starting to happen, and the pre-frontal cortex is starting to grow while the pleasure center area of the brain is growing faster.
- **Relationships** – Starting to shift from learning from caregivers to learning from peers. Generally, community is getting larger as well.
- **Mind** – Shift from concrete thinking to abstract thinking, while learning about self and others and how to interact with the world around us that is now getting larger.

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The Name of the Game is Experiences

Neuroplasticity is the ability of the brain to adapt, grow, and prune.

- Think play dough.
- Nature vs. Nurture – Both work together to help us reach our full potential.
- Experiences are the biggest spark to get neurons firing, experiences from our physical environment and our relationships.



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The Name of the Game is Experiences

The brain's intentional imbalance of slower forming pre-frontal cortex and larger more active limbic region area or pleasure center is so adolescents can take more risks to have more experiences.

- Sparks greater growth of pre-frontal cortex
 - Emotional Regulation, Abstract Thinking, Decision Making
- Fosters more overall neural pathways and networks
- Leads to more information to better understand who we are as individuals, the people around, and the world us.
- Unlocks genetic potential, dormant positive traits of resilience that have been passed down but not fully activated

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The Name of the Game is Experiences

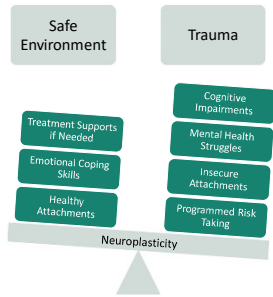
That is all good stuff, what's the catch?

- Being programmed to take more risks, means greater likelihood to experiment and/or abuse substances and other risky behaviors.
 - Dormant genetic traits or susceptibility to addiction passed down through the family gene pool can be activated
- If an adolescent struggled to form healthy relationships this will increase chances to connect to "something," possibly substances or other risky behaviors.
 - A better perspective of addiction is to view it as an attachment disorder.

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Risk and Protective Factors

One risk factor alone will not lead to someone growing from experimenting or abusing substances to developing a substance use disorder.



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Impact of the Pandemic

A time of persistent ***grief and loss*** is and continues to be a risk factor. The full scope of the negative impact will not be realized for years to come.

- Access to Friends and Family
- Lifestyles
- Routine
- Access to reliable and helpful coping skills
- Death of loved ones
- Watching those around us struggle to find ways to cope

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Understanding Addiction is a Disease

Repeated use of substances and behaviors that flood the brain with dopamine will short circuit our brain.

- The brain will try to adapt and using neuroplasticity will physical create a new unhealthy circuit (neural pathway) that bypasses the part of the brain that can realize this is bad and I need to stop.
- This is a physical change in the brain.
- The part of the brain needed to self-regulate is already at a disadvantage for an adolescent because it is still growing and not at full strength.

What's the Difference between Substance Abuse Disorder and Substance Use Disorder?

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Model of the "Highway" or neural pathway of addiction


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MRI Image Comparison of Non-Addicted Brain vs. Addicted Brain

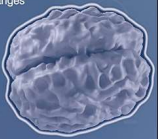
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Structural Damage
(The wall that blocks our critical thinking/personality)

Structural Changes



Healthy Brain



Addicted Brain

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Signs of Struggling

The Drift

Relationships	Health/Mood	Behavior and Function
<ul style="list-style-type: none"> Strain with prior healthy attachments Isolated—Friends, Family, Clubs, Teams Active in toxic relationships Struggle to form new connections 	<ul style="list-style-type: none"> Appearance - weight, complexion, pupils, cuts/bruises, scabbing Morning sickness Severe and persistent shifts in mood – tricky one Memory loss, confusion, struggle to concentrate Withdrawal Symptoms Illness related to heavy use 	<ul style="list-style-type: none"> Negative change in academic performance (grades and attendance) Struggle to perform in employment, sports teams, extracurricular activities Change in sleep pattern – Insomnia and Nodding Out Aggression Risky Behaviors – Late nights with no contact, theft, vandalism, driving while under the influence

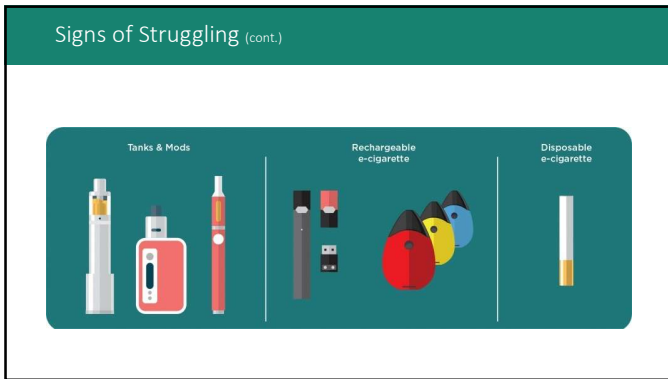
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Signs of Struggling (cont.)

What you might find?

- Alcohol
- Old Scripts (Benzodiazepines, Opioids, Stimulants)
 - Find pills whole, but also see them crushed up you know struggles have progressed
- Bongs, Glass Pipes, Rolling Paper, Cigars, Dime Bags
- Vapes (Tanks, E-Cigarettes, E-Pen, Dab Pens)
 - Are not just used for nicotine but THC as well
 - THC often at the root of the news reports of adolescents who end up in the hospital
 - The THC itself is a risk, often not regulated, and mixed with other chemicals
 - The Vitamin E that is often added as thickening agent to the liquid is now learned to be lethal after being heated for clogging up the lungs.

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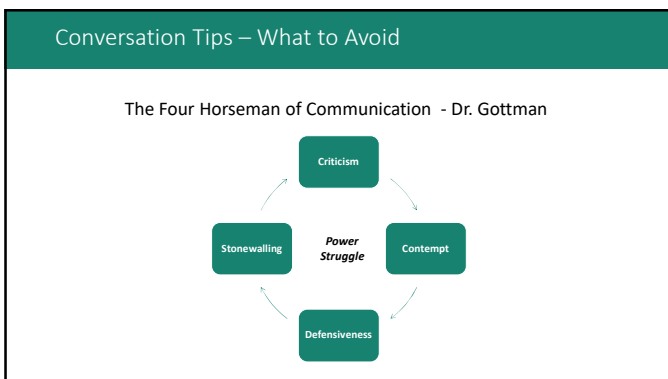
How to Start the Conversation?

Conversation can be anxiety provoking and awkward, but first step is to lean into the discomfort and have it.

- The experience itself when done with transparency will lead to you feeling like a safe place to ask questions, share concerns, and ask for help.
- Key word is transparency, no mind games, no tricks, no entrapment.
- Use I-Statements to express your own concern and anxiety.
- Use O.A.R.S. to keep a safe feeling and motivate change:
 - Open Ended Questions
 - Affirmations
 - Reflections
 - Summaries



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What Help is Out There?

There are various levels of help available based on current risk and protective factors for each person.

- Community Supports
 - A.A
 - N.A
 - SMART Recovery
 - Refuge Recovery
 - Celebrate Recovery
 - Mountainside has free community supports available on website that range from support groups to wellness group.

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What Help is Out There? (cont.)

- Recovery Coaching
- Treatment options and the various levels of care.
 - Inpatient Services
 - Detox Programs (Medical support to help during withdraw)
 - Residential Programs (30-90 Days)
 - Outpatient Services
 - Intensive Outpatient Programs (IOP)
 - Outpatient Programs (OP)
- Psychiatry and Medications Assisted Treatments (MAT or MATS)
 - Should be paired with outpatient services/psychotherapy

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Key Points to Take Away

Adolescent period of development is a natural time to take risks, and if enough risk factors are in place can lead to a relationship started with substances.

A protective factor to add is being transparent and curious in having conversations with our loved ones.

There is help available through community supports, and professional help available through a variety of treatment options.

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References

- MD, D. J. (2014). *Brainstorm: The Power and Purpose of the Teenage Brain*. New York , NY: TarcherPerigee.
- Daniel J. Siegel, M. (2010). *Mindsight: The New Science of Personal Transformation*. New York , NY: Bantom Books.
- Daniel J. Siegel, M. (2010). *The mindful therapist* (1st ed.). New York, NY: W.W. Norton & Company.
- Daniel J. Siegel, M. (2012). *The developing mind: How relationships and the brain interact to shape who we are* (2nd ed.). New York, NY: The Guilford Press .
- Flores, P.J. (2004). *Addiction as an Attachment Disorder*. Oxford , UK: Jason Aronson .
- InspireMalibu. (2018 , October 20). *Understanding Addiction Reward and Pleasure in The Brain* . Retrieved from InspireMalibu: <https://www.inspiremalibu.com/blog/alcohol-addiction/understanding-addiction-reward-and-pleasure-in-the-brain/>
- National Institute on Drug Abuse: National Institutes of Health; US. (2020, January 20). *Vaping Devices (Electronic Cigarettes) Drug Facts* . Retrieved from National Institute on Drug Abuse: <https://www.drugabuse.gov/publications/drugfacts/vaping-devices-electronic-cigarette>
- U.S. Food and Drug . (2019, September 10). *How FDA is Regulating E-Cigarettes* . Retrieved from U.S. Food & Drug Administration : <https://www.fda.gov/news-events/fda-voices/how-fda-regulating-e-cigarettes#:~:text=When%20of%20foundational%20e%20%80%9Cdeeming%20rule,pipes%2C%20and%20e%20%2Dhookahs>
- Volkow N. (2016, April 05). *The Emerging Science of Addictions*. National Council for Behavioral Health . Retrieved Feb. 25, 2019, from <https://www.youtube.com/watch?v=5v1kaHFrjw&feature=youtu.be>
