
Facilitator's Guide:

Understanding Adolescent Development

April 2023








Note to Trainers and Facilitators

The Youth Thrive 4 Youth Facilitator Guides are intended for you to use to get to know all of the training content and to prepare your presentation and activities for each of the training modules. The Guides include information about each activity and content area. Within each Guide:

- Underlined text is a suggested script that covers the core training content.
- *Italicized text* is a note to you, the trainer/facilitator.
- **Plain or bolded text** is instructions for activities, discussions, and lessons.
- **Highlighted** text is for **IN-PERSON** version and **blue** text is for **ON-LINE** version specifically. **Note that all other text and information (much of the content) is for both on-line and in-person presentations.**

You will see the **icons** below inserted throughout the YT4Y Guides. These are there to give you quick, additional visual cues of the key content and activities planned for this training. Here are the icons we've used and what they indicate:

Trainer Script	Note to Trainer	Activity Instructions	Group Discussion	Activation Warning
 <p>Suggested script for the trainer that covers the core training concept.</p>	 <p>Notes to the trainer with suggestions and reminders.</p>	 <p>Instructions on how to conduct an activity.</p>	 <p>Instructions and questions to facilitate group discussion.</p>	 <p>Indicates specific content, activity, or video that may be emotionally difficult or intense. Please give participants advanced warning and allow time and space to take a break, provide support, and process their reactions.</p>

Goals

Understanding Adolescent Development: Facilitator Guide Notes



Understanding Adolescent Development



Overview of Objectives

Time: 30 sec

Participant Manual: P. 17

Our Learning Goals

- Understand the fundamentals of adolescent brain development
- Understand the impact of trauma on the brain and behavior
- Develop strategies to cope with chronic stress



Development of Brain

Time: 15 sec



Development of Brain

The Art of Growing Up

Time: 3 min 32 sec



The Art of Growing Up

Participants will:

- Understand the fundamentals of adolescent brain development.
- Understand the impact of trauma on the brain and behavior.
- Develop strategies to cope with chronic stress.



Welcome! Now let's get into increasing our understanding of adolescent development. During this section we will talk about brain development. This material may seem information heavy at times. It's important to remember that our brain is the foundation of what we think, how we feel, how we act, and who we become.

In this section, we will talk about the fundamentals of adolescent brain development, how trauma can affect the way the brain develops, and coping mechanisms to deal with stress and trauma. To truly understand development, let's talk first about how the brain develops.

Let's watch a short and helpful video that explains the different phases of brain development as well as a few other interesting facts about the brain. We will discuss it after we watch it together.



Play video. <https://www.youtube.com/watch?v=0BJFoGK5GIY>



So as you saw, there are three major stages of brain development. Scientists and the professionals in our lives refer to these as early childhood, adolescence, and emerging adulthood.

In early childhood, your brain grows quite a bit. You not only have the ability to breath, eat, and live, but you gain the ability to speak, crawl, walk.

As the video explained, once you reach adolescence and hit puberty, your body really starts to change. Inside your head, your brain starts to develop more rapidly. It starts to make connections and causes you to crave excitement and take more risks. Into your adulthood, at about 18 years, your brain is still in development, especially your pre-frontal cortex where you start to develop emotional and social skills.

Thinking back to the video...

1	2	3
What stage of development are you in right now?	What signs do you have in your life that tell you that you are in this stage?	How do you think life will be different during your next life phase?

Self-Evaluation

Time: 5 min

The Three Main Parts of the Brain



Parts of the Brain

Time: 3 min

Participant

Manual: P. 17-18

The Adolescent Brain



The Adolescent Brain Video by Dan Siegel

Time: 4 min 36 sec



Self-Evaluation: Popcorn style responses from participants.

1. What stage of development are you in right now?
2. What signs do you have in your life that tell you that you are in this stage?
3. How do you think life will be different in your next life phase?



To understand brain development a bit deeper, we need to talk about the different parts of the brain. Think of your brain in the context of there being **three main parts**. These parts are: **the Executive Brain, the Emotional Brain, and the Survival Brain**. All of these parts of the brain are key parts of being able to function.

Your **Executive Brain** includes parts of the brain like the prefrontal lobes and the prefrontal cortex. It is the part of the brain that is responsible for things that require cognition such as thinking, decision making, organizing. Think of all the skills you need to plan a vacation.

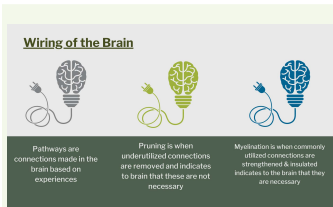
Your **Emotional Brain** includes parts of the brain like the limbic system which is responsible for emotional responses such as asking whether you feel loved or supported. Your emotional brain is the reason why you get excited for your vacation.

Your **Survival Brain** includes parts of the brain like the brain stem which regulates your heart, helps you breathe, and tells you when you are in danger. For example, when you get stuck at the airport on your way to your vacation destination. You will see this image of the brain later on in the presentation when we discuss what situations can cause us to utilize certain parts of the brain.

So we understand now that the brain has three main parts and functions. Now let's watch this video to learn more about how the brain makes connections for those parts to work together.



Play video: <https://www.youtube.com/watch?v=001u50Ec5eY>



The Wiring of the Brain

Time: 4 min

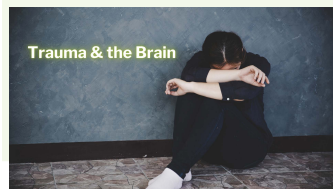


Our brain makes connections based on the things happening around us in our environment or through our experiences.

"Pruning" happens when we do not utilize a connection very much in our brain, and the connection disappears. This is because the brain is signaled that the connection is un-needed based on lack of use.

"Myelination" is the opposite of pruning. In myelination, the brain strengthens connections by insulating the pathway that has been formed when that pathway is used more often. Using a connection often indicates to the brain that it is a necessary connection, and it makes sense that the brain wants to protect it and keep it.

An example of this is a pathway that would first form once you find a newer and faster route to take to your favorite restaurant. When you take the new route more and more, you may find it hard to remember the old route because your brain has begun to prune it away as it is unneeded information. Soon it may become so easy to follow your new route that you barely even have to think in order to get there. This is because your brain has made that new pathway stronger as you take that route more and more



Transition: Trauma and the Brain

Time: 15 sec



Now that we understand how our brain connects our thoughts to our actions, let's talk about the impact of trauma on the brain's development.

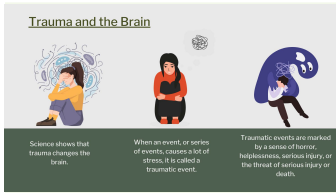


Revisiting Values

Time: 2 min



In the Intro, we talked about a Value that focuses on being aware of the impact of traumatic stress in our lives. That Value (#4) says: *Recognize the impact of trauma and other hardships and identify opportunities for healing including through connection to others and shared experiences.* In this section, we will address how trauma can impact our development. There will be an opportunity for us to discuss this deeper during our reflection.



Trauma and the Brain

Time: 3 min

Participant Manual: P.18

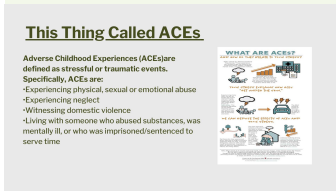


Since our brain develops based on our environments and experiences, chronic stress and trauma in adolescence can cause significant changes in how the brain forms its pathways.

Let's talk about what we mean when we say "trauma." Trauma happens when an event or series of events causes a lot of stress. Trauma happens especially when an experience causes a feeling of horror or helplessness. It can also happen when an experience involves serious injury, or a threat of injury or death.



What do you think when you hear this definition of trauma? Have you experienced moments where you felt helpless or had a very high amount of stress? Many people identify with having trauma. The world can be a challenging place sometimes, so it's hard to live in it without at least experiencing one of these things.



ACE's Overview

Time: 2 min

Participant Manual: P.18-20



In addition to trauma, Adverse Childhood Experiences, or ACEs, can also impact your brain development. Research on ACEs and trauma have shown that these experiences can cause damage to your brain that can affect your memory, emotional regulation, and your reaction to stress.

Adverse childhood experiences include: physical, emotional, and sexual abuse; physical and emotional neglect; mental illness or substance abuse in your household; having an incarcerated relative; seeing a parent treated violently; or having parents or caregivers who divorced.

There is a handout on ACEs on p. 20 in your Participant Manual if you would like to look at it



HOPE

Time: 2 min

You may have heard of ACEs because they have gotten a lot of attention and they are important, but it can also feel pretty discouraging or upsetting if you have already experienced a lot of these tough situations in your life. It is important to know that **positive experiences** can ease toxic stress and help children and youth grow into more resilient, healthier adults. An initiative called **HOPE** developed a scale to measure positive experiences and has shown that these strengths and forces for good in our lives can help us heal and protect us in the future. The Four Building Blocks of HOPE are: 1) relationships 2) safe, equitable, and stable environments 3) social and civic engagement and 4) emotional growth. These building blocks intentionally line up with the protective factors and strengths we are learning about in this training.

For more information on HOPE, you can go to: www.positiveexperiences.org

When Someone Experiences Trauma

- 01 Impacts all areas of development
- 02 May influence impulsive reactions
- 03 Poor view of self and difficulty regulating emotions
- 04 Affects ability to trust interpersonal connections & relationships

When Someone has Experienced Trauma

Time: 3 min



Let's think back to when we learned about how the brain is wired. Let's think about the brain of a person who has experienced ongoing stress or trauma during their brain's development.



What pathways might have been strengthened through myelination? Participants respond.



An example: A young person who has experienced multiple instances of violence may have a strong reaction of panic when someone throws up their hand for a high five.



What pathways might have been weakened or lost through pruning? Participants respond.

An example: A young person who had a chaotic home environment may not be used to silence, so silence may feel uncomfortable for them.

Generational Trauma

Descendants of those people impacted by chronic stress and trauma are more likely to be impacted by that trauma in their own DNA makeup before even being born.

Effects of this can change one's ability to cope with stressful situations in a way that does not negatively impact them.



Generational Trauma

Time: 2 min

Participant Manual:
P. 21



Someone does not have to experience trauma directly for their brain's make-up to be affected by it. Experiential information can actually be passed through DNA -- our genetic code -- for generations.

Transgenerational epigenetic inheritance, more commonly called generational trauma, is a research-backed concept that basically means that descendants of people impacted by chronic stress and trauma, such as victims of slavery, holocaust survivors, witnesses to terrorist attacks, natural disasters, etc. are more likely to start life with certain response pathways naturally built into their brains.

This may mean that the children, grandchildren, and great-grandchildren of trauma survivors start life with a changed ability to cope with stress.

Based on one's identity, bias in the community around you can also impact brain development...



Experience Impacts Development

Time: 3 min



Based on one's identity, discrimination, or bias in the community around you can also impact brain development.

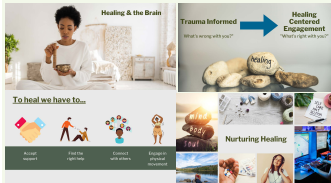
For example: institutional racism and violence towards young Black men in the community can affect a young Black male's ability to feel safe during his development and may cause trauma.

This shows up in schools, local community institutions, and on social media.



Trauma NOT Permanent

Time: 2 min



Healing

Time: 4 min



Activation

Time: 2 min

Participant Manual: P. 22



It can be very upsetting, sometimes overwhelming, to think about trauma and its impact. It's also really important to know that all of our brains are resilient and continue to grow and change -- that's called "neuroplasticity." Positive experiences and loving, kind, supportive, caring people can make a huge difference in our ability to understand, process, and come to terms with past trauma and losses. With support and time, we can move forward from tough times, eventually feel better and go on to thrive.



We also want to share the idea of "healing-centered care" that says young people have tremendous strengths and assets. Young people are not a set of problems or symptoms, but unique contributors to our society. Healing-centered care does not ask "What's wrong with you?" (which is problem or deficit-focused), and it doesn't ask: "What happened to you?" (which is trauma informed). Healing-centered approach asks: "What's right with you? What parts of your identity make you feel good and valued? How can your surroundings and community support you?" And remember, sometimes the adults in your life -- family, workers, teachers -- need to heal too.



Trauma causes a lot to happen in the brain. Activation is what happens in your brain when something reminds you about past traumas. This can include certain places, people, words, sounds, smells, sensations, etc.

When you experience these reminders, your brain signals a pathway to open. When this happens, you may feel unsafe or as if you were living through the trauma(s) over again. You can use your coping and relaxation skills to gain control over these reminders.

Activation cont...

Time: 2 min



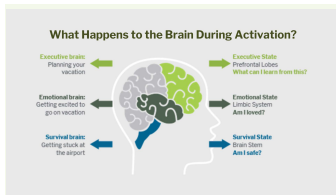
What are some other words you have heard people use to talk about activation? Participants respond. For example: "feeling some type of way"



Note to Trainers:

"Triggering" may come up as an example. If it does, mention to your participants that the word "trigger" itself may activate a trauma response for those who have been around gun violence.





Our Brain During Activation

Time: 4 min



Ask Participants to look at brain handout again on p. 17 of Participant Manual.

In the first part of activation, the brain starts to lose its ability to see things logically, moving us to focus solely on our emotional state.

In the **emotional state**, our brain starts to analyze how we feel about the situation at hand. Often times our emotional state can spiral into negativity, and we move into solely needing to survive.

When in **survival brain**, it's hard for us to do anything at all. In survival mode, it becomes impossible to think logically and self-regulate. Have you ever been so angry you can't make a sentence? In those moments your brain could be working in this state of activation.



What happens to behavior during activation?

Time: 5 min

Participant Manual: P. 22



There are four basic ways humans react to activation: Fight, Flight, Freeze, or Face

Fight: Repel and engage the threat.

Flight: Repel and disengage the threat.

Freeze: Attract and disengage the threat

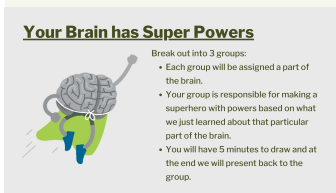
Face: Attract and engage threat



Which one do you identify with most? **Participants respond.**

Does anyone feel like it depends on the situation?

Which one do you think is most effective?



What is Your Superpower?

Time: 13 min

Participant Manual: P. 23



Did you know your brain had so many superpowers?

Now that we know a little bit more about how the brain functions, let's do an activity.



Directions:

Place participants into 3 separate groups after explaining the directions to them. If **in person**, use separate rooms, spaces, or tables for each group. If **online**, use virtual breakout rooms.

I am going to divide us up into 3 groups and give you each one of the three main parts of the brain. Assign one group the emotional brain, one group the executive brain, and one group the survival brain. [set up breakouts]. As we talked about earlier, all three parts of the brain play their own role in making the superhero that you are. Your task as a group is to draw and describe a superhero. This hero's powers should represent the functions of your part of the brain. Any questions? Answer clarifying questions from participants.

You will have 5 minutes as a team to develop and draw your superhero. Please give your hero a name too. Your time starts now. Set timer for five minutes. Update on time at the three and one minute remaining marks.

Okay, times up. Let's talk about your heroes. I'll go around and ask a representative from each group to tell us about the hero's name and what their powers are.



Debrief:

What is your super hero's name?

How did you choose that name?

What are your superhero's powers? Why?

Go around the room and allow each group to share.

Want to Learn More?

- Adverse Childhood Experiences
- Youth Guide to understanding Trauma
- Ted Talk on Trauma and the Brain



Here are some additional resources if you want to learn more.

Tip Sheet

- Recognize which of your life experiences may be considered trauma.
- Think about how trauma affects you.
- Start to notice when you are feelings activated
- Vision how you would like to respond when you get activated
- Use breathing and other calming techniques to help.



Tips & Resources

Time: 1 min

Participant Manual:

P. 24

L.E.A.F Activity



As we wrap up on adolescent development, let's think back to the information we learned today. Let's check in with our LEAF Debrief.

Take 1 minute to fill out the form

What did you **learn**?

What did you **experience** that you can apply?

What **action** steps do you want to take?

How do you **feel**?