

The Power of the Adolescent Brain: A TAG Talk

Transcript — Segment 2: Adolescents, Risk, and Behavior

Frances Jensen:

Hi, I'm Dr. Frances Jensen. I'd like to talk to you today about teen and adolescent brains, and how brain development relates to risky behavior. We've learned a lot about how neurobiology is explaining why teenagers have issues with risk-taking, impaired decision-making at times, and the inability to consider consequences of some of their actions. This can be vexing for adults, but there's really neurobiology behind this.

The process of connecting the brain, connecting the part of the brain, the frontal lobe, which is responsible for impulse control and decision-making, has not yet completed by adolescent years.

While the lack of connectivity, of full connectivity, of the frontal lobe may be a vulnerability of the teenage brain, the teenage brain also has a great strength. That is that a teenager can learn faster than adults. Their synapses, parts of the brain where our neurons, our brain cells, are connecting to one another, are more active. We use them to learn. Because teenagers have this extra strength in learning, they are learning machines, we could try to use that to help them learn cause and effect while their frontal lobe is still coming online, if you will.

This presents opportunities for parents, grandparents, educators, and other adults to have a positive impact on the teens' life. We know that enriching, positive experiences have lasting impacts at this age. Studies show that adolescents react more strongly to reward and risk than adults and children. Actually, the novelty-seeking area of their brain, the reward center, is actually more active in adolescents compared to adults and children.

Neuroscientists believe that the revved up response to reward and the underdeveloped impulse control, meaning the lack of full connectivity of their frontal lobe, really contribute to this greater risk-taking behavior seen in teens and adolescents.

Most people respond negatively when you combine the word teen and risk-taking. We all know the negative risks we want teens to avoid: smoking, drinking, drugs, driving too fast, texting while driving, and a myriad of other poor choices that they can make. We often forget that teen and young adult life also requires some aspect of novelty-seeking and positive risk-taking. Starting with your first job, volunteering in the community, going off to college, having your first romantic relationship, managing your own money, renting your first apartment, these are all positive risks that teens and young adults should take and learn from. It is truly a process of trial and error that shapes our brains.

The trick is pointing out their natural tendencies towards positive risks and understanding that teens may need what we call a frontal lobe assist from the adults around them at times. Adults can help teens with thinking through their positive and negative consequences of some of their decisions before and after they take action. Focusing on the positive aspects of teens' risk and behavior may be more important as highlighting the negative parts. Adolescents have energy and enthusiasm and they can learn so fast that we can use this very positively.

Teens are open to new experiences and intellectual challenges more than they will later in life. They're ready to try new things, work to overcome obstacles and difficulties, and they will learn a great deal in

this process. All of this helps build positive self-concept, confidence, and independent living skills. For more information on what adults can do to support positive risk-taking and skill development, and reduce negative risk-taking, please check out the resources and the other segments in this series. Thank you.