

Teen Brain Development - What's Going on Here?

Back when your children were little, you probably had several good books explaining in minute detail about how babies and young children grow and develop and how all those changes affect children's behavior. Hopefully understanding about the developmental reasons for separation anxiety at 9 months and tantrums at 2 made you a more effective parent. The same thing is true now. Understanding adolescent development and what's happening in the teen years is an invaluable tool for you to have as your child moves through the teen years.

Teen development, just like any other stage of human development, does not progress in an orderly, linear fashion. Although we may wish the developmental path was a straight and narrow highway, it's actually more like a meandering country road - going this way and that, twisting and turning, progressing in "fits and starts". Just when you think your child is showing a great deal of maturity, he or she does something totally outrageous. That's partly because the developmental pieces aren't necessarily in sync. At any given moment, your teenagers can be at several stages of development. Your 14 year old can have the physical development of a 16 yr. old, the cognitive development of a 14 year old and the social development of an 11 year old. No wonder teens are confused! No wonder parents are confused!

Most parents have heard or read a lot about the physical changes that are most obvious in the early-mid teens years- the growth spurts and the rapid development of sex characteristics. But sometimes we forget how stressful all these physical changes can be. How would you like to wake-up and find yourself in a body you don't even recognize! You have to admit, it would be disturbing. Add to that, the stress of comparing yourself to all the other developing teens and wondering if you're "normal". Parents can help tremendously simply by listening empathetically to their teens' concerns and by providing accurate information about the wide range of normal teen development.

Parents may not be as familiar with the even more profound changes going on in the teenage brain. Until about a decade ago, scientists believed that the brain was fully developed by the onset of puberty. Now researchers have found that all that brain development isn't complete until young people are in their twenties. That explains a lot, right? So, what is going on in the teenage brain?

The big thing to remember is that the teenage brain is a work in progress. According to researchers, in many ways the teen brain is more like a child's brain than an adult's. The neuron connections that affect emotional skills and mental and physical skills are still being formed. So if you think your teen acts impulsively and irrationally at times, or if you think your teen's moods change in a nanosecond, you're probably right. But it's not because they want to drive you crazy, it's because the parts of the brain that make decisions and process emotions aren't working well together yet.

The prefrontal cortex is the part of the brain that makes judgments - the "seat of reason". It's the part of the brain that sorts out unclear information and makes decisions. It's the part that tells us to slow down and think before we do something crazy. In teens the prefrontal cortex is still developing and making connections to other parts of the brain. It's not working at the same capacity as an adult brain. What **is** working in over-drive is the amygdala - the part of the brain associated with gut reactions and emotions. So your teen is working with lots of raw emotions that are not being well-moderated by reason. So what can parents do to be supportive and encouraging through all this development?

- Teens are moody because they are overwhelmed with emotions, not because they are terrible people. Perhaps the most helpful thing parents can do is to listen and observe with an empathetic, reasoned, non-judgmental attitude. Even when confronted by a slammed door, we are the grown-ups with the fully developed brains and we can not afford to let our emotions take over.
- Teens are still learning to read other people's emotions - including yours. They see anger where none exists and miss it when it's right in front of them. Although you may think your anger or disappointment is obvious to your kids, it may not be. Parents need to talk about how they feel – don't assume your teen will know you're angry by looking at your face. When you name your feelings, teens learn better how to name their own feelings.
- Because the prefrontal cortex is not fully wired, teens, especially young teens, can have trouble with organizing, planning and setting priorities. Parents can help teens set their own priorities by talking about school work and other activities and the time needed to get it all accomplished. Parents can also help teens limit their activities if they seem over-whelmed. And it's up to parents to set some boundaries and insist that homework be done before other activities.
- With the amygdala in over-drive and the prefrontal cortex not fully wired, teens tend to “leap before they look”. On the one hand, risk-taking can be very positive and lead teens to try a new activity, get to know new people or take a leadership role. On the other hand the thrill of risk-taking can lead to dangerous behaviors – like diving off cliffs in local parks or downing 10 shots of whiskey. Parents can certainly support positive risk-taking. And you as parents can help limit negative risk-taking by setting limits, knowing where your teen is and who they are with. Even with all our best efforts, teens may do stupid things. If you think your teen is involved in risky behaviors, don't ignore it. Talk to them, get help.

The bottom line is your teen still needs you in his/her life. Your teen needs to have the benefit of your fully functioning brain while hers/his is still developing. Loving and supporting teens in a way that respects their developing autonomy and reasoning skills while still acknowledging their developmental limits is a difficult task. The balance is hard to find – but all the effort you make now will help ensure that your teen does continue to develop to his or her very highest potential.

Assets Framework: Researchers have identified 40 developmental “assets” that have a powerful positive affect on youth – things like positive family communication, school engagement, family boundaries, adult role models and caring neighborhoods. Many of these assets are experienced through relationships with caring adults – adults like you! For more information or to send any feedback on the articles, please contact Mary Ann Moran at mmoran@arlingtonva.us or 703-228-1671. You can also visit our website: www.arlingtonpartnershipforyouth.org (11/05)