

THE BEAUTIFUL, OPEN, ADOLESCENT BRAIN: AN OPPORTUNITY FOR PARENTS TO MAKE A DIFFERENCE

Lisa Filholm February 16, 2016

Teenagers Are Worth It.

On the bright side, living with teenagers keeps us in the moment. They are a constant invitation to remain flexible, keep learning, and see the world through new eyes. Meeting them where they are requires vigilance and super-human tenacity but it's worth it. When you break through a sullen stare and connect with a teenager, when you get a glimpse of the funny, confident, fascinating grown-up lurking behind the angst (almost but not-quite ready to see the light of day) you can see it's worth it. Staying on the sunny side of the street is easier said than done when we're faced with real-live hooligans, but it's worth it every single time.

In this post I discuss a new, beyond-hibernation, beyond-Mama-Bear role model for parents of teens: The Artist, who reminds us to see our children (and ourselves) with forgiving eyes. Now I'll get into the nitty-gritty of why adolescents need such expansive and constant forgiveness.

It's Not Their Fault: Consider the Teenaged Brain.

Nothing in a teenager's life seems in control. Their thoughts and emotions are tangled and often scary. They are astute enough to recognize hypocrisy but naive enough to be frightened by it. The adults in their lives do contradictory, weird things. Many teens find it impossible not to vocalize every thought in their brains. Some burst into tears without reason. Their bodies betray them daily in ways that baffle and humiliate them.

Pleasure Rules.

It's really way beyond their control. During adolescence the human brain is hard at work developing and organizing itself for the demands of adulthood. As soon as the puberty engines start revving, emotions rule the brain and body. It takes years for higher-level cognitive functions to catch up. Adolescence is a time of impulse, sensation, immediacy and growth. The body and brain explode with chemical and physical activity. Young people are super-vulnerable to sensations and feelings because it's all limbic-system and dopamine receptors during these years—whim and pleasure and thrill-seeking. The pre-frontal cortex—which controls impulse, weighs consequences and regulates action—lags behind in development. In short, they're slaves to their desires because everything good feels *so much better* to a teenager. Until that frontal lobe is fully formed, there's not much preventing kids from obeying the dictates of their pleasure sensors, all the time. We can't trust them to make sound decisions because—mind, body and spirit—they are programmed to do the opposite. (Steinberg, 2014)

Teenagers=Sponges (Sensation is Everything)

You know how certain smells or sounds can evoke specific-but-random memories of your own teenaged years? Personally, the aroma of Bonne Bell Bubblegum Lipgloss, stale Coors Light or a Russian Olive tree in the month of May can send me into intense high-school reverie. (Never mind the power of certain Grateful Dead, Steve Miller Band or Pink Floyd songs to transport me right back to my freshman dorm room.) We are all sensory sponges during those salad days; adolescents literally see colors more vividly, taste food more intensely and feel the wind on their faces more keenly than they will at any other time in their lives.

Even when they act exactly like they're not listening, teenagers are experiencing, feeling and absorbing everything around them. When I taught high school I took advantage of their condition by making my classroom beautiful and pleasant. I eschewed overhead fluorescent lights for lamps and strings of small bulbs. Whenever possible, I used solid wood furniture and played good music during passing periods. I treated the walls as thoughtfully as I do my own home and kept the room smelling sweet. For adolescent people (and all of us—but more so for them), good feelings beget more good feelings. I primed their brains to soak up as much grammar and literary analysis as possible by appealing to their hyper-reactive senses.

Now that my former students are all grown-up, they remember me for many things. Sometimes it's stuff I meant to teach them—how to write a solid argument or deconstruct a text—but more often it's the sensory experience we shared. They thank me for introducing them to reggae-rapper Matisyahu, for hanging butterflies from the ceiling, for offering a cozy respite from the high-school storm. I did not always leave my students with the lessons I intended because they soak up *everything* during those sensitive years. But I left them with something. It's a good reminder of how important it is to tread lightly with impressionable, unpredictable teenagers.

The Plastic Brain: Open to All Outside Influences

Should we doubt just how impressionable they are, we need only look at recent research confirming the brain's intense "plasticity" during adolescence. The malleable nature of the brain allows us to learn from experience and adapt to the environment. It is a quality that engenders more of the same: brains challenged and nourished during these years will develop into more resilient adult brains. The brain is primed to learn from new experiences during this time in everyone's life. Laurence Steinberg, MD employs several useful analogies to help us understand this plasticity, which is heightened during the early years of childhood and again during adolescent development. Clay is reminiscent of our brains, he writes: easily shaped by outside experience when it is raw, nearly impossible to manipulate once it hardens. Electrical wiring, too, helps us understand: during times of greater plasticity, the brain makes and strengthens new, more efficient connections. Teenaged brains are hard at work re-wiring, ensuring full power from all outlets in adulthood. The metaphor I love best is the open window of the brain. During adolescence, its malleable nature means the window is thrown wide open to the influences of the outside world (without the protection of a screen or curtain). Along with sweet summer breezes and bird songs, the open-window brain lets in pollution, vermin and weather. A plastic, moldable brain is an opportunity to experience the fullness of life. It is also a liability, susceptible to all the negative influences the world has to offer.

Here again is a reason not to check out, parents. See how often I remind you? When our children are tiny we believe we have a big influence in their lives. Otherwise we wouldn't invest in all those Baby Einstein videos and mommy-and-me yoga classes. It can be a hard pill to swallow but the teenaged brain is similarly receptive to our input and influence. If we engage, we can help our kids take advantage of their awesome new brains. They can actually learn to be better adults because these are the years when they are learning to self-regulate. They are learning the skills of making plans and following them, controlling their behavior, working with other people and understanding long-term consequences. When these tasks are interrupted, people tend to repeat mistakes and patterns of reckless behavior well into adulthood. Let's re-invest in our terrible, tempestuous teenagers and their beautiful, fragile brains. They're worth it every time.