

# **Attention Teenagers – Something is happening to your brain!**



**BCEI Booklet #13**

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You are “adolescent”. A big word with heavy meaning for most of us who’re over it and perhaps ‘the best of years/the worst of years’ for you. What’s happening?

Well, it all started when you were between eight and ten years of age. This is the end of the ‘critical period’ when you brain changes from a learning sponge to something you’re going to have to work to use properly in the future. Did you ever wonder how you ever learned to speak English without studying like you do a new language now? You learned it when your brain was in a special state required for learning your first languages, but those years are gone now, which means you have to work harder for the same result (see Doidge 2007).

When you were about ten years old your brain realized it had far too many synapses. It started a period of active “synaptic pruning”. Synapses are the connections between neurons. Between 10 and 13 you could be losing as many as 30,000 synapses *every second*. What your brain is doing is getting rid of the weakest connections and keeping those that are useful. It’s a ruthless process that could clear away about half of your synapses. Your brain is specializing itself based on its experience to date.

Your frontal lobes during this stage are being renovated. These lobes are the areas which make you civilized human beings, they control planning, judgment, wisdom, kindness and consideration. Psychologist Andrew Fuller says someone should

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hang a sign on teenagers' frontal lobes saying "CLOSED FOR CONSTRUCTION".

Your brains are, for the early teen years, ruled by other parts. Your amygdala has a great time – making you more emotional, ready for a fight or running away, and more romantic (for the first time you start showing interest in the opposite sex). The trouble is your ability to forward plan and control your impulses is switched off for a while too, so your parents are meant to plan for you. That's their job and it's important – too much freedom now can be a disaster for you.



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At 12 or 13 you're really about to grow – you may put on 20 kg and get 50 cm taller in the next few years as well as getting hairy and other obvious changes. Your friends are really important now and popularity for some people is more important than ever – some kids will take big risks to gain peer acceptance. You spend a lot more time talking with your peers than to adults. You may sometimes be going “ballistic” when asked to take out the trash, and wonder why you have to do *everything*. You are developing your sexual identity but your need for privacy has grown considerably. You probably have a “KEEP OUT” sign on your bedroom door whereas three years ago you had “No girls/boys allowed”.



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In your later teens you may also be feeling stressed because you feel you have little control over your life. Things may happen to you that are really negative in these years but later on they won't seem as important. Your views on many things (sex, money, your future) might be so different from your family's that for a few years you're going to have conflict.



This is common enough to be normal, but not compulsory so don't wish it on yourself. You might also be feeling angry or aggressive. You're probably taking risks you would never have done a few years ago. You may be experimenting with drugs or alcohol. You may be breaking your parents' hearts but think that that's not your problem! Or you may be a sweet teen sailing through without any of these problems.

All of us find our own pathway, and most of us survive well. You've just got to make sure you're one of the survivors.

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References:

- Doidge, Norman (2007) *The Brain That Changes Itself*, Scribe
- Fuller, Andrew (2007) *Tricky Kids – Transforming Conflict and Freeing Their Potential*, Finch.

Visit [www.braincompatibleeducation.com](http://www.braincompatibleeducation.com) for more free information booklets about brain compatible education.



*Derek Pugh is an experienced Principal and teacher in both Australian and International Schools. He now runs workshops in Brain Compatible Education for students, teachers, parents and corporate groups worldwide. Workshop participants discover the*

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