

NB: This is not a word-for-word transcript

Neil

Hello and welcome to 6 Minute English. I'm Neil...

Rob

... and I'm Rob. Hello.

Neil

Hello, Rob. I like your new hoody.

Rob

Oh, right! Thanks a lot. A **hoody** is a sweatshirt with a hood, by the way. You don't think I'm too old for hoodies, do you?

Neil

Never. No, no. You too old? Never, Rob! It's all about how young you feel inside, isn't it?

Rob

Is that right? Well, I don't feel a day over sixteen, Neil.

Neil

Excellent! Now, that might help you because in this programme we're talking about the teenage brain! So, are you ready for today's quiz question, Rob?

Rob

Yes, I am Neil. Fire away.

Neil

OK. What part of the brain is connected with basic emotions? Is it the...

- a) prefrontal cortex?
- b) cerebral cortex?
- or c) limbic system?

Rob

OK. I was terrible at biology – I never listened in class. So I'm going to have to take a guess and say the answer is a) prefrontal cortex.

Neil

OK, well. We'll find out if that's the right answer at the end of the programme. Now Rob, were you a well-behaved student?

Rob

Well, I wasn't badly behaved. But we had a horrible school uniform and sometimes I got **detention** just for having my shirt hanging out.

Neil

Well, that's pretty harsh! Detention means having to stay at school after the day to do extra work.

Rob

Yes it was a punishment for doing something wrong. Now some people think that typical teenage behaviour such as embarrassment, anxiety, mood swings and risk taking is caused by changing hormones.

Neil

Mood swings are sudden changes of mood and **hormones** are chemicals in the body that stimulate cells and organs into action.

Rob

Yes. I bet you were a moody teenager, Neil!

Neil

I might have been (in a teenage voice)... no, let's not go there, Rob. Now, apparently, it's not only our hormones that change when we reach **adolescence** – that's the age when we start changing into an adult.

Rob

That's right. According to scientific research, some teenage behaviour is probably caused by changes in the brain. Let's listen to Professor Sarah-Jayne Blakemore talking about this. What's the phrase she uses to mean 'to enjoy'?

INSERT

Sarah-Jayne Blakemore, Professor of Cognitive Neuroscience, University College London

There's a pretty established theory of risk taking – the biological basis of risk taking – which is that two different systems in the brain developed at different rates. The parts of the brain called the limbic system, which includes the regions of the brain that give you a rewarding

feeling out of taking a risk, a kind of kick out of taking a risk, and an emotion out of taking a risk, are developing more quickly than the part of the brain called the pre-frontal cortex, which inhibits risk taking.

Neil

So what risks do teenagers typically take?

Rob

Well. The things most parents worry about, such as drinking, smoking, possibly taking drugs, and driving too fast.

Neil

And the reason that they take these risks might be because the area of the brain that rewards risk-taking behaviour develops more quickly than the area of the brain that **inhibits** – or slows down – risk-taking behaviour.

Rob

And what was the phrase she used to mean ‘enjoy something’?

Neil

It was to **get a kick out of something**. Teenagers ‘get a kick out of’ and are rewarded for taking risks by one part of the brain – the **limbic system** – while the other part – the **pre-frontal cortex** – does little to slow things down.

Rob

Well, that sounds more fun than being an adult. But actually, we often give teenagers a hard time. Let’s hear more about this from Sarah-Jayne.

Sarah-Jayne Blakemore, Professor of Cognitive Neuroscience at University College London

Something that I’ve noticed since working with teenagers is that they are the butt of many jokes. And they’re parodied left, right and centre. They’re demonized in newspapers. And whenever I tweet anything about the teenage brain – which I do quite frequently – invariably, inevitably, I’ll get a reply from someone saying, ‘Oh, what, teenagers actually have brains?’

Neil

Now of course some teenagers are very brainy – **brainy** is another way of saying clever. I know young people who are brilliant at maths, art and science.

Rob

But we heard Sarah-Jayne describe teenagers as being the **butt of a joke** – that means to be its target. And if you **parody** someone you copy their style in an exaggerated way to make people laugh.

Neil

And **to demonize** a person or a group means to talk about them as if they were evil or threatening. Poor teenagers, Rob!

Rob

Oh, don't worry, Neil – they'll grow up and be like us one day! And now it's time to hear the answer to today's quiz question.

Neil

Yes it is. I asked you, what part of the brain is connected with basic emotions? Is it the... a) prefrontal cortex? b) cerebral cortex? or c) limbic system?

Rob

And I chose a) prefrontal cortex. Was I right?

Neil

Well. I'm afraid to say, Rob, that you were absolutely wrong.

Rob

Using the wrong part of my brain, obviously.

Neil

Yes. The answer is c) the limbic system. But don't get too emotional about getting that wrong and instead, please remind us of the words we learned today?

Rob

Good idea. We heard:

hoody

detention

hormones

adolescence

inhibits

get a kick out of something

limbic system

prefrontal cortex

brainy

butt of a joke

parody

to demonize

Neil

Well, that's the end of today's 6 Minute English. I hope you got some kicks from today's show! You can hear more programmes at bbclearningenglish.com. Please join us again soon.

Both

Bye.

Vocabulary

hoody

a jumper or sweatshirt that has a hood on it

detention

a period of time children have to stay at school after classes have finished as a punishment

hormones

natural chemicals produced in animals that control how they develop and grow

adolescence

time period in life when a person changes into an adult

inhibits

(here) slows down or stops

get a kick out of something

(informal) to enjoy

limbic system

part of the brain that encourages young people to take risks

prefrontal cortex

part of the brain that encourages a young person to slow down

brainy

clever

nothing between the ears

stupid

butt of a joke

target of someone's joke/made fun of

parody

copy someone's style in an exaggerated way

to demonize

to talk about someone/something to make people believe they are/it is evil or threatening