

青少年的大脑 The teenage brain

Hello. This is 6 Minute English, I'm Neil.

大家好，这里是六分钟英语。我是内尔。

And I'm Rob.

我是罗伯。

What do you remember of your teenage years?

你还记得你青少年时期的什么事？

Oh, I was a nightmare.

哦，我那时就是个噩梦。

I was rude to my parents, always stayed out late, never did my homework.

我对我的父母很没有礼貌，总是在外面待到很晚才回家，从来不写作业。

hung out with the wrong people and made lots of bad decisions.

跟不好的人出去闲逛，并且做了很多错误的决定。

How about you, Neil?

你呢，内尔？

Well, much the same really.

嗯，跟你差不多。

People always say that about teenagers, don't they?

人们总是这么谈论青少年，不是吗？

That they go through a period where they are out of control and behave badly.

他们所经历的那段失控、行为失当的时期。

But apparently, it's not their fault.

但是很显然，这不是他们的错。

At least not directly.

至少不是直接原因。

So whose fault is it?

那么，是谁的错呢？

Our brains', apparently.

显然是我们大脑的错。

Teenagers' brains are still developing in areas that control behaviour, which could mean that you can't blame them for acting the way they do.

青少年的大脑中控制行为的部分仍然在发展，这意味着你不能因为他们做事的方式而责备他们。

Before we find out more, let's have our question.

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在我们进一步了解之前，我们来看看今天的问题吧。

There have always been teenagers, but when was the word 'teenager' first used to refer to the 13 – 19 age group?

青少年这个词一直存在，不过世界是什么时候第一次用青少年指代13-19岁这个年龄群体呢？

Was it: a) the 1920s, b) the 1930s, or c) the 1950s? Any ideas, Rob?

是 A. 20世纪20年代，B.20世纪30年代，还是 C. 20世纪50年代呢？有头绪吗，罗伯？

Well, I think it came along around the time of rock and roll, so that would have made it the 1950s.

嗯，我认为它出现在摇滚年代，所以应该是20世纪50年代。

That's my guess.

我是猜的。

I'll have the answer later in the programme.

我会在稍后的节目中揭晓答案。

Sarah-Jayne Blakemore from University College London specialises in the workings of the brain, particularly the teenage brain.

来自伦敦大学的莎拉·杰恩·布莱克摩尔是大脑运转方面的专家，尤其是青少年的大脑。

Recently she was a guest on the BBC Radio programme, The Life Scientific.

她最近作客BBC电台节目，《科学生活》。

She explained that the understanding that the brain is still developing during the teenage years is quite new.

她解释道认为大脑在青少年时期仍然在发展的这一理解非常新。

When does she say the first research came out?

她说第一篇研究是什么时候出现的呢？

The first study showing that the human brain undergoes this very substantial and significant development throughout adolescence and the twenties; the first papers were published in the late 90s.

最早表明人类大脑在青春期和20岁这段时间经历着这一至关重要的发展的研究；最早的论文于90年代末期被发表。

Before that, and for example when I was at university, the dogma in the text books was that the vast majority of brain development goes on in the first few years of life and nothing much changes after mid-childhood.

在那之前，例如我上大学的时候，教材中的教条写的是大脑绝大部分的发展在生命的前几年进行，而在童年中期过后就没有什么大的变化了。

That dogma is completely false.

这种教条完全是错误的。

So when did the research into the teenage brain come out?

所以她说对于青少年大脑的研究是什么时候出现的？

Surprisingly, it wasn't until the late 1990s.

很令人惊讶，直到20世纪90年代才出现。

This was when she said that the first papers on this subject were published.

她说这时第一批关于这个主题的论文被发表出来。

Papers in this context means the results of scientific research which are published.

在这个语境中，论文指的是被发表出来的科研成果。

And she didn't actually talk about teenagers, did she?

而且她事实上并没有说青少年，对吧？

No, that's right.

是的，没错。

She talked about the period of adolescence.

她说的是青春期。

This noun, adolescence, is the period when someone is developing from a child into an adult and it more or less is the same as the teenage years.

这个名词的意思是某人从一个小孩成长为一个成年人的时期，并且它或多或少跟青少年时期有重合。

What I found interesting was that before the 1990s people believed something different about the way our brains develop.

我发现的有趣的一点是，在20世纪90年代之前，人们对大脑发展的方式的认知有所不同。

Yes, Professor Blakemore said that the dogma had been that our brains are mostly fully developed in early childhood, long before adolescence.

是的，布莱克摩尔教授说教条一直以来都说我们的大脑在童年早期就基本发展完全了，早在青春期之前。

Dogma is a word used to describe a strong belief that people are expected to accept as true.

教条这个词过去被用来描述人们期待被当作真理而接受的强烈的信念。

So our brains are still developing much later than was originally thought.

所以我们的大脑在比原先认为的要晚得多的时期仍然在发展。

What does this tell us about teenage behaviour?

这又告诉我们关于青少年行为的什么内容呢？

Of particular interest is an important part of the brain called the prefrontal cortex.

值得注意的是，大脑中有一个非常重要的部分叫做前额皮质。

Here is Professor Blakemore again.

下面还是布莱克摩尔教授的话。

What excuse can she give for teenagers who don't get their homework done in time?

她对于青少年无法按时完成家庭作业给出了什么样的解释呢？

The prefrontal cortex is the part of the brain right at the front, just behind the forehead and it's involved in a whole range of very high-level cognitive tasks such as decision making and planning—we know that this region is undergoing very very large amounts of development during the adolescent years.

前额皮质是大脑前部的部分，就在额头后面，并且它参与各种高水平认知任务，例如做决定和计划——我们知道这个区域在青春期时期正进行着大量的发展。

And so in terms of the expectations that we place on teenagers to, for example, plan their homework, it might be too much given that we know that the region of the brain that critically involved in planning is not developed yet.

所以说到我们对青少年所寄予的期待，例如计划他们的家庭作业，这个可能过头了，鉴于我们知道大脑中非常重要地涉及规划的那个区域还没有发育完全。

So the prefrontal cortex is important in cognitive tasks.

所以前额皮质在认知任务中非常重要。

What are those, Rob?

那是什么，罗伯？

A cognitive task is one that requires conscious thinking and processing, such as making decisions and planning.

认知任务指的是要求有意识地思考和处理的任務，例如做决定和计划。

It doesn't happen automatically, you have to think about it.

它并不是自动发生的，你得思考。

So in the adolescent years this part of the brain is not fully developed.

所以在青春期，大脑的这个部分还没有发育完全。

Note the adjective form here of the noun we had earlier adolescence.

请注意这里我们之前提到的名词青春期的形容词形式。

So this gives a good excuse for not doing your homework!

所以这是不做家庭作业的一个很好的理由！

Ha, I wish I'd known that.

哈，我真希望我早点知道这一点。

I used to say that I'd left my homework on the bus or that the dog had eaten it.

我过去常常说我把我的家庭作业落在公交车上，或者狗把它吃了。

Now I could say, "Sorry sir, my brain isn't developed enough for the cognitive task of planning my homework".

现在我可以說：“对不起，老师，我的大脑还没有发育完全，不能做规划家庭作业的认知任务”。

Yes, I'm sure that would work!

是的，我肯定这会奏效的。

Before we wrap up, time to get the answer to this week's question.

在我们结束之前，该揭晓本周节目的答案了。

I asked when was the word 'teenager' first used to refer to the 13 – 19 age group?

我之前问青少年这个词什么时候被第一次用来指代13-19岁的年龄群体。

Was it: a) the 1920s, b) the 1930s, or c) the 1950s?

是 A. 20世纪20年代, B.20世纪30年代, 还是 C. 20世纪50年代呢?

Rob, you said?

罗伯, 你说的是?

I guessed c) 1950s.

我猜的是 C. 20世纪50年代。

And the answer is actually b) the 1930s.

答案其实是 B. 20世纪30年代。

Very well done if you knew that.

如果你知道答案的话就太棒了。

Now a quick review of today's vocabulary.

现在快速地回顾一下今天的词汇。

Adolescence is the noun for the period of change from child to adult and the adjective is adolescent-this same word is also the noun for someone who is in that teenage period.

青春期这个名词指的是从儿童到成年人的变化时期, 形容词形式是adolescent——这个词也用作名词, 指的是处于那个时期的人。

So an adolescent might be responsible for adolescent behaviour in his or her adolescence.

所以青少年可能要为他或她的青春期行为负责。

Exactly.

确实。

Papers is the word for published scientific research.

论文指的是发表的科学研究。

Dogma is strongly held beliefs that are not challenged.

教条指的是被强烈认定的不可挑战的信念。

The prefrontal cortex is an important part of the brain which deals with cognitive tasks.

前额皮质是大脑中处理认知任务的非常重要的一个部位。

And cognitive tasks are mental processes that require active thought and consideration, such as planning and making decisions.

认知任务指的是要求积极思考和考虑的心里过程, 例如规划和做决定。

Well, my decision making skills tell me that it's time to finish.

嗯, 我的决策技巧告诉我是时候结束了。

Well, your skills are working well, Neil.

嗯, 你的技巧表现得很好, 内尔。

We may be going now but you don't need to-you can listen or watch us again and find lots more learning English materials on our social media platforms.

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See you soon, goodbye.

待会见。

Goodbye!

再见。
