
科学家们发现，通过对大脑部分区域进行无创刺激，可增强人们的记忆力，效果至少能维持一个月。专家发现，参与实验的志愿者接受电流刺激后，在单词记忆任务中表现得更好，这些任务测试了即时“工作”记忆和长期记忆。

Our brain works by **firing off electrical impulses**. The team at Boston University used this in order to **boost** memory.

我们的大脑通过发送电脉冲来工作。美国波士顿大学的研究团队就利用了这一原理来提高人们的记忆力。

They asked volunteers to wear a cap filled with **electrodes**, then used precise **electrical currents** to alter their **brainwaves** in 20-minute sessions of brain **stimulation**. These took place every day for four days, and the group's ability to remember a list of words was tested. The results, published in the journal Nature Neuroscience, showed improvements in memory lasted at least a month.

研究人员让志愿者戴上一顶装满电极的帽子，然后用精确的电流改变其脑电波，对大脑进行每次 20 分钟的无创刺激。实验连续进行了四天，然后测试了志愿者们记忆一组单词的能力。测试的结果发表在《自然-神经科学》期刊上，志愿者们记忆力改善的效果至少维持了一个月。

The researchers were able to boost two types of memory. They improved the volunteers' **long-term memory**, which is how we can remember our first day at school, and also working memory, which is for **the here and now**, such as remembering what platform your train's on.

研究人员能够提高两种类型的记忆。他们改善了志愿者的长期记忆，就是帮助我们记得第一天上学时的情景的记忆，同时还改善了工作记忆，就是用于记住此时此刻发生的事情的记忆，比如马上要乘坐火车的站台号。

The researchers are now investigating whether this technology can be used in the treatment of Alzheimer's disease, when **brain cells** have already started dying, as well as in **schizophrenia** and **obsessive-compulsive disorder**.

研究人员正在研究这项技术能否用于治疗患病时脑细胞已开始萎缩的阿尔茨海默病，以及精神分裂症和强迫症。

1. 词汇表

firing off	发射，发送
electrical impulses	电脉冲
boost	提高，改善
electrodes	电极
electrical currents	电流
brainwaves	脑电波
stimulation	刺激

long-term memory	长期记忆
the here and now	此时此刻，当前
brain cells	脑细胞
schizophrenia	精神分裂症
obsessive-compulsive disorder	强迫症

2. 阅读理解：请在读完上文后，回答下列问题。（答案见下页）

1. True or false? *The results of the research showed improvements in memory lasted for at least two months.*

2. What knowledge did the team at Boston University use to boost memory?

3. What did the researchers ask the volunteers to wear?

4. Which two types of memory were the researchers able to boost?

3. 答案

1. True or false? *The results of the research showed improvements in memory lasted for at least two months.*

False. The results, published in the journal Nature Neuroscience, showed improvements in memory lasted at least a month.

2. What knowledge did the team at Boston University use to boost memory?

The team at Boston University used the knowledge that our brain works by firing off electrical impulses to boost memory.

3. What did the researchers ask the volunteers to wear?

They asked the volunteers to wear a cap filled with electrodes.

4. Which two types of memory were the researchers able to boost?

They were able to boost long-term memory and working memory.