Is free will an illusion, and how can we tell?

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

It is perhaps the most famous experiment in neuroscience. In 1983, Benjamin Libet sparked controversy with his demonstration that our sense of free will may be an illusion, a controversy that has only increased ever since.

Libet's experiment has three vital components: a choice, a measure of brain activity and a clock.

The choice is to move either your left or right arm. In the original version of the experiment this is by flicking your wrist; in some versions of the experiment it is to raise your left or right finger. Libet's participants were instructed to "let the urge [to move] appear on its own at any time without any pre-planning or concentration on when to act". The precise time at which you move is recorded from the muscles of your arm.

Physiologists had known for decades that a fraction of a second before you actually move the electrical signals in your brain change. So it was in Libet's experiment, a fraction of a second before participants moved, a reliable change could be recorded using the electrodes. But the explosive result was when participants reported *deciding* to move. This occurred *in between* the electric change in the brain and the actual movement. This means, as sure as cause follows effect, that the feeling of deciding couldn't be a timely report of whatever was causing the movement.

Read full, original post: Why do we intuitively believe we have free will?