How our brains reward us during sleep to reinforce positive experiences

Memory's function is to store information that will be useful. Because of this, our mind prioritizes remembering some things over others. Studies have <u>shown</u>, for example, that it's easier to remember things that are useful for survival. Might sleep similarly focus on things that are particularly good or bad for us, like food and dangerous animals, and ignore things that are irrelevant to our well-being, like the exact shape of a cloud?

A recent <u>study</u> by the University of Geneva's Virginie Sterpenich and colleagues tried to find out. They had subjects play two computer games, which were designed to be engaging and to use two very different brain areas. One game involved picking a target face out of a set of 18, and the other game involved navigating through a Duke Nukem-derived 3D maze.

•••

It turned out that, yes, the participants' brains revealed they were doing a kind of "neural replay" of the game they had been manipulated to win.... The reward you felt after "winning" the face game made a neural replay of it more likely to arise in your sleep.

Follow the latest news and policy debates on sustainable agriculture, biomedicine, and other 'disruptive' innovations. Subscribe to our newsletter. SIGN UP

This suggests that our minds are rehearsing things during sleep and that they preferentially feature things that are good for us over experiences that don't matter to us.

Read the original post