

State-Dependent Learning



by Armando Simón

State-dependent learning was discovered decades ago, but is a phenomenon that is not well known outside the field of psychology, that is, not known as a formal fact. Or if you prefer, the term is not well known, since the phenomenon itself has been experienced by many people.

Psychologists put rats in a maze that had to navigate the maze to get a piece of food at the end. Through trial and error, their performance improved, and they did not waste time wandering about, but went straight to the food.

When they put new subjects in the maze, these subjects were injected with a drug. The drug did not impair learning at all through the number of trials, and the time spent getting to the food was shortened, as usual. After they learned the maze, when they were put back in the maze, but without being injected with the drug, however, their performance went back to square one, but if they were placed back in the maze after being injected once again, their performance went back to the previous (learned) level. Simply put, the drug became part of the learning and memory experience.

There are people who have drunk alcohol so much at a bar or

party that the next day they cannot remember what happened at the party. Sometimes, they will wake up next to a naked, sleeping, person next to them. If the sleeping man, or woman is ugly, and has his/her arm under the man's/woman's head, the person might feel like being a trapped fox and think of gnawing his arm off so he can make his getaway. Regardless, if the partygoer later drinks as much alcohol as he did that night, he will remember what he did (and who she was).

But here is the thing: state-dependent learning does not necessarily need an extraneous substance to manifest itself. We have all of us experienced it. Like so: you are in a room and you need to do something, so you head out, but you are distracted by something or other and you forget what you were going to do. The quickest way to remember is to go back to the same room. You may even have to be in the same position that you were in, or face the same direction. Chances are that your task will spring back to mind.

Armando Simón is a retired psychologist, author of *When Evolution [Stops](#)*.