

B.2.2

Examples of the Placebo Effect

Caffeine Placebo

In a study testing sleep deprived students, Anderson and Home, (2008) demonstrated that the students experienced increased mental performance, increased reaction time and felt better if they thought they were drinking caffeinated coffee. The key word is “thought”. In the study the coffee was actually decaffeinated. However, if the students were told that the coffee was decaffeinated there were no improvements.

Alcohol Placebo

In 2003, researchers Assefi and Garry showed that participants who believed they were drinking alcohol experienced feelings of being drunk and actually showed impaired judgments. The participants were told that they were drinking vodka, but in reality were given only tonic water. The researchers took 148 students and split them into two groups. Half of the students were told they were getting Vodka and tonic water and the other half were told they were just getting the tonic water. The research was carried out in a bar-like room equipped with bartenders and vodka bottles. However, in reality, both groups just got plain tonic water. What happened? The group that believed they were drinking vodka experience memory lapses and some even showed physical signs of being intoxicated the longer the study went on and the more water they drank. When told the truth, many students insisted that they were in fact drinking vodka because they felt drunk.

Sham Surgery Placebo

In 2013, Sihvonen et al., developed a test to see if arthroscopic knee surgery was an effective way to treat knee pain. Participants with severe knee arthritis were brought to a surgical center and received actual surgery or a sham surgery. In a sham surgery the patient undergoes anesthesia and the doctor makes incision in the knee but never inserts instruments. An incision is made and stitched up, but no surgery was ever done. What do you think the results were? You may have guessed it, as long as the patient believed they had surgery and underwent the same recovery period as those who received the surgery, they believed it helped. All patients underwent a knee mobility exercise at the conclusion of the healing time, and there were no differences between those that received the surgery and those that thought they had received the surgery. In some cases, those who received the sham surgery felt better and even performed better on the knee agility exercises!

Placebos without deception

It is widely believed that for a placebo to work there must be some type of concealment and the patient has to think they are actually taking a medication that has been shown to treat their condition. However, in 2010 Kaptchuk et al., demonstrated that even if the patient is told they are being given a placebo that is nothing more than a sugar pill, it can still help them if they believe that it will! In this study, patients with severe irritable bowel syndrome (IBS) were given placebo pills that were labeled as “placebo pills made of an inert substance, like sugar pills, that have been shown to produce significant improvement in IBS symptoms through mind-body self-healing processes”. Even with the disclaimer that the pills were just sugar patients showed a significant improvement of IBS symptoms. Apparently, the part that

read “have been shown to produce significant improvement” was enough to convince the participants.



This content is provided to you freely by BYU-I Books.

Access it online or download it at

https://books.byui.edu/bio_461_principles_o/examples_of_the_plac.