

The Connect Between CBD, Productivity, and the Placebo Effect

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Introduction

In recent years, productivity in the workplace has been a growing concern for many employers. Workplace stress and pain are among the most prevalent and common disabling conditions within the United States workforce, which translates to reduced quality of performance (Stewart et al. 2003). In an attempt to search for productivity-boosting methods, research suggests that cannabidiol (CBD) may reduce motivation challenges (Zlebnik et al. 2016). The stigma surrounding CBD roots from the misconception that CBD is tetrahydrocannabinol (THC), another cannabinoid derived directly from the hemp plant, a cousin of marijuana. THC is the one to credit for the intoxicating high and euphoria marijuana users feel once ingested. Alternatively, CBD is not a psychoactive substance and helps ease symptoms of anxiety, depression, PTSD, pain, insomnia, and much more. CBD can be the easy fix to boosting workplace productivity and their employee's moods.

However, there are a few limitations to CBD being primarily responsible for great performance. Although there has been extensive research conducted on CBD and its benefits, there is a lack of information available on the role of the placebo effect and how it impacts studies on CBD. Scientists are unsure how the placebo effect works, but the most widely accepted theory is that the placebo effect is based on a person's expectations (Benedetti et al. 2005). Theoretically speaking, placebos work when an individual wholeheartedly believes it will. The body can be fooled into adjusting its chemistry to cause the effects a substance is expected to cause.

I hypothesize that productivity is boosted from the use of CBD and similar results are produced when individuals undergo the placebo effect.

## Methods

This experiment will serve to test if CBD reduces procrastination and increases productivity. Two different groups would be established. Both groups would consist of individuals with ages ranging from early to mid-late 30s – an age range that is, on average, when bodies begin to decline and muscle mass decreases (Volpi et al. 2004). These individuals would work as delivery package drivers – a job that requires large amounts of physical labor and concentration to ensure accurate deliveries. The first control group (group A) would complete a twelve-hour shift without any substances that affect productivity or moods. The second group (group B) would complete the same twelve-hour shift with CBD oil in their system. Both groups would report their levels of productivity, stress, mood, and pain.

The second experiment would serve to test if CBD relief symptoms are due to pharmacological effects or placebo effects. Two different groups would be established using the same variables for age and job tasks as the prior experiment. The first group (group A) would complete a twelve-hour shift with CBD oil in their system. The second group (group B) would complete the same twelve-hour shift and be told that they have consumed CBD oil. They would be given a liquid similar to CBD oil to test the placebo effect. Both groups would be told they received real CBD oil. Both groups would report their levels of productivity, stress, mood, and pain. The next day, the same experiment would be conducted again, except the variables and groups would be swapped. For example, group A would receive the fake CBD oil, and group B would receive actual CBD oil. This allows the study to observe if the study participants can identify the effect CBD has on their mind and body, despite its presence. Both groups would report their observations and effects throughout the day.

## Results

The results would be expected that the individuals in the first experiment that did not use CBD oil (group A) would report no change to their everyday work and emphasize high levels of stress and existing pain. The individuals that did use CBD oil (group B) would expectedly report reduced levels of stress and muscle pain, and an increase in mood, productivity, and quality of work. The results of the second experiment would be expected that group A and group B report similar symptoms: lower stress levels and pain, heightened mental capacity, and improved productivity. It is expected that both groups would not be able to identify which day they had received actual CBD oil.

### Discussion

CBD has a demonstrated history of easing anxiety and stress, which is a growing concern within the next generation, and considering the recent pandemic, employers should be searching for ways to improve the overall wellbeing of their employees inside and out of the workplace. CBD is a fantastic fix to lack of productivity and decreases the epidemic of workplace stress. CBD's productivity benefits are so great, it could be studied to treat ADHD/ADD symptoms. The proposed study does, however, have its limitations, such as the consideration that CBD doesn't work for everyone and may not work for some at all. The second study was conducted to determine if CBD relief symptoms are due to pharmacological effects or placebo effects. If the expected results prove true, then it draws the question of why an individual would invest in CBD. However, if the overall goal of CBD is feeling happier, healthier, and more productive, then it should be deemed a beneficial and natural product to use recreationally, academically, and professionally.

## End References

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