

Don't Trip; TRIPP! The Effect of a Virtual Reality Meditation Environment on Stress and Mindfulness

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Virtual Reality, or VR, is the creation of a simulated 3-dimensional environment in which the user can be immersed. With many people transitioning to an online and at-home atmosphere, and depression and anxiety on the rise, people are seeking health and entertainment. Can those in self-isolation who are unable to confide with others find peace in an effective VR meditation experience? Using VR as the central focus, mental fitness can be more interesting, safer than in-person therapy, and better than online conferences. Using 3 Oculus Quest headsets, 16 participants were instructed to reach a goal of 8 total meditation sessions by scheduling time slots to safely meditate at the researcher's house. Before the study began, each participant filled out a stress and mindfulness survey, and before each session, heart rate, blood oxygen, and blood pressure were measured using a blood oximeter and blood pressure monitor. After meditating for about 35 minutes in the VR meditation software, the physiological factors were measured again and analyzed. On average, the stress scores saw an 18.61% decrease, the mindfulness scores saw a 5.24% increase, 68.75% of the blood pressure readings saw a decrease, and the closing scale increased by 9.33%, indicating that the meditation experience was indeed effective. Additionally, 88% of participants said that the VR component positively impacted their meditation experience, half of the participants said they noticed meditation improved their sleep quality, and 75% of the participants said they would recommend the VR meditation experience to a friend.

Awards Won:

American Psychological Association: Honorable Mention