Relax VR:
Digital Worlds, Real Relaxation

Abstract

hello@relaxvr.co

www.relaxvr.co

Over the last 25 years an increasing number of publications have emerged showing the efficacy of Virtual Reality Exposure Therapy (VRET) in the treatment of anxiety-related disorders. However, to date a limited number of studies have investigated the use of Virtual Reality (VR) for supporting stress management and promoting mental well-being in the general population.

Given this context, a research study has been conducted in the Psychology Department of the Universitat de Vic - Universitat Central de Catalunya to examine the efficacy of VR accompanied by an audio narrative to induce relaxation and positive emotions in a non clinical sample. Using a within-subject experimental design, 30 healthy participants were exposed to two conditions delivered through a Google Daydream Head Mounted Device (HMD):

- *Condition 1 - Catatonic*: A 360º horror film in which the user becomes a mental health patient in an insane asylum. For 7 minutes the participants are ushered through a psychiatric wing and experience the full brunt of madness within. In the present research Catatonic was used to induce anxiety and negative emotions on the participants.

- *Condition 2 - Relax VR*: A VR-App specifically designed to help users confront stress and anxiety. The App combines the exposure to immersive 360º videos of natural landscapes with relaxation narratives and soothing music. For the present study, a 5 minute narrative based on the Yoga Nidra technique was combined with the exposure to a tropical beach to induce positive emotions, and substitute the negative emotions induced with Catatonic.

Before and after the exposure to each VR experience the participants' emotional state was assessed through the following questionnaires: State-Trait Anxiety Inventory (STAI-S, Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) and Positive and Negative Affect Schedule (PANAS, Watson, Clark, & Tellegen, 1988). A series of one-way ANOVA with repeated measures were performed to examine variations in the emotional state across the conditions.

The results showed that the exposure to Catatonic increased subjective anxiety ($p<.001$), induced intense negative emotions ($p<.001$), and decreased the positive emotions ($p<.001$) of the participants. However, after being exposed to Relax VR the levels of anxiety ($p<.001$) and negative emotions ($p<.001$) were significantly reduced, being lower than those found during the baseline line. In a similar way, Relax VR was able to promote a positive mood on the participants ($p<.001$). The detailed results of the research performed by Eudald Gil and Ivan Alsina at the UVIC-UCC University can be found (in Catalan) at: https://goo.gl/fxv9MC

These findings suggest that VR is a viable tool to induce different moods in the users. In particular, the use of VR for relaxation represents a promising approach as a stress management tool. This study will be followed up with intervention studies to evaluate the efficacy of Relax VR in clinical populations.

relax vr

Rest, Relax and Meditate
in Virtual Reality

f fb.com/relaxvr

🐦 @relaxvr

📷 @relax_vr