

VR Mindfulness- Based Stress Reduction for Chronic Pain Treatment

Morgan A. Stinson Ph.D., LMFT, Andrea S. Meyer Ph.D., LMFT, Andrew Benesh, & G. Bowden Templeton, Ph.D., LMFT

BACKGROUND

Pain is a frequent cause for clinical visits with approximately 45% of the population seeking medical help for pain at some point in their lives.

- Pain is found across the lifespan and it has been estimated that four out of every ten people with moderate or severe pain do not get adequate relief.
- Regular mindfulness practice benefits people both mentally and physically, but many populations who could benefit do not practice mindfulness.
- Virtual Reality (VR) is a new technology that helps capture participants' attention and gives users the illusion of "being there" in the 3D computer-generated environment, facilitating a sense of presence.
- By limiting distractions from the real world, increasing the sense of presence, and giving people an interesting place to go to practice mindfulness,

PROTOCOL

For meditation practice, a commercially available Guided Meditation VR application (YouTubeVR) was used with the VR Device.

- As each meditation consists only 10-15 minutes in this app, we help patients select a calming environment (e.g. forest, beach, nature).
- Patients are able to explore a calm, 3D environment with running water features with soft chirping bird and gentle wind sounds.
- Using a controller, participants could move to different positions in the forest to explore or find a particular viewpoint they liked and found most conducive to their meditation.
- A narrative script provided audio guidance on the meditative practice about managing chronic pain.



Take-Home Points

- Growing research of efficacy of using VR Mindfulness—especially with populations that struggle with engaging in mindfulness practices.
- Similar to traditional mindfulness practices, it is important to translate the patients' VR mindfulness-based experience into relevant, pragmatic goals or values.
- **Free Guided Meditation Script Link:**
https://www.youtube.com/watch?v=HBa5_rXNSxw&t=1s

