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The Role of Virtual Reality in the Treatment of Anxiety





The Role of Virtual Reality in the Treatment of Anxiety Problems

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Virtual Reality (VR) first emerged as a tool for mental health over 15 years ago. Studies have examined VR as both a standalone and therapy-augmenting tool, with preliminary findings indicating a role for VR for individuals struggling with anxiety. In a recent literature review by Li Pira and colleagues (2023), the authors summarize the current status of VR and its effectiveness in promoting positive mental health. Findings ranged from mixed to beneficial across studies, with the major takeaway of VR being a cost-effective and largely scalable approach to helping with mental health. The authors caution, however, that future studies should be conducted to develop and improve VR software. Below are some of the studies examining VR for anxiety, with a summary of the findings.



POWERS & EMMELKAMP (2008) - META-ANALYSIS OF VIRTUAL REALITY EXPOSURE THERAPY (VRET) FOR ANXIETY DISORDERS

FINDINGS:

This meta-analysis reviewed various studies on VRET across different anxiety disorders, including specific phobias, PTSD, and social anxiety. The analysis found that VRET is as effective as traditional exposure therapy, with large effect sizes observed for both anxiety reduction and symptom improvement. The study concluded that VRET is a viable and effective alternative to traditional exposure therapy, particularly for patients who may not have access to real-world exposure opportunities.

IMPLICATIONS:

VRET offers a practical and accessible option for treating anxiety disorders, with outcomes comparable to traditional methods.



ANDERSON ET AL. (2005) - COGNITIVE BEHAVIORAL THERAPY FOR SOCIAL ANXIETY DISORDER USING VR

FINDINGS:

This study focused on treating public-speaking anxiety, a common form of social anxiety disorder, using VR to simulate public speaking situations. The study found that participants who underwent VRET showed significant reductions in anxiety levels compared to those who received traditional cognitive-behavioral therapy (CBT) alone. The immersive nature of VR helped participants to face their fears more effectively in a controlled environment.

IMPLICATIONS:

VR can enhance traditional CBT for social anxiety, particularly in helping individuals to confront specific social fears like public speaking.



REGER ET AL. (2013) - VRET FOR COMBAT-RELATED PTSD

FINDINGS:

s study examined the use of VRET to treat combat-related PTSD among military personnel. The findings indicated that VRET was effective in reducing PTSD symptoms, particularly in helping individuals process traumatic memories in a controlled and gradual manner. The study highlighted the ability of VR to recreate realistic combat scenarios that can be tailored to individual experiences, facilitating exposure therapy.

IMPLICATIONS:

VRET is a promising treatment for PTSD, particularly for combat-related cases where traditional exposure methods may be difficult to implement.



PARSONS & RIZZO (2008) - META-ANALYSIS ON VR FOR SPECIFIC PHOBIAS

FINDINGS:

This meta-analysis reviewed studies on the use of VR in treating specific phobias, such as fear of heights, flying, and spiders. The results showed that VR-based treatments led to significant reductions in phobic symptoms and anxiety levels, with outcomes comparable to in vivo exposure therapy. The ability to control and customize the exposure scenarios in VR was a key advantage.

IMPLICATIONS:

VR is highly effective for treating specific phobias, offering a safe and controlled alternative to traditional exposure methods.



