VR and Therapy

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Article Summary

Key points from Forbes, VR Brings Dramatic Change To Mental Health Care

- Clinicians have put VR in the top three anticipated new treatments in mental health.
- VR systems can recreate an extremely detailed rendition of a traumatic incident.
- VR games can help reduce pain in young hospital patients by 24%.
- VR can be used in nursing homes, allowing patients to travel to places new and old, which can aid in memory recall and provide relief from the assisted living, offering an increase to quality of life.

Technology Involved

- Motion Tracking Headsets and Input devices
- Game engines
- Psychoanalysis
- Exposure Therapy



Relevant Tenets of Psychoanalysis

human behaviour and cognition are largely determined by instinctual drives that are rooted in the unconscious;

liberation from the effects of the unconscious is achieved by bringing this material into the conscious mind through therapeutic intervention;

Cognitive Behavior Therapy and Exposure Therapy

Cognitive Behavior Therapy (CBT):

- Psychotherapeutic treatment-
 - Involves identification, recognition, and changing of negative or destructive behaviors
- Provides a way to cope with thoughts and feelings effectively.

Exposure Therapy:

- Applied Psychoanalysis-
 - Antiphobic treatment involving controlled exposure to stressors
- Achieves 'Transference' -
 - Allows greater insight by allowing a medical professional to examine exposures alongside a patient

Stakeholders

- Healthcare Companies
- Technology Companies
- Mental Health Patients







Advantages and Disadvantages



Advantages:

- Healthcare Companies
 - Using VR can help decrease dependencies on certain drugs
- Technology Companies
 - There is an expected nearly \$4 billion market
- Mental Health Patients
 - "A combination therapy [of medication and psychotherapy can] be more effective than either alone"

Disadvantages:

- Healthcare Companies
 - Additional training will be needed for all medical practitioners, and may be costly.
- Technology Companies
 - Can be costly in development
 - Every experience must be unique
- Mental Health Patients
 - This treatment doesn't work on everyone.
 - There is a possibility of more anxiety as a result of VR Exposure Therapy.

Major Impacts



- Who Virtual Reality Exposure Therapy (VRET) helps:
 - Those suffering from depression, anxiety disorders, panic disorders, phobias, OCD, PTSD, and more.
 - VR therapy is a safe and drug free therapy.
 - It can target phobias that would otherwise be impossible to receive safe therapy for.
- Why it's effective:
 - VR can recreate a scenario that causes fear and anxiety in people (Iraq/Afghanistan war zones for military personnel, sitting in an airplane for those with fear of flying, or a room full of people for those with social anxiety)
 - VR can "commandeer a patient's brain so it no longer focuses on pain"

Other Issues

- VR Therapy is still an expensive treatment, at minimum requiring at least thousand dollars per headset on top of the fee for the required software.
- The VR Headsets must also be simple, sterile and ready to use outside of the box.
- At this point in time, there are no "VR clinicians" to explain how and why to use VR therapy to the general consumer.
- Some patients could be too immersed in the therapy, causing them to prefer to VR over the real world.



Ethical Concerns

- Efficacy of the treatment
- Expense of treatment
- Risks of panic attacks and other episodes of distress
- Portrayal of sexual violence



Code of Ethics

- Real Virtuality: A Code of Ethical Conduct: Recommendations for Good Scientific Practice and the Consumers of VR-Technology
 - Written by Michael Mdary and Thomas K. Metzinger
 - The first code of ethics written for Virtual Reality
- Medical Ethics
 - Autonomy
 - Justice
 - Beneficence
 - Non-maleficence



Recommendations for Research Ethics of VR

- 1. Non-maleficence
- 2. Informed consent
- 3. Transparency and media ethics
- 4. Dual use
- 5. Internet research
- 6. The Limitations of a Code of Conduct

Recommendations for The Use of VR by the General Public

- 1. Long-term immersion
- 2. Increasing virtualization of social interactions
- 3. Risky Content
- 4. Privacy

Sources

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