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Virtual Reality Therapy: Revolutionizing Mindfulness and Anxiety Management in Modern Counselling

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Abstract: In today's fast paced life with immense competition for humans, stress and anxiety is very common. As per the World Health Report,1 out of 4 people suffer from neurologicalor mental disorders. A part from the traditional therapy interventions, modern therapy offers innovative therapies including virtual or augmented reality therapy as line of treatment. We know that psychiatry offers comprehensive care through both therapeutic and medical approaches and unlike psychologists, psychiatrists prescribe medicines and address underlying physical causes of mental health issues to diagnose and treat conditions such as anxiety, depression, anger management, bipolar disorder, schizophrenia using medication, psychotherapy (talk therapy), and brain stimulation therapies (ECT,TMS) etc. Before deep diving into the various aspects of virtual reality therapy (VRT) which is nowadays revolutionizing mindfulness and anxiety management in modern counselling, it is necessary to understand as to how and why modern technology seeped into day-to-day modern psychotherapy and psychiatrist practices. The answer is simple – with over exposure to online presence via various gadgets on social media, digi space, workfront exposure, binge watching and so on, dependency on virtual assets is extensive for people. This is why virtual reality interventions in modern counselling is required, which in turn uses immersive, simulated environments to treat mental health issues such as PTSD, anxiety, phobias, depression by offering safe and controlled exposure, empathy building, and social skills training, allowing gradual desensitization, new Behavioural practices, building self-compassion, and so on. VR offers customizable, repeatable, and ecologically valid experiences, enhancing traditional therapy by making triggers manageable and allowing for embodied self-reflection, though challenges like cost and patient acceptance.

Keywords: Virtual Reality, Augmented Reality, Anxiety, Mental Disorders, Depression, Counselling, Anxiety Management, PTSD, VRET.

Introduction - The new wave of immersive technology which is transforming mental healthcare practices is called virtual or augmented therapy. It working mechanism is simple: (a) **immersion:** Headsets create believable virtual worlds (airports, social gatherings, traumatic scenes); (b) **control:** therapists adjust intensity (e.g., adding smells, changing crowds) and replay scenarios; and (c) **embodiment:** users inhabit avatars, allowing them to experience situations from different perspectives (e.g., giving advice as a therapist).

The key applications include (a) **virtual reality exposure therapy (VRET):** safely confronts fears (heights, flying, public speaking) in controlled, adjustable settings to reduce anxiety; (b) **PTSD:** recreates traumatic scenarios for processing and desensitization, (c) **social anxiety/ skills:** practices social interactions in realistic but safe simulations, useful for autism spectrum disorder and social phobias. **Depression & self-compassion** uses 'embodied self-counselling' where users advise themselves from an avatar's perspective (e.g., a supportive friend or family member) to improve self-acceptance. Further, **stress & pain management** reduces distress in chronic pain and palliative care. At any time or place, patients can be transported into immersive and interactive virtual worlds that are fully controlled by the researcher or clinician. This capability is central to recent interest in how VR might be harnessed in both treatment and assessment of mental health conditions. As per a review report of Grand View Research, the market size of AR and VR in healthcare is projected to reach staggering $41.18 billion by 2030.

It is to be noted that clinical potential of VR in improving accessibility to care, supporting immersive and personalized interventions, and enhancing patient engagement and outcomes across many mental health contexts is substantial. Across many findings, VR is also shown to contribute to pain distraction, cognitive training, and social skill development. Recent findings underscore the increasing relevance of VR in mental healthcare and the need for continued research to guide its broader implementation in clinical practice.

Virtual Reality Therapy and Mental Healthcare: Benefits & Challenges: Virtual reality (VR) therapy uses a computer-simulated world as a treatment tool. A person might use it to practice new skills, face a fear in a safe environment, or become more confident in social interactions. VR therapy does not replace standard treatments for mental health conditions. Instead, most clinicians use it as an additional treatment. For example, a therapist might use VR as a part of cognitive behavioural therapy (CBT), empowering a client to test new skills in a more controlled environment than in the real world. A number of studies have found that virtual reality therapy can be effective for managing various mental health conditions, including anxiety, depression, post-traumatic stress disorder (PTSD), and phobias.

The benefits of VR therapy includes: (a) **safety and control** that is, it offers a safe space for confronting triggers for the individual patient, (b) **customization** that is, environments can be tailored to individual patient's requirements, (c) **accessibility** that is, can reach remote or mobility-limited patients, (d) **engagement** that is, gamification and immersive nature can boost motivation, and (e) **better outcomes** (in many cases) as it improves maintenance of results and reduces daily life interference compared to traditional imagery.

Virtual reality (VR) effectively reduces symptoms in individuals with anxiety disorders,Including PTSD, specific phobias, and performance-based anxiety, according to Donnelly *et al.* (2021) in "Virtual Reality for the Treatment of Anxiety Disorders: A Scoping Review." Of 28 studies, 17 showed positive out comes with VR. One study established no major difference between standard care and VR treatment, while another showcased that standard care was more effective due to unrealistic VR stimuli. The remaining 9 studies confirmed VR's Feasibility for coaxing therapeutic anxiety levels, with one noting that immersive CAVEVR (which uses a multi-projection environment) provokes even greater anxiety.

The major challenges or limitations of VR therapy in mental healthcare include (a) **cost and access** that is ,high cost of equipment and accessibility limitations for usage, (b) **training** hat is, specific training for the therapists using it, and (c) **ethics** that is, privacy concerns and over-reliance on technology.

Working Mechanism of VR Therapy: VR therapy uses virtual scenarios as a therapeutic tool. A person may wear a headset or use a device to immerse themselves in the virtual world and interact with it, for example, a family member. It is possible to simulate a wide variety of worlds and scenarios with VR, which makes it useful for constructing situations that are hard to recreate in real life or that could be too scary or risky, for example climbing a mountain. Therapists may use VR to allow patients to practice real-life challenges, revisit a past event, or help an individual confront his fears in a controlled environment. Researchers published the first paper on VR therapy over almost three decades ago, but as the technology has improved with time, interest in this therapeutic tool has increased substantially.

VR therapy works by allowing people to act out, practice, or revisit situations in a safe environment. This may, (i) reduce fears, (ii) teach life skills, (iii) build confidence, and (iv) help process a situation that happened in the past and overcome its outcomes. By filtering the real-world risks, VR can also make something frightening feel more manageable. For example, a person with a phobia may not be ready to confront it in real life. Inter acting with a simulation in VR may help such individuals to slowly become accustomed to the object/reason of their fear (phobia) and learn it is not a threat. This is how VR may help bridge the gap between therapy and the real-world scenarios especially day-to-day challenges for the patients.

Therapists originally used VR therapy to treat phobias, but over time, therapists have tried it for a variety of mental health conditions. Some of the conditions could VR help with as discussed below.

(i) Phobias: Therapists can use VR for exposure therapy, which is a main stay of phobia treatment. It involves gradually exposing a person to what they fear in small, manageable steps with their consent. The exposure therapy can be done without VR, but sometimes, this is difficult to do. For example, a person with a fear of flying cannot fly on an airplane for a few seconds and work their way upward. Additionally, other phobias, such as a fear of wild animals, could put someone in danger if they try to interact with one. VR expands the possibilities of exposure therapy. A 2022 systematic review of 18 articles found that this approach improved almost all types of specific phobias the research included, such as animal phobias and blood or injection phobias, and so on.

(ii) PTSD: Exposure therapy can also help treat PTSD (post-traumatic stress disorder), but as with phobias, controlled exposure to a traumatic situation can be difficult and may not be very safe. A handful of studies suggest that VR therapy offers an alternative. For example, a 2019 review and meta-analysis of nine previous studies compared the effects of VR exposure therapy to no therapy. In comparison to the participants who received no treatment, VR therapy reduced PTSD symptoms, and the benefits continued for at least three months after the treatment ended.

(iii) Social and emotional skills: A person can practice various social and emotional skills using VR therapy. For example, they might practice talking through a conflict with their partner or asking their boss for arise. This allows them to safely test new skills while under the guidance of a therapist.

(iv) Anxiety and depression: A review of previous research works notes the potential for VR to help with multiple aspects of anxiety and depression treatment. VRT can help people understand mental health, visualize CBT techniques, teach self-compassion, simulate other therapies,

such as gardening or animal-assisted therapy.

Anxiety Management, Mindfulness and VR Techniques: Anxiety management, mindfulness, and VR techniques when combined by using immersive virtual reality to create calming or exposure-based environments, help individuals practice mindfulness skills (for example, focused breathing in a virtual mountain) or safely confront fears (such as height, public speaking) which reduces anxiety, and offers a controlled, engaging way to train the brain for real-world calm and resilience. VR enhances traditional mindfulness by reducing distractions, allowing for better focus on breath or sensory input in simulated natural settings, and serves as a tool for virtual reality exposure therapy (VRET) for treating phobias and PTSD. Studies show VR mindfulness consistently lowers stress, anxiety, and negative emotions, thereby enhancing positive feelings, attention, and relaxation. VR-mediated behavioural practices show similar results to face-to-face exposure therapy.

The efficacy of mindfulness training is, however, influenced by an individual personality. Those who have higher levels of trait mindfulness may be less anxious, less stressed, and more confident. They may also be more effective self-regulators with better mental-health outcomes than those with relatively low mindfulness straits. Both *trait* and *state* mindfulness can be measured via self-reported questionnaires and other psycho-physiological approaches. Mindfulness-based interventions, or MBI, are designed to address particular mental issues, and they may be implemented together with other clinical treatments.

The most used MBIs are mindfulness-based cognitive therapy (MBCT) and mindfulness- based stress reduction (MBSR).The mechanism of MBCT is designed to inspire individuals to demonstrate more self-compassion and self-acceptance. MBSR, on the contrary, aims to mitigate stress by raising the individual's awareness of the present moment. Both MBCT and MBSR were found to be effective in treating depression and other mental disorders in adult population. Traditional MBI usually requires eight weeks to be spent under the guidance of professional trainers. This is demanding, and many individuals find it challenging to commit to such levels of attendance.

In recent years, a combination of mindfulness and/or meditation training with virtual reality (VR) has been promoted. This model generally comprises specific professional guidance alongside changeable virtual immersive environments, background music, and instant evaluations. Studies have, meanwhile, verified the feasibility of incorporating VR within mindfulness training. One such study found that participants in VR-based mindfulness practice believed their feelings of calmness, relaxation, and peace improved, as did their general emotions and state mindfulness. Good-looking scenery, soft music and gentle audio guidance that applied in VR may help users to focus their attention on the practice. This suggests that VR-based mindfulness practice may help individuals maintain present-moment awareness and block distractors and may be more effective than conventional mindfulness approaches. There are draw backs as well such as sub-optimal video quality, the heaviness of VR headsets and the potential for motion sickness, high costs, and limited accessibility, affecting its overall effectiveness for some users.

In research-based case studies, overall, the outcomes of participants' mood, anxiety, sleep quality, mindfulness level, cognitive function, and experience of meditation are measured using standardized questionnaires and objective measurements. More details about Measurements and all citations applied in the included studies are noted down and evaluated.

It has been reported that training son both group (VR-based mindfulness training versus conventional mindfulness training) effectively decreased participants' stress, and the participants in VR-based mindfulness group reported less stressful than those in control group.

VRT as Progressive Alternative Therapy in Modern Counselling- VRT's versatility allows for personalized and progressive treatment, making it effective in many therapeutic settings. VRT has demonstrated a success rate of 66–90% for individuals with PTSD when combined with cognitive behavioural therapy (CBT), as explored in "Virtual Reality Applications in Chronic Pain Management: Systematic Review and Meta-analysis" by Goudman *et al*. (2022).

Clark Atlanta University's Human-Computer Interaction Laboratory established Virtual Reality Therapy (VRT) in 1992 as a therapeutic intervention using computer-generated environments. Max North pioneered Virtual Reality Therapy (VRT) research, starting in 1992 at Clark Atlanta University. North's ground breaking work included key publications and the development of therapeutic applications using computer-generated environments, with a focus on treating anxiety disorders and PTSD.

Researchers Pot-Kolder *et al.* (2020) examined the economic viability of VR-based CBT for treating paranoia in psychosis in the study "Cost-Effectiveness of Virtual Reality Cognitive Behavioural Therapy for Psychosis: Health-Economic Evaluation With in a Randomized Controlled Trial." The trial, conducted with 116 participants, demonstrated that VR-CBT led to a considerable uptick in social participation, with 90.74-99.74% of patients experiencing benefits over standard treatment. The cost per quality-adjusted life year (QALY) gained was estimated at •48,868 (approx. $53,000), indicating VR-CBT as a cost-effective option, though further long-term analysis is suggested.

A survey conducted in 2012 involving 262 therapists who had not previously utilized virtual reality (VR) revealed concerns regarding training, equipment, costs, and a lack of understanding of the benefits and applications of VR, as explored by Schwartzman *et al.* in "Perceptions of Virtual Reality Among Therapists Who Do Not Apply This

Technology in Clinical Practice." However, by 2019, a survey of 185 behavioural therapists indicated reduced concerns related to technical and cost issues, as VR equipment had become widely commercialized since 2016 as discussed by Lindner *et al.* (2019) in Attitudes Toward and Familiarity with Virtual Reality Therapy Among Practicing Cognitive Behaviour Therapists: A Cross-sectional Survey Study in the Era of Consumer VR Platforms."

The challenges of virtual reality therapy are ethical considerations, technological limitations, the need for trained therapists, security and privacy concerns, and high costs of technology. These challenges preclude the productive implementation of virtual reality therapy, influencing accessibility and efficacy for individuals seeking treatment.

Conclusion: Mindfulness practices constitute a form of meta cognitive training by which individual scan take control and balance the physiological processes that determine cognition, mood, and well-being. Virtual reality maximizes therapeutic outcomes, especially for people with Disabilities or difficulties with conventional interventions. Virtual Reality Therapy (VRT) is an immersive therapeutic technique that uses virtual environments to simulate real-life scenarios for psychological or physical treatment, especially simulate different real-life Triggers or scenarios to help people learn new skills, or to face their fears in a safe environment. Initially, therapists used it for the treatment of phobias, but today, the rapists use it for a range of conditions. VR can provide a controlled space to try things that could beover whelming or risky in real life, making it useful for exposure therapy. However, as with any therapy, it is important to seek care from a licensed, experienced practitioner. A 2021 scoping review that assessed nine previous studies that combined VR with CBT found that it could benefit the treatment of anxiety and depression. Virtual reality provides numerous benefits facilitating training conditions, optimizing the experience, and increasing the effectiveness of interventions. In addition, it strengthens self-control skills. These results indicate also that those physiological parameters, which are out of human control, can be modified with self-control practices. To try VR therapy, a person needs to find a licensed psychotherapist with access to a VR device. Virtual Reality Therapy (VRT) is revolutionizing mental healthcare, offering innovative treatment for a variety of anxiety disorders, phobias, and attention-related challenges. While exposure therapy (the safe exposure to situations or activities that induce fear) has been a long standing effective therapeutic tool for treating anxiety and phobias, the process can often be time-consuming, impractical, and expensive. VRT offers a safe and effective way for individuals to face their fears, build resilience, and develop coping strategies without ever leaving the therapy room. VR technology can facilitate mindfulness learning by reducing the interference of distractors from the natural environment and providing a sense of presence in immersive environments. These qualities have great potential to benefit research in that extraneous variables that would otherwise be uncontrollable can be limited. There has been widespread use of VR-based MI in diverse clinical areas including psychosis.

References:-

1. How AR/VR is Revolutionizing Mental Health Treatment in 2025https://share.google/00aQFrW4YDkWtEjv4accessedon 11thDecember2025.
2. https://www.who.int/news-room/detail/28-09-2001-the-world-health-report-2001-mental-disorders-affect-one-in-four-people accessed on 11th December 2025.
3. https://www.grandviewresearch.com/industry-analysis/virtual-reality-vr-healthcare-market-report accessed on 12th December 2025.
4. https://www.liebertpub.com/doi/10.1177/29941520251394885accessedon12th December 2025.
5. Arias D, Saxena S, Verguet S (2022). Quantifying the Global Burden of Mental Disorders and their Economic Value. *E Clinical Medicine* 54:101675.
6. Dreison KC, Luther L, Bonfils KA, *et al.*(2018).Job Burnout in Mental Health Providers: A Meta-Analysis of 35Years of Intervention Research. *J Occup Health Psychol*; 23(1):18–30.
7. https://www.sciencedirect.com/science/article/pii/S1550830722001227accessedon 12th December 2025.
8. https://www.betterliferecovery.com/therapy/virtual-reality-therapy-vrt/ accessed on 12th December 2025.
9. Virtual Reality Applications in Chronic Pain Management: Systematic Review and Meta-analysis" by Goudman *et al*. (2022), *JMIR*.
10. Donnelly *et al.*(2021) in "Virtual Reality for the Treatment of Anxiety Disorders: A Scoping Review." *American Journal of Occupational Therapy*
11. Pot-Kolder *et al.*(2020) "Cost-Effectiveness of Virtual Reality Cognitive Behavioural Therapy for Psychosis: Health-Economic Evaluation With in a Randomized Controlled Trial."

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