Systematic Review: Are Table-Top Roleplaying Games a Useful Therapeutic Tool for People with Neurodiversity?

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Aims: This study aimed to review prior research on tabletop role-playing games (TTRPG) as a therapeutic tool for neurodiverse individuals and identify gaps in the field to direct future research.

Methods: A comprehensive systematic review of available literature on the use of TTRPGs in the neurodiverse population was completed, with no limitations to publication language or date. This was completed using appropriate medical subject headings (MeSH terms) and ProQuest to search 21 electronic data bases. Papers were superficially reviewed using the title and abstract to determine if they met the inclusion criteria and relevant articles were reviewed in full.

Results: The systematic search resulted in the identification of 5 relevant articles, containing a combination of peer-reviewed journal articles (n=3), and dissertations/theses (n=2). The majority of papers (n=3) were published in the western world, with others coming from Japan (n=1) and Brazil (n = 1).

Conclusion: Existing literature suggests that TTRPGs offer significant benefits for neurodiverse individuals, particularly in enhancing social skills, communication, and overall social functioning. Kato's (2019) qualitative case study showed that TTRPGs improved social functioning, intentional communication, and cooperative decision-making in youth with autism spectrum disorder (ASD). Henning et al. (2024) echoed these findings, though they were not statistically significant. The benefits of TTRPGs were also demonstrated by Parks (2021), remarking that TTRPGs allow autistic young adults to practice social roles and skills at their own pace. Atherton et al. (2024) expanded this by showing that TTRPGs helped autistic adults form social connections in a safe, structured setting, promoting community and friendship. A shift in focus was seen in the study presented by Rubin-Budick (2022), which focused on the perspective of the therapist over the participants. This research gave an overriding consensus on the effectiveness of TTRPGs in improving emotional attunement and social engagement. Whilst the current body of research highlights these potential benefits, it is important to note that the studies conducted so far have been limited by small sample sizes and narrow participant demographics, with an overriding focus on ASD over other neurodiverse conditions.

Overall, available literature suggests that TTRPGs can enhance social development, communication, and emotional well-being in neurodiverse individuals. This review has also highlighted the need to explore the role of TTRPGs as a therapeutic tool in a wider range of neurodiverse conditions, with particular reference to attention deficit hyperactivity disorder (ADHD).

VR for Mental Health Interventions at Home: Feasibility and Guiding Principles for Success

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Aims: Virtual reality (VR) is becoming readily recognised as a transformative force in healthcare. In recent times there have been rising waiting lists, barriers to accessing care and a need to rapidly scale treatment provision for mental health conditions including depression, anxiety, anorexia, and phobias. As a result, the feasibility and design of current home-based VR mental health treatments has been evaluated to synthesise cohesive guiding principles for further development and implementation of Virtual Reality technologies.

Methods: A multi-method approach was employed, utilising both secondary data from literature reviews and primary data collection through semi-structured expert interviews and surveys to gain insights from all potential stakeholders. These were thematically coded through the COM-b behavioural model to produce a qualitative analysis uncovering key themes hindering and facilitating the adoption of VR technology. Survey data was subject to quantitative analysis to understand attitudes and guide our recommendations.

Results: Analysis of the results ascertained the key barriers and opportunities to provide improved VR mental health services for patients. The two main overarching themes found were: optimisation of the design of technology, and provision of a supportive deployment environment. Within design a significant theme was immersion; This allows simulated environments to replicate the benefits of in-vivo interventions. Presence, a subtheme, is key to supporting immersion and can be thought of as the suspension of disbelief in one's surroundings, allowing for the mimicking of the effects of in vivo exposure. Personalisation and interaction also contributed to enhancing the design. For the higher theme of creating a supportive deployment environment, the main considerations were acknowledging inequalities regarding both technical barriers and financial challenges.

A patient centered framework was developed to support engagement and adoption of VR, using the COM-B model. The model shows the interaction between the capability to participate in an action, the opportunity, which is determined by external factors that allow behavioural change, and the motivation to implement these changes.

Conclusion: The evidence for VR's therapeutic efficacy on home mental health is growing rapidly, however, translating evidence-based practices into the NHS can be a lengthy process. A theory driven framework of practical recommendations is vital for implementing VR interventions. Focus should be centred on holistic design and prioritization of facilitators, which address barriers under multiple domains to support patient and clinician confidence, and thus the successful adoption of VR.

Multi-Parametric Cerebellar Neuroimaging in Subjective Cognitive Decline as Predictors of Cognitive Alterations in Alzheimer's Spectrum

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Aims: Subjective Cognitive Decline (SCD) represents the earliest, reversible stage in Alzheimer's dementia (AD) spectrum, marked by self-appraised cognitive deterioration, that escapes objective