

Correspondence

Cite this article: Martin MC (2023). Correspondence to Freeman et al. (2023)'s virtual reality (VR) therapy for patients with psychosis: satisfaction and side effects. *Psychological Medicine* **53**, 7471–7472. <https://doi.org/10.1017/S0033291723003100>

Received: 12 August 2023
Revised: 11 September 2023
Accepted: 25 September 2023
First published online: 6 November 2023

Corresponding author:
Matthew Connor Martin;
Email: matthewconnormartin@gmail.com

Correspondence to Freeman et al. (2023)'s virtual reality (VR) therapy for patients with psychosis: satisfaction and side effects

Matthew Connor Martin 

Brunel University London, London, UK

The proliferation of technology has entrenched itself within our lives, rendering the necessity for tech-savviness less important in its effective use. Against this backdrop, a mounting research preoccupation has emerged, centering on the deployment of technology, specifically virtual reality (VR), as a therapeutic modality for addressing severe mental health conditions like psychosis. A seminal contribution in this arena was published recently, authored by Freeman et al. (2023), which scrutinizes patient satisfaction and the collateral side effects of VR-based therapy for psychosis. Freeman's study is distinctive, offering a pioneering analysis of patient satisfaction. The study's findings underscore a broad contentment among patients, signifying a pronounced eagerness for technology adoption. Notably, negative side effects, for example technology-related discomfort, remained marginal. Notwithstanding this commendable stride in research, several limitations persist, which this exposition seeks to address. This paper will address the following limitations: constraints inherent in patient self-assessment; limitations of the patient questionnaire; conflicts of interest encumbering research outcomes; the circumscribed ambit of therapy tailored exclusively to agoraphobic psychosis; and the lack of information regarding patient trust in the technology used.

The evaluation of patient satisfaction emanates from their subjective self-assessments after a series of VR-based therapeutic sessions. This methodological approach, while ostensibly apt, harbors substantial risk factors (Dunning, Heath, & Suls, 2004). Initially, this appears to be a fitting reporting method as patients are guided through a number of private therapy sessions and then report back on questions like: 'Using the headset gave me a lasting headache', 'While using VR, I felt so sick that I had to stop', and 'After using VR, the everyday world felt very unreal' (Freeman, et al., 2023). However, this modality of self-assessment is not devoid of inherent limitations, often fraught with susceptibility to biases. Scholars widely contend that self-assessment represents a flawed reporting mechanism due to the inherent complexity of appraising one's health condition, especially for patients enduring psychosis. Given the complexities of self-assessment, I would advise that the reporting method post-therapy be revised to ensure impartiality.

The structure of the patient questionnaire, which confines respondents to binary choices of 'yes' or 'no', warrants consideration. Freeman and his research cohort maintained this structure, aiming to discern unequivocal instances of adverse effects (Freeman et al., 2023). While this rationale is cogent, several interrogatives embedded within the questionnaire could have yielded richer insights if a more nuanced response spectrum had been accommodated. Instances such as the query concerning sensations of entrapment or claustrophobia, ocular strain during VR engagement, and the blurring of demarcation between virtual and real-world experiences could have afforded more elaborate analytical trajectories. Moreover, the imbalance between negative and positive questions may have inadvertently skewed participants' perceptions given that there were 27 negative questions asked and only six positive questions asked (Freeman et al., 2023).

A conspicuous factor impinging on the veracity of research outcomes is the issue of conflict of interest. Freeman and his team are implicated in the creation and deployment of the gameChange therapy program, courtesy of their affiliation with Oxford VR (Freeman et al., 2023). The disclosure of Freeman's multifarious roles – Scientific Founder, non-executive director, and advisor to Oxford VR – in the study's denouement is mentioned. However, the centrality of this conflict of interest necessitates more robust deliberation. Its prominence verges on the sponsorship of research by commercial interests, a facet bearing detrimental implications for research credibility and receptivity (Fabbri, Lai, Grundy, & Berro, 2018). A growing body of scholarship underscores that corporate involvements can skew research agendas away from inquiries regarding to public health concerns, and this aspect appears acutely relevant to Freeman's exposition. Empirical evidence suggests that research conclusions in studies tainted by declared conflicts of interest are perceived as less credible, less translatable to practical contexts, and less dependable (Fabbri et al., 2018). In this light, it would have been judicious to explore alternative technologies distinct from gameChange in order to mitigate this profound conflict.

A critical lens aimed at the scope of the gameChange VR program is warranted. This initiative chiefly targets the mitigation of agoraphobic tendencies in individuals afflicted with psychosis, encompassing activities such as venturing outdoors, visiting establishments, or engaging in social activities. It is pertinent to note that while a subset of individuals grappling with psychosis may indeed manifest agoraphobic proclivities, this correlation should not be unequivocally conflated with causation. Consequently, the research's ambit is narrower than initial impressions might suggest, as it is predominantly oriented towards a subgroup nested within the larger cohort of psychosis sufferers. Therefore, it would be suggested that the title and keywords should be adapted to represent this narrower focus.

Regrettably, Freeman's study lacks an exploration into the dimension of patient trust vis-a-vis VR therapy. Contemporary research endeavors have spotlighted the pivotal role of trust – or its absence – in the acceptance of emerging therapeutic technologies. Novel technologies can induce discomfort or 'cybersickness', attributable to their intrinsic departure from natural contexts. It is less predictable which can make users worried and reserved about its application. Furthermore, human beings are inherently social creatures and the gameChange VR therapy sessions, by their very nature, extricate individuals from these interpersonal dynamics. Strikingly absent from the discussion is an in-depth exploration of the degree to which patients reposed trust in the VR headset and the potential implications thereof, especially in the context of individuals grappling with the vulnerability inherent in psychosis.

In summation, Freeman's study encompassing patient satisfaction and side effects attendant to VR-based psychosis therapy represents a pivotal juncture in the realm of cyberpsychology, particularly concerning technology's judicious deployment to address intricate mental health experiences. Given its unique vantage point, the study's distinctive focus on gauging patient contentment is impressive. Notwithstanding this noteworthy contribution, several domains necessitate further examination, as delineated in the present exposition, in order to engender comprehensive maturation within this research realm. These spheres encompass the constrained efficacy of patient self-assessment, limitations of the patient questionnaire, the significant conflict of interest, a more expansive inquiry into VR therapy's application scope, and an exploration into the relationship between patient trust and VR therapy.

Competing interests. None.

References

- Dunning, D., Heath, C., & Suls, J. (2004). Flawed self-assessment: Implications for health, education, and the workplace. *Psychological Science in the Public Interest*, 5(3), 69–106. doi:10.1111/j.1529-1006.2004.00018.x.
- Fabbri, A., Lai, A., Grundy, Q., & Berro, A. (2018). The influence of industry sponsorship on the research agenda: A scoping review. *American Journal of Public Health*, 108(11), 9–16. doi:10.2105/AJPH.2018.304677.
- Freeman, D., Rosebrock, L., Waite, F., Loe, B., Kabir, T., Petit, A., ... Lambe, S. (2023). Virtual reality (VR) therapy for patients with psychosis: Satisfaction and side effects. *Psychological Medicine*, 53(10), 4373–4384. doi:10.1017/S0033291722001167.