

Peer Review

Review of: "A Case Series of Virtual Reality-Based Social Interactions for Adolescents with Psychiatric Disorders in a Television Program: Insights from NHK's Project Alien"

Joe Hasei¹

1. Department of Medical Information and Assistive Technology Development, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University, Japan

Thank you for the opportunity to review your manuscript on NHK's Project Alien. The case series presents an innovative approach to utilizing VR technology for adolescents with psychiatric disorders. While the study offers valuable insights, there are several critical limitations that should be addressed in your manuscript:

1. Confounding Variables Due to Television Program Format

Your study is conducted within the context of a television program, which introduces significant confounding variables. The participants' responses and outcomes may be influenced by the excitement of media participation, attention from production staff, and awareness of being filmed for public broadcast. These factors could independently affect psychological measurements regardless of the VR intervention itself. I recommend explicitly acknowledging this limitation and discussing how these media-related factors might have influenced your results. This would strengthen the paper by providing appropriate context for interpreting the findings.

2. Absence of Comparative Design for Avatar Type Efficacy

While your discussion suggests potential benefits of non-humanoid (alien) avatars based on prior research, your study design does not directly compare different avatar types (e.g., human-like vs. alien

avatars). This limitation should be clearly stated, as readers might incorrectly infer that your study demonstrates the superiority of alien avatars for therapeutic interactions. I suggest acknowledging that establishing the relative efficacy of different avatar types would require a controlled comparative design in future research.

3. Selection Bias and Small Sample Size

The manuscript notes that 3 participants were selected from 10 interested patients (from an initial pool of 15 invited) by NHK producers based on "thematic and logistical needs." This selection process introduces significant bias that limits generalizability. Additionally, with only three participants, individual variations can substantially impact overall findings. I recommend expanding the limitations section to explicitly discuss how the selection process and small sample size affect the interpretation and generalizability of your results, and suggesting how future studies might address these limitations.

Addressing these limitations would significantly strengthen your manuscript by providing readers with a more accurate context for interpreting your findings while still acknowledging the value of this exploratory work.

Declarations

Potential competing interests: No potential competing interests to declare.