Remote art therapy in collaborative virtual environment: a pilot study on feasibility and usability Chen Li Yixin Dai Honglin Li Pui Yin Yip THE HONG KONG POLYTECHNIC UNIVERSITY 香港理工大學 IEEE V 2023 Department of Computing, The Hong Kong Polytechnic University Helen Yip PROBLEM **EXPERIMENT DESIGN** The need for remote art therapy has increased rapidly due to the We designed and implemented a highly customised global pandemic. collaborative virtual environment (CVE) for this pilot study. Remote art therapy faces the challenge of effectively translating Each participant had a 30-minute one-on-one session with the and maintaining the unique triangular therapeutic relationship registered expressive arts therapist (the fourth author of the among the therapist, the client, and the artworks in the digital paper), followed by a semi-structured interview focusing on possible improvements to the CVE. world. The off-the-shelf applications only support therapists to observe During the sessions, clients were asked to draw a comfortable and the art creation process on computer monitors without actual cosy space, and the therapists were asked to evaluate the system. participation. • PARTICIPANTS MEASURES Four young adults and two registered art therapists were System Usability Scale (SUS) recruited. The four young adults were referred by an NGO and Simulator Sickness Questionnaire (SSQ) participated as clients. The two therapists had remote arts therapy experience using video conferencing tools. Except for one client (C3), other participants had no VR experience. Oculomotor Disoriontation 13.92 13.92 SCAN THE QR CODI FOR DEMO VIDEO 19.08 19.08 Pre C4

RESULTS

- Quantitativ
- The SUS scores suggest that the usability of the CVE was good.
- The SSQ scores suggest that using the CVE for remote art therapy did not introduce more cybersickness symptoms.

RESULTS

Qualitative

 Both therapists agreed that the CVE was a promising medium for delivering remote arts therapy and found it easy to use.
Except for one client (C2), who had a long history of being sensitive to motion sickness, other clients found the process enjoyable and interesting.

FINDINGS

• The CVE-enabled approach was feasible, and the system's usability was high.