

Virtual reality and social training skills to adults with epilepsy and intellectual disabilities

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Abstract

Background

People with epilepsy and mild intellectual disability have a limited adaptive capacity resulting in difficulties in communication and social skills. Virtual Reality (VR) has the potential to help this group of people to learn how to manage difficult situations. SEIN (Expertise Center for Epilepsy) provides training to the residents to improve their social and communication skills. The purpose of the exploratory study was to establish whether VR could be a suitable digital means to provide a more efficient blended training.

Methods

Online interviews were conducted with healthcare professionals from SEIN: two coordinators, three psychologists and two coaches. The participants were asked about their ideas for improving the social skills of the residents and their view on using VR to do so. Interviews were recorded, transcribed and analyzed using thematic analysis approach. In addition, observations were conducted during a training session to get a realistic sense of its process and contents. Observations were noted in a logbook.

Findings

The participants are positive to use VR in the training but point out that it is not suitable for all the residents. VR glasses were ruled out because it put the resident alone in a virtual setting. VR with a tablet is preferred to allow the residents and the healthcare professional to simultaneously view 3D simulated situations and allowing opportunities to talk about it. The development of VR contents and simulations using tablet will need to take into account relevant VR guidelines dedicated to people with epilepsy. Appropriate training for the healthcare professionals also needs to be provided.

Conclusions

The use of Virtual Reality in training programs to improve communication and social skills of adults with intellectual disabilities and epilepsy is promising. We advocate to utilize user-centered design and co-creation approaches with all concerned parties for further development of tablet-based VR solutions