Exploring older adults’ attitudes towards virtual Reality

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Introduction
In the last decade, immersive virtual reality (VR) has gained more interest and acceptance, as an innovative technology intervention in a wide range of health settings for older adults. Immersive VR is an emerging technology that immerses an user into an alternate virtual 3-Dimensional environment through the use of Head mounted device (HMDs) (e.g. Oculus Rift/ Oculus Quest, HTC Vive), giving a complete sense of presence (Lombard & Ditton, 1997). The Immersive VR allows the user not just to view, but also to engage and interact with the virtual environment, by moving their head to look around and could also use the handheld controllers to move and interact within the virtual world.

Therefore, understanding older adults’ attitudes towards accepting Immersive Virtual Reality (VR) is fundamental for maximising the potential that this emerging technology could offer, in delivering improved health and wellbeing outcomes for older adults. Hence, this study aims to examine the attitudes of older adults towards immersive VR experiences.

Methodology
This study will be using a mixed methods approach, both quantitative and qualitative methods to get a comprehensive picture, addressing the limitations of the earlier studies. This study will happen in two phases. The phase I of the study, aims to examine the attitudes of older adults’ towards technology using a Technology Acceptance Model (TAM) questionnaire to establish a baseline (Davis, 1986). The questionnaire will be administered either via online, hosted in the Survey Monkey site, or in a paper format which will be posted to the participants with a self-addressed returnee envelope, depending on their personal preference.

In the phase II of the study, older adults’ attitudes towards immersive VR experiences will be examined using telephone interviews. Before the interview, a private link to the demo video on immersive VR will be sent to the older adult participants, who will be purposively chosen from the same sample used for the phase I keeping with the diversity goal of the sample.

Recruitment & Sampling
Participants for both the phase I and phase II of the study will be older adults (male and female) in the age group of 60- 80 years, recruited from Lancaster University’s C4AR volunteer panel, and online senior forums such as the Longevity Forum, Silver surfers and Hell’s Geriatrics. For Phase I, the sample size is 89 participants which was calculated using G*Power 3.1 application. For Phase II, 15- 20 participants will be purposively recruited to achieve a diverse sample for the interview.

Benefits of the study & participation
Some people may find it to be a positive experience to reflect, offer their thoughts and suggestions on the challenges of ageing and how best technology and more specifically immersive (VR) technology could open a new window of opportunity for engagement and entertainment in improving their wellbeing. More so, the findings and insights gained from this study could deepen the understanding of the older adults as a group, which could lead to older adults’ focussed design of VR devices and content, which could eventually benefit them.

Key References