Transforming Palliative Care: Stakeholder Evaluation of Virtual Reality Nature Therapy for Usability, Immersion, and Emotional Impact

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Background

Immersive VR nature therapy offers potential for symptom management in palliative care (PC), yet evidence for routine implementation is limited. This study applies implementation science methodologies to explore stakeholder perspectives on usability, emotional engagement, and practical integration within a specialist Irish PC setting.

"The VR was very relaxing … it was so realistic and would be so lovely for any patient to have while they are confined to bed…it gives them some last chances to be in the environment and the places that they love which will relax them and hopefully add some joy to their life."



Figure 2. Stakeholders Experiencing VR Nature

Aim

To evaluate stakeholder with experience or interest in PC perceptions of usability, emotional impact, and therapeutic potential of VR nature therapy in a specialist Irish PC setting.

"I forgot about everything — it took me to a peaceful place."

Methods

- *Design*: Mixed-methods, prospective study.
- *Phase-1*:* Stakeholder feedback on 5-minute VR nature therapy experience [360º Video/ Meta Quest 2 headset] using online Qualtrics survey.
- *Assessments* include: System Usability Scale (SUS), immersion & emotional impact.
- Implementation Science Frameworks of Participatory Action Research (PAR), Engagement Research and User Centred Design (UCD).
- Stakeholders, with experience or interest in PC, feedback was gathered to inform feasibility and implementation strategy with clinical staff in specialist PC.
- *Analysis:* Frequencies/valid percents (SPSS V.28).

Results

Sample: N=43 Stakeholders (88% female; ages 18-50+years) with PC experience/Interest (Range: 1-20+ years).

"Very relaxing — it felt like I was actually there."

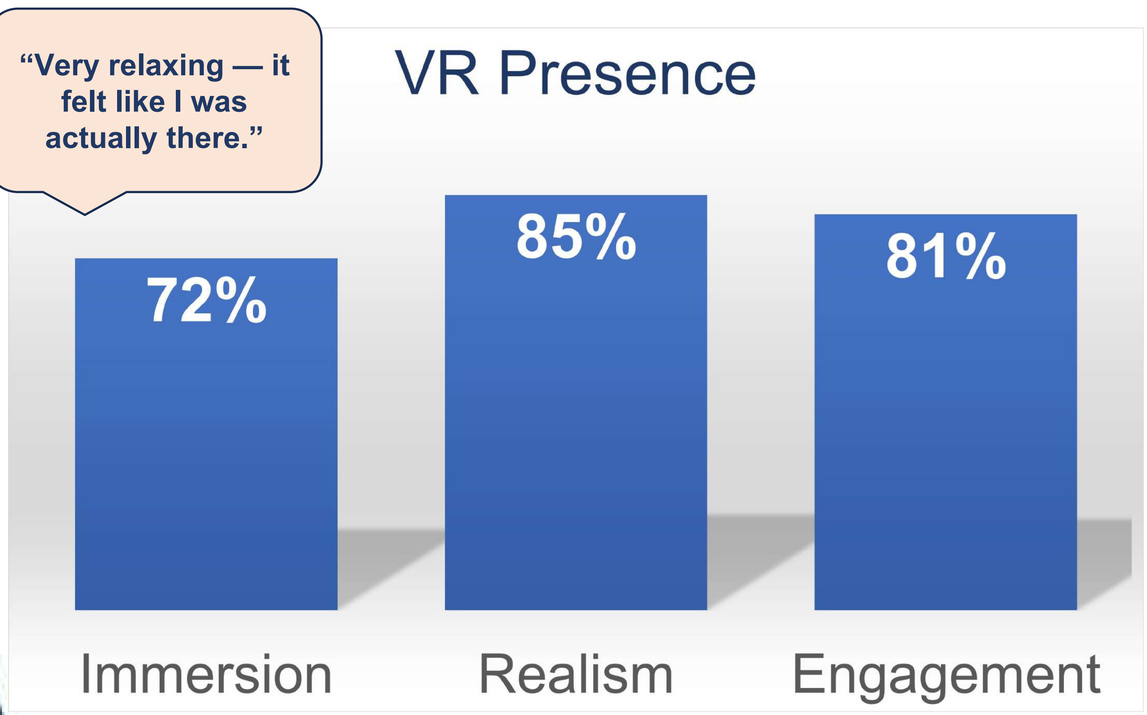


Figure 1. Barchart of Stakeholders Evaluation of VR Presence and Engagement

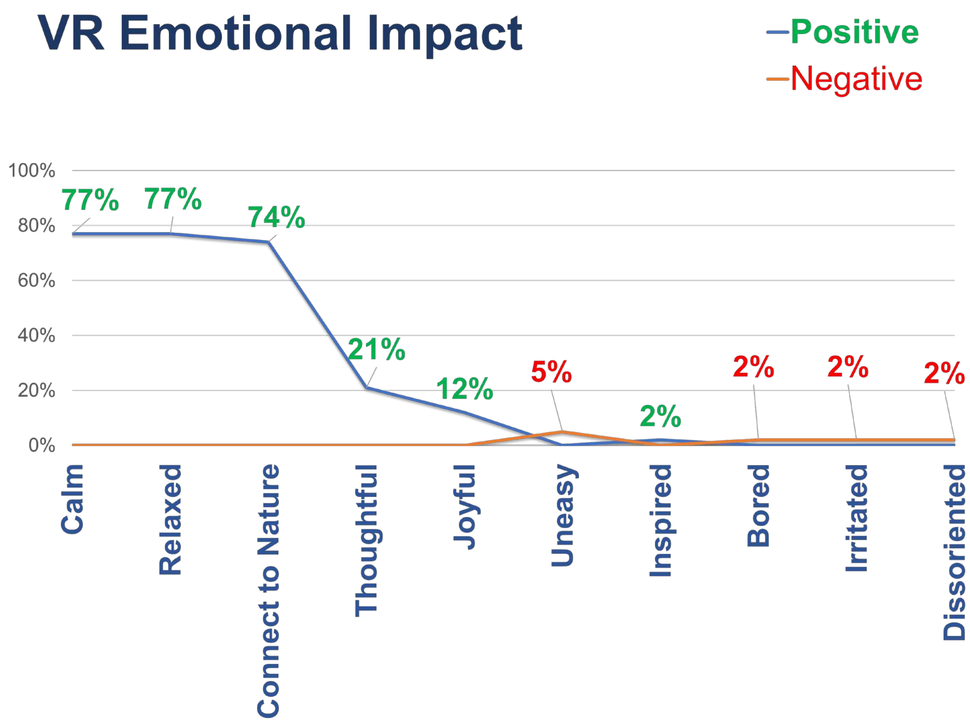


Figure 3. Line Graph of Emotional Impact of VR Nature Experience

"Wi-Fi isn't always available…Onsite IT support would be essential."

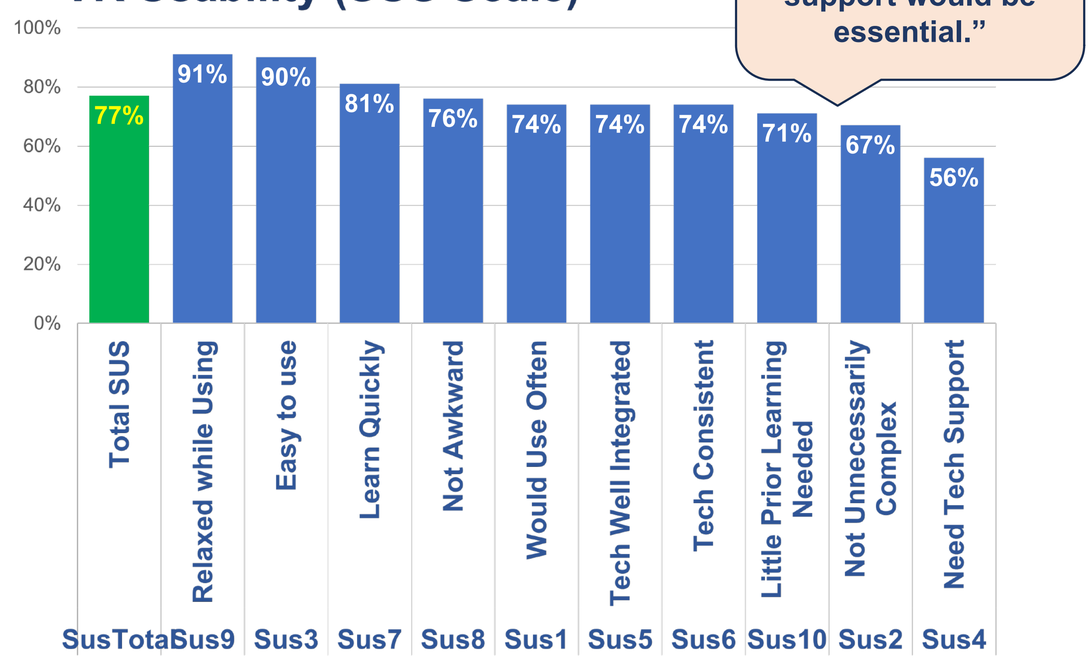


Figure 4. Barchart of System Usability Scale Scores rating VR Experience

Discussion

Stakeholders reported strong emotional benefits (calm, relaxed, connected) and high usability (SUS: 77±15). High immersion (72%) and realism (85%) levels support VR's potential beyond mere distraction. However, adoption depends on local technical support, staff training, and early staff engagement. Findings suggest VR is a credible adjunct to symptom management in PC, warranting phased integration for successful implementation.

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***Ethics Approval:** SETU/REC/23/24/002. *Study title: "The Feasibility, Usability, and Acceptability of a Personalised Virtual Reality Intervention in an Irish Palliative Care Setting".* A Pilot Study using User-Centred Design, Participatory Action, and Engagement Research Frameworks.

This research received no external funding. Travel and conference attendance were supported by EU-CONEXUS.

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