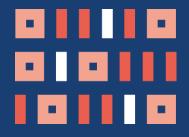
## Virtual Reality for Mental Health

#### **Dr Jen Martin**

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Improve access to treatment

New non-pharma treatments

#### **Treating Fears through Virtual Reality**

- Psychological treatment is recommended treatment for a range of conditions
- NHS does not have the staff or funding to meet demand
- VR could be a solution
- People with severe fears are willing to go into situations in VR because they are simulations
- But the learning from VR transfers to the real world







Immersive technology for mental health



#### VR to Treat Fears of Heights



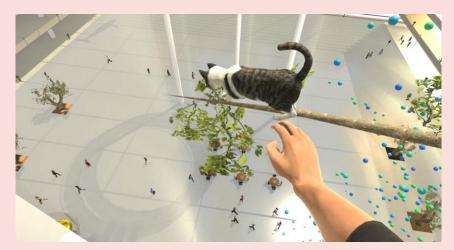


### VR to Treat Fears of Heights

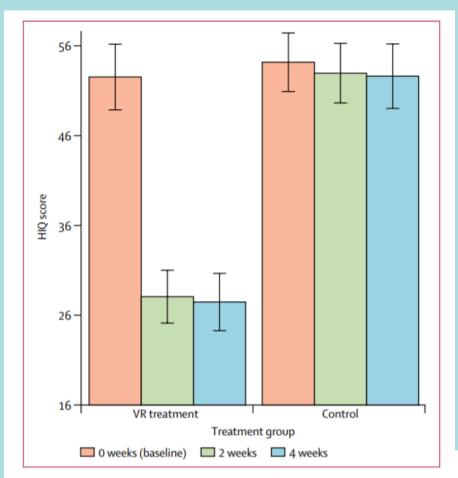
- Automated intervention guided by an avatar virtual coach
- User taken through a variety of tasks at different levels
- Coach delivers cognitive information about FoH and its treatment
- Outcome measures collected within the software







#### **NIHR** Mental Health MedTech Co-operative



**Figure 2:** Scores on the HIQ at every timepoint for each randomised group The minimum score on the HIQ is 16. Bars represent the mean, error bars the 95% CI. HIQ=Heights Interpretation Questionnaire. VR=virtual reality. THE LANCET Psychiatry

Freeman, Daniel, et al. "Automated psychological therapy using immersive virtual reality for treatment of fear of heights: a single-blind, parallel-group, randomised controlled trial." *The Lancet Psychiatry* 5.8 (2018): 625-632.

#### **Richard's Story**

#### https://vimeo.com/264025028



**NIHR** Mental Health MedTech Co-operative

## VR to Transform the lives of people with psychosis

- Winner of NIHR i4i Grand Challenge on Mental Health
- Multidisciplinary Team
- Commercial Partner
- 3 year project (2018-21)
- Y1: Development
- Y2-3 national NHS trial (n=480)







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# VR to Transform the lives of people with psychosis gameChange









With psychosis in England and Wales are being treated in the NHS (NICE, 2014).

Cost to society very year: 1/3 of ental health and social care expenditure. (LSE, 2012) Patients are sedentary for 9.5 hours of the daytime (Vancampfort et al, 2017). People with schizoprenia die on average 14 years earlier (Hiorthøi et al, 2017).

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#### Aim: taking VR into NHS Services



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