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Using virtual reality (VR) to reduce fear of heights

Submission date	Recruitment status	[X] Prospectively registered
01/10/2017	No longer recruiting	[ ] Protocol
Registration date	**Overall study status**	[ ] Statistical analysis plan
04/10/2017	Completed	[X] Results
Last Edited	**Condition category**	[ ] Individual participant data
17/07/2018	Mental and Behavioural Disorders	

Plain English summary of protocol

Background and study aims
Cognitive behavioural therapy (CBT) or exposure therapy delivered by virtual reality (VR) has been shown in a number of studies to be a safe and effective way of reducing anxieties. A state-of-the-art VR cognitive behavioural treatment has been developed for fear of heights that is automated, engaging, and deliverable via the latest consumer equipment. The aim of this study is to test whether the VR treatment reduces fear of heights at the end of treatment, and whether the treatment gains are maintained at follow-up.

Who can participate?
People aged over 18 who report a fear of heights

What does the study involve?
Participants are randomly allocated to receive the VR treatment or no treatment. The VR treatment is provided in six sessions over about a fortnight. Fear of heights is assessed using questionnaires at the start of the study, after treatment, and two weeks after the end of treatment.

What are the possible benefits and risks of participating?
The potential benefits for participants are a reduction in their fear of heights. There are unlikely to be any risks in participating although sometimes people get short-term motion sickness with VR (though this has not been found to occur with this VR set-up).

Where is the study run from?
University of Oxford (UK)

When is the study starting and how long is it expected to run for?
May 2017 to May 2018

Who is funding the study?
Oxford VR/Nowican (UK)

Who is the main contact?
1. Polly Haselton
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2. Prof. Daniel Freeman

Contact information

Type(s)
Public

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Additional identifiers

Protocol serial number
R52909/RE001

Study information

Scientific Title
Using virtual reality (VR) to reduce fear of heights: a parallel-group, randomised controlled trial of a virtual reality cognitive behavioural therapy based programme for fear of heights

Study objectives

The primary hypothesis is that the VR treatment, compared to a non-intervention control group, will reduce fear of heights at the end of treatment.
The secondary hypothesis is that the treatment gains will be maintained at follow-up.

Ethics approval required
Old ethics approval format

Ethics approval(s)
University of Oxford Medical Sciences Inter-Divisional Research Ethics Committee, ref: R52909 /RE001

Study design
Parallel-group randomised controlled trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Fear of heights

Interventions
Participants will be randomly allocated, stratified by fear of height severity and using randomised permuted blocks, to VR treatment or control (no treatment). The VR cognitive behavioural treatment for fear of heights is automated and is delivered in six sessions, typically lasting 20-30 minutes, over approximately a fortnight.

The outcomes are self-report assessments of fear of heights, with neither participant nor researcher blind to randomisation allocation, conducted at 0, 2 (post-treatment), and 4 weeks (a fortnight after treatment ends).

Updated 18/10/2017:
The outcomes are self-report assessments of fear of heights, with the researcher administrating the assessments blind to randomisation allocation, conducted at 0, 2 (post-treatment), and 4 weeks (a fortnight after treatment ends).

Intervention Type
Behavioural

Primary outcome(s)
Fear of heights, assessed using the Heights Interpretation Questionnaire (Steinman and Teachman, 2011) at 0, 2 (post-treatment), and 4 weeks (a fortnight after treatment ends)

Key secondary outcome(s))
Fear of heights, assessed using the Acrophobia Questionnaire (AQ) (Cohen, 1977); Phobia Avoidance item 3 (IAPT, 2008) at 0, 2 (post-treatment), and 4 weeks (a fortnight after treatment ends)

Completion date

01/05/2018

Eligibility

Key inclusion criteria
1. Adults (18+ years old)
2. Fear of heights (Heights Interpretation Questionnaire score of 30 or greater)

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

Key exclusion criteria
1. Current psychological treatment for fear of heights
2. Unable to travel to research appointments
3. Photosensitive epilepsy
4. Lack of stereoscopic vision or balance problems

Date of first enrolment
01/11/2017

Date of final enrolment
27/02/2018

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Oxford VR/Nowican
King Charles House
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Sponsor information

Organisation
University of Oxford

ROR
https://ror.org/052gg0110

Funder(s)

Funder type
Industry

Funder Name
Oxford VR/Nowican

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study are not expected to be made available. The data will be held by Oxford VR.

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/08/2018		Yes	No