

## Publication

### Effectiveness of a stand-alone, smartphone-based virtual reality exposure app to reduce fear of heights in real-life: a randomized trial

#### JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

**ID** 4635637

**Author(s)** Bentz, Dorothée; Wang, Nan; Ibach, Merle K.; Schick Tanz, Nathalie S.; Zimmer, Anja; Papassotiropoulos, Andreas; de Quervain, Dominique J. F.

**Author(s) at UniBasel** [Papassotiropoulos, Andreas](#) ; [de Quervain, Dominique](#) ; [Bentz, Dorothee](#) ; [Schick Tanz, Nathalie](#) ;

**Year** 2021

**Title** Effectiveness of a stand-alone, smartphone-based virtual reality exposure app to reduce fear of heights in real-life: a randomized trial

**Journal** NPJ digital medicine

**Volume** 4

**Number** 1

**Pages / Article-Number** 16

Smartphone-based virtual reality (VR) applications (apps) might help to counter low utilization rates of available treatments for fear of heights. Demonstration of effectiveness in real-life situations of such apps is crucial, but lacking so far. Objective of this study was to develop a stand-alone, smartphone-based VR exposure app-Easy Heights-and to test its effectiveness in a real-life situation. We performed a single-blind, parallel group, randomized controlled trial. We recruited 70 participants with fear of heights, aged 18-60 years. Primary outcome was performance in a real-life Behavioral Avoidance Test (BAT) on a lookout tower after a single 1-h app use (phase 1) and after additional repeated (6  $\times$  30 min) app use at home (phase 2). After phase 2, but not phase 1, participants in the Easy Heights condition showed significantly higher BAT scores compared to participants in the control condition (Cohen's  $d = 1.3$ ,  $p = 0.0001$ ). Repeated use of our stand-alone, smartphone-based VR exposure app reduces avoidance behavior and fear, providing a low-threshold treatment for fear of heights.

**Publisher** Nature Publishing Group

**ISSN/ISBN** 2398-6352

**edoc-URL** <https://edoc.unibas.ch/85899/>

**Full Text on edoc** Available;

**Digital Object Identifier DOI** 10.1038/s41746-021-00387-7

**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/33558625>

**ISI-Number** 000617455900001

**Document type (ISI)** Journal Article