

Supplementary details VR:

Head Mounted Display (HMD)

The virtual reality setup is composed of three computers, each with their own particular task: The first or console machine was a Dell Optiplex 750 (using an Intel DuoCore processor), equipped with 2 gigabytes of RAM, Windows XP Professional 2002 Service pack 3, Python 2.4 and the Timor console application ported from SARA (Computing & Network Service). This computer also provided background sound effects via a conventional amplifier and a wall mounted speakers arrangement. This computer is used during treatment to control the operation of the VR models employed. The second machine runs the VR software and is a Dell Precision T3500 (Equipped with an Intel Xenon processor), Nvidia Quadro FX4800 Video adapter, Windows XP Professional Service pack 3, WorldViz Vizard V3.0 and Timor image generation module and several models (“Large square”, “Crowded market place”, “Metrostation” etc). External peripherals include 2 ‘Smart View’ DVI splitters, an nVisor SX head mounted display, and Intersense InertiaCube angular tracker. This second machine runs the 3 dimensional models, and renders the virtual world to a stereoscopic pair. The third machine is part of a complete optical tracking system, the WorldViz PPT. This comprises 4 Infrared TV cameras, a 4 channel video capture board, and the PPT software. This machine only function is to determine the position of the optical target, mounted on the head mounted display, in three dimensions. This information is passed to the image generator as the subject’s position in the virtual world.

Computer Animated Virtual Environment (CAVE)

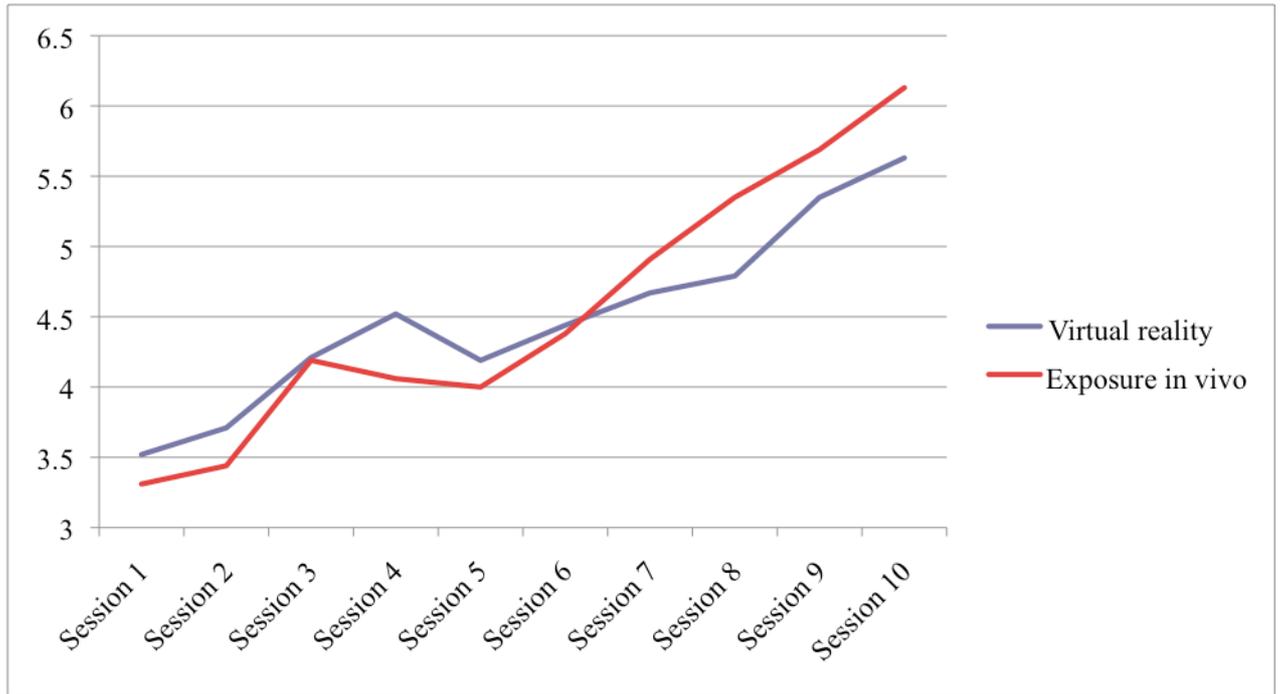
In the CAVE the virtual environments were projected on the floor and three sides of the cubicle. The patient was wearing glasses that lightened and darkened in synchronization with the images on the screen. Furthermore a tracking system kept track of the position of the eyes so that the client was able to see the projections in 3D. The projection was accomplished by

eight projectors, each with a resolution of 1400x1050 pixels en 60 Hz refresh rate. Per screen with the size of 4x3m two projectors were used, one for each eye. The participants wore CrystalEyes active stereo glasses; Ascension Flock of Birds was used for the head tracking. The pictures were generated by four Intel Xeon PC's 2.5Ghz, 4Gb RAM, NVidia Quadro FX5600 graphic card). The software used was an application developed by SARA (Computing & Networking Services) with the help of OpenSceneGraph en CAVELib, with a Linux operating system. A separate PC was used by the therapist to operate the system.

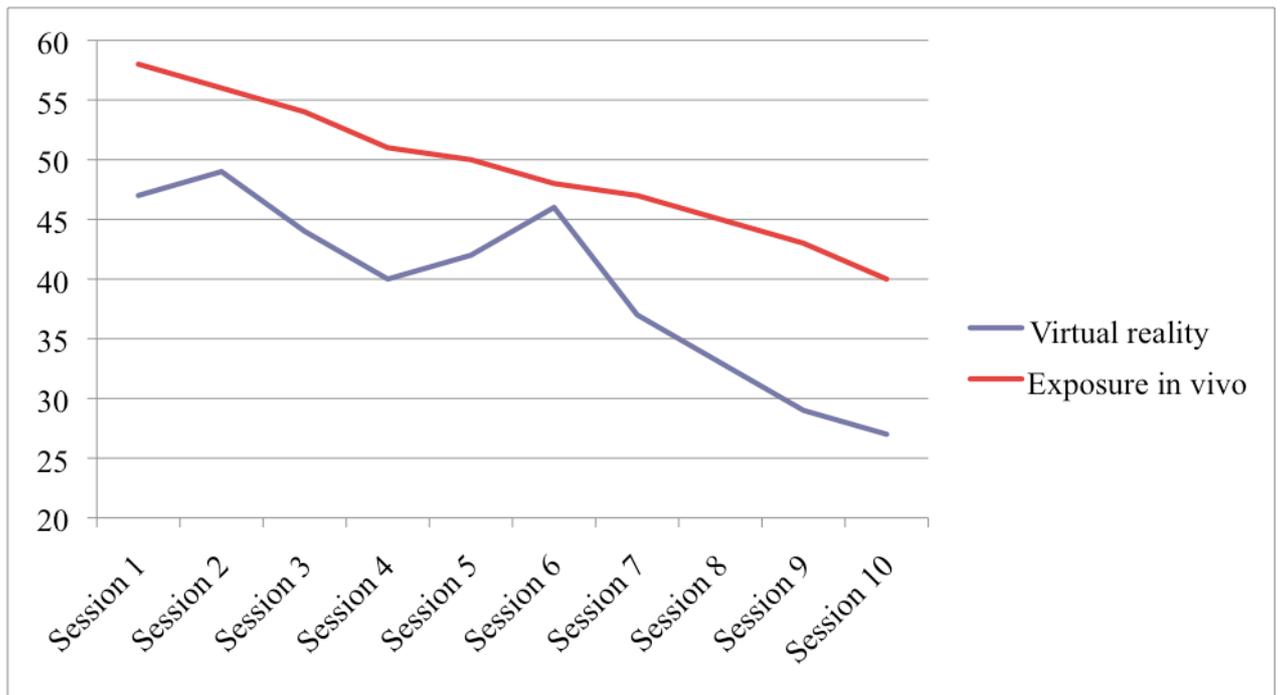
Means and standard deviations of process measures at pre-, inter- and post-assessment

Among patients receiving exposure in vivo, means and standard deviations for the process measures PAI 1, 2 and 3 and the avoidance measure were as follows: Session 1: PAI 1: 55.56 (16.87); PAI 2: 46.73 (18.51); PAI 3: 26.68 (9.68); Session 5: PAI 1: 48.00 (21.87); PAI 2: 38.94 (22.71); PAI 3: 38.04 (18.80); Session 10: PAI 1: 37.82 (23.63); PAI 2: 23.91 (23.77); PAI 3: 55.93 (24.64).

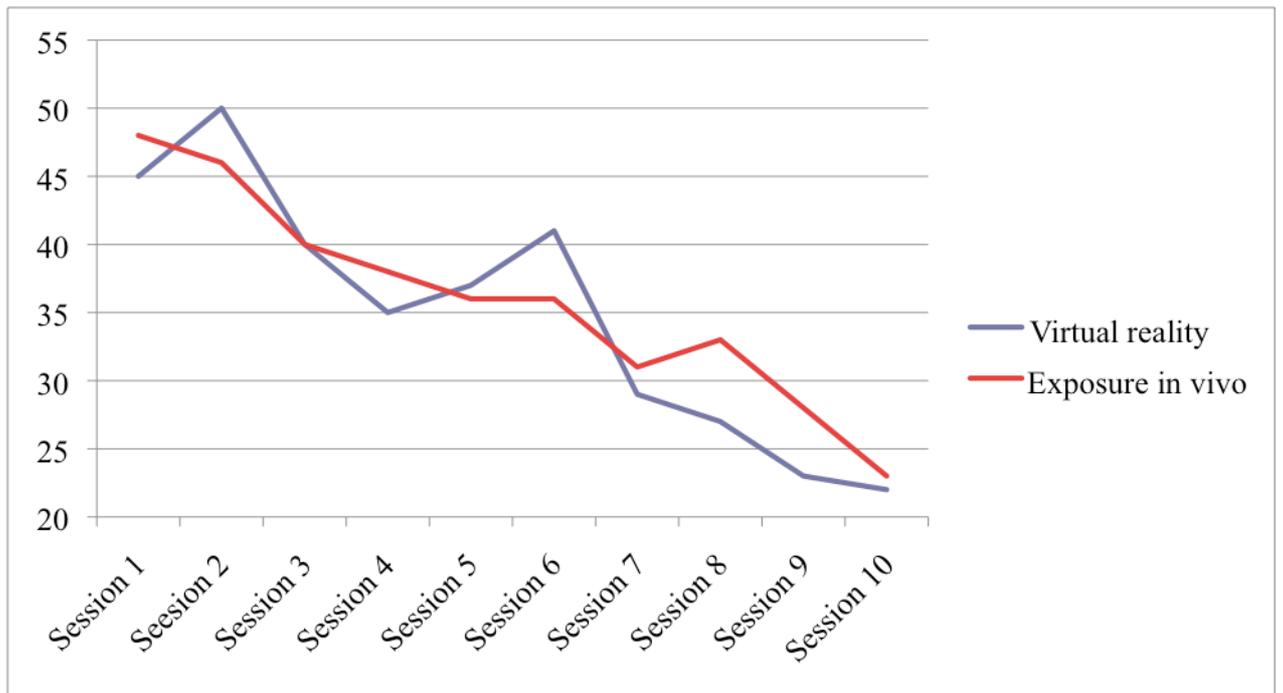
Among patients receiving VRET, means and standard deviations were as follows: Session 1: PAI 1: 49.12 (14.96); PAI 2: 38.93 (23.09); PAI 3: 32.42 (13.96); Session 5: PAI 1: 38.90 (20.59); PAI 2: 33.95 (25.19); PAI 3: 43.36 (15.77); Session 10: PAI 1: 30.67 (31.01); PAI 2: 24.12 (26.63); PAI 3: 57.09 (26.98). Means and standard deviations for the avoidance scale in the in vivo condition were as follows: Session 1: 3.11 (1.95); Session 5: 4.11 (2.17); Session 10: 6.16 (2.29), and for the virtual reality condition: Session 1: 3.99 (2.44); Session 5: 4.88 (2.52); Session 10: 5.63 (2.89).



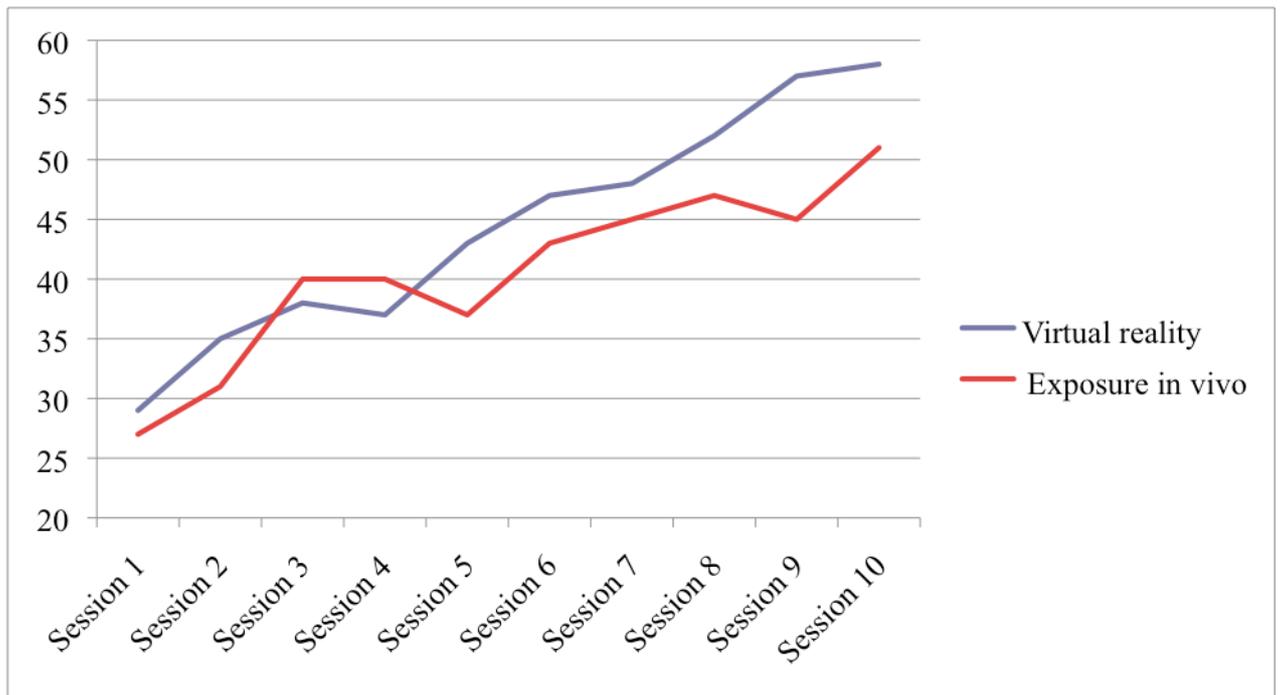
Supplementary figure 1: Avoidance behavior across 10 treatment sessions, measured with the Avoidance Scale



Supplementary figure 2: Anticipation of panic across the 10 treatment sessions, measured with the PAI 1.



Supplementary figure 3: Panic consequences across the 10 treatment sessions, measured with the PAI 2.



Supplementary figure 4: Panic coping across the 10 treatment sessions, measured with the PAI 3.