

Development of a Virtual Reality-experience to improve compassion in caregivers of people with dementia

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DEVELOPMENT

Objective

- To develop a Virtual Reality (VR)-experience and an e-learning, called 'Through the D'mentia Lens' (TDL), for caregivers of people with dementia to:
 - Enhance understanding of the person with dementia
 - Increase compassion for the person with dementia
 - Have a more empathetic relationship with the person with dementia
 - Reduce stress and care burden

Into D'mentia, a simulation set in a shipping container with a living kitchen in which visitors experience a day in the life of someone with dementia, was used as a base for TDL. TDL is developed as a more portable and affordable tool.

Development of the intervention 'Through the D'mentia Lens'

- Step 1: Writing the script for the film in collaboration with Virtual Reality experts
- Step 2: Caregivers' feedback and adjustment of the script
- Step 3: Recording the film and developing the e-learning
- Step 4: Feedback from caregivers on the film and e-learning
- Step 5: Finalizing the film and e-learning
- Step 6: Carrying out a pilot study



A caregiver watching the VR-movie



Recording the VR-movie



PILOT STUDY

Aim

To investigate whether or not TDL has an impact on empathy, attitude towards people with dementia (PWD), quality of the relationship, self-efficacy in caring for someone with dementia and perceived pressure of family caregivers and to investigate the feasibility of TDL.

Methods

- One-group pre-test post-test design: online survey (N=40).
- Process evaluation on feasibility and acceptability of TDL.
- Dependent samples t-tests were used to test for differences between pre-and post-measurements
- Inclusion criteria: taking care of a PWD living at home, Dutch speaking, no visual or hearing impairments, sufficient computer skills to follow the e-learning.
- Exclusion criterion: participation in 'Into D'mentia' simulation.

Measurements

Primary outcome measurements

- **Perspective-taking** (Interpersonal Reactivity Index).
"I sometimes find it difficult to see things from my family members' point of view"
- **Attitude towards PWD**; person-centeredness (Approach to Dementia Questionnaire).
"People with dementia need to feel respected, just like anybody else"

Secondary outcome measurements

- **Perceived competence** (Trust in Own Abilities), with subscales resilience, pro-activity and solution-orientation.
"How well can you, in your own opinion, recollect memories with your family member about e.g. his/her former job or interests?"

- **Quality of the relationship** (Dyadic Relationship Scale), with subscales positive dyadic interaction and dyadic strain.
"Because I take care of my family member with dementia, our communication improved"
- **Perceived burden of care** (Self Perceived Burden from Informal Care).
"Owing to the situation of my partner/father/mother I have too little time for myself"

Feasibility

- Usefulness, ease of use, satisfaction, acceptability and the look and feel of TDL.

Preliminary results

- Feasibility: The usefulness, ease of use, satisfaction and acceptability were evaluated positively.
- Primary outcomes: Person-centeredness and perspective-taking increased significantly.
- Secondary outcomes: Perceived competence, resilience and pro-activity and positive dyadic interaction increased significantly.

Future directions

The TDL experience will soon be tested and used in the education program for professional caregivers with an adjusted version of the e-learning and additional scenes (interactions between professional caregivers and the PWD).

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