Innovative technological tools and depressive disorders in institutionalized elderly people with cognitive disorders. interpsy







Delphine Machot-Isaac

Doctoral Supervisor: Céline Clément and co supervisor: Paolo Di-Patrizio

BioSE doctoral school's scientific day, 07/05/2025

Background: situation of institutionalized elderly people

- •Depressive and cognitive disorders are highly prevalent and mutually aggravating.
- •Antidepressant treatment must be supplemented by non-drug therapy.

Aims

- •To determine whether the use of innovative technological tools reduces the intensity of depression and behavioral disorders.
- •To assess the persistence of the effect.

Population

- Residents (9+3)aged between 75 to 99 in a nursing home in Moselle (Eastern France).
- Depressive and cognitive disorders diagnosed.

Tools and procedure:

- Cornell Scale for Depression in Dementia (CSDDE) (Alexopoulos et al.,1988).
- NeuroPsychiatric Inventory Nursing Home version (NPI-NH) (Sisco et al., 2000).

Pretest

Virtual reality relaxation therapy Behavioral activation therapy

Once a week for 8 weeks (30 min)

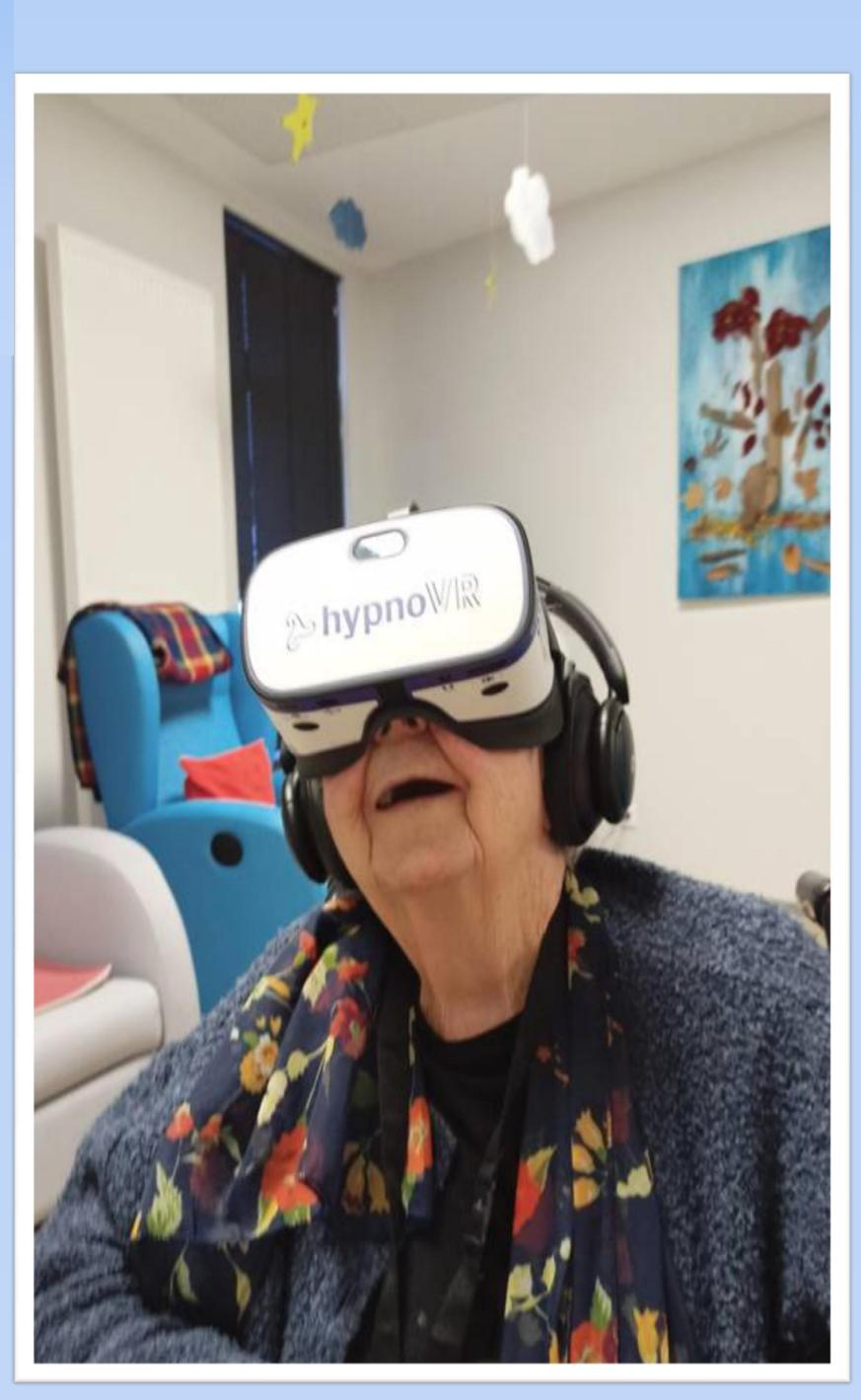
Post test 1

Post test 2 3 months later

Virtual reality relaxation therapy virtual reality headset «HypnoVR®». (photo crédit @ D Machot Isaac)

Expected results

-Decrease in the intensity of depressive and behavioural disorders after therapy. (1)(2) -Persistence of therapeutic effect in the medium term. (2)





Behavioral activation therapy «Moto-Med®» ou «Bike Labyrinthe ®» Pedal system for virtual tour of a site. (photo crédit @ D Machot Isaac)

REFERENCES

- 1. Brimelow, R. E., Thangavelu, K., Beattie, R., & Dissanayaka, N. N. (2022). Journal of the American Medical **Directors** Association, 23(5), 831-837.
- 2. Dziubek, W., Kowalska, J., Kusztal, M., et al. (2016). Kidney and Blood Pressure Research, 41(1), 86-98.