



HAL
open science

Description of the effects induced by technological tools in the management of depressive disorders in institutionalized elderly people with cognitive disorders

Delphine Machot-Isaac, Céline Clément, Paolo Di Patrizio

► To cite this version:

Delphine Machot-Isaac, Céline Clément, Paolo Di Patrizio. Description of the effects induced by technological tools in the management of depressive disorders in institutionalized elderly people with cognitive disorders. "Ma thèse en 180 secondes" BioSE doctoral school's scientific day, Dec 2024, Nancy (France), France. <hal-05113355>

HAL Id: hal-05113355

<https://hal.science/hal-05113355v1>

Submitted on 15 Jun 2025

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons CC BY-NC-ND 4.0 - Attribution - Non-commercial use - No Derivative Works - International License

Background: situation of institutionalized elderly people

- Depressive and cognitive disorders have a very high prevalence and worsen each other ⁽¹⁾,
- Antidepressant treatment must be supplemented by non-drug psychotherapy ⁽²⁾.

Population

- Residents aged 75 to 90 in a Moselle nursing home.
- Diagnosed depressive and cognitive disorders.

Research objectives :

- To determine whether the use of certain technological tools reduces the intensity of depression and behavioral disorders.
- To describe whether the effect persists.



**Organization of relaxation sessions
 virtual reality headset « HypnoVR® »**

(photo crédit @ D Machot Isaac)



**Behavioral activation therapy
 «Moto-Med®» ou «Bike Labyrinthe®»
 Pedal system for virtual tour of a site**

(photo crédit @ D Machot Isaac)

Methodology

Organisation of sessions

1 session/week

8 weeks

30 minutes

Evaluations

- Cornell Scale for Depression in Dementia (CSDDE) (Alexopoulos et al., 1988).

- NeuroPsychiatric Inventory Nursing Home version (NPI-NH) (Sisco et al., 2000.)

Relaxation = Psychologist

- Just before and just after therapy.

Behavioural activation =
 Ergotherapist

- Three months after the end of therapy.

Expected results

-Decrease in intensity of depressive and behavioural disorders after therapy ⁽³⁾⁽⁴⁾

-Persistence of therapy effect in the medium term⁽⁴⁾

Bibliography

1. Thomas, P., & Hazif-Thomas, C. (2024). *NPG Neurologie-Psychiatrie-Gériatrie*. 2. Sibille, F. X., Verreckt, E., Philippot, P., Agrigoroaei, S., Gobiet, P., Mees, L., ... & Schoevaerds, D. (2019). *Dépression*, 3. Brimelow, R. E., Thangavelu, K., Beattie, R., & Dissanayaka, N. N. (2022). *Journal of the American Medical Directors Association*, 23(5), 831-837. 4. Dziubek, W., Kowalska, J., Kuztal, M., Rogowski, Ł., Gołębiowski, T., Nikifur, M., ... & Woźniowski, M. (2016). *Kidney and Blood Pressure Research*, 41(1), 86-98.

Management

Thesis director: Céline Clément

Thesis co-supervisor : Paolo Di-Patrizio