Motivation regulation mediates the relationship between apathy of the person with dementia and the burden of the caregiver

Simon Forstmeier, Institute of Psychology, University of Siegen, Germany

Objectives: To investigate motivation regulation as mediator of the relationship between the patient’s apathy and the caregiver’s burden.

Background: Apathy is...

- ...one of the most frequent non-cognitive symptoms of mild cognitive impairment (MCI) and Alzheimer’s disease (AD)
- ...associated with faster cognitive decline, reduced quality of life in the patient, larger caregiver burden, and higher costs of care.
- Core of apathy is a motivational dysfunction.
- Predictors of apathy, previously investigated:
 - Severity of cognitive impairment
 - Environmental factors (e.g., social support)
 - Gender (male)
- What about motivation regulation?

Sample

- Data from MoReA (“Motivational Reserve in Alzheimer’s”) study: A longitudinal study on motivational abilities as risk factors of cognitive impairment in old age (Forstmeier & Maercker, 2015).
- Recruited from 17 memory clinics in Switzerland. State-of-the-art neuropsychological and medical assessment.
- Sample: N = 111
- Inclusion criteria: MCI (64) or mild AD (47), age 60+, informant available
- Exclusion criteria: Severe depression, alcohol/drug abuse, schizophrenia, Parkinson’s, HIV, Huntington, Pick, Creutzfeld-Jakob
- Some sample characteristics:
 - Age 75.3 years (SD 8.1)
 - Education 12.0 years (2.7)
 - MMSE 25.3 (3.3),
 - GDS Depression: 3.3 (2.6),
 - Female 53.2%

Conclusions:

- Motivation regulation is an important predictor of apathy in individuals with cognitive impairment and mediates the influence of apathy on caregiver’s burden.
- A limitation of the study is its cross-sectional design. Longitudinal results will soon be analysed.
- A training of motivation regulation should be included in prevention and early intervention in order to reduce both apathy symptoms in patients and burden in caregivers.
- Enhancing motivation regulation might be a mechanism underlying the efficacy of engagement in pleasant/structured activities often used in psychosocial interventions.

Measurement

- Cognitive status: Mini Mental Status Examination (MMSE)
- Functional status: Bayer Activities of Daily Living (B-ADL)
- Depression: Geriatric Depression Scale (GDS)
- Apathy: Apathy Evaluation Scale (AES)
- Motivation regulation: Scale of the Volitional Components Questionnaire (VCQ)
- Social Support: Questionnaire of Social Support (FSozU)
- Caregiver’s burden: Zarit Burden Inventory (ZBI)

Results

Predictors of apathy	r	β
Cognitive status (MMSE)	.01	.18
Functional status (B-ADL)	.47***	.31*
Depression (GDS)	.46***	.03
Motivation regulation (VCQ)	-.61***	-.48**
Social support (FSozU)	-.28*	-.20*

(R² = .54; F = 10.8***)

Predictors of caregiver burden	r	β
Cognitive status (MMSE)	-.34*	-.35*
Functional status (B-ADL)	.44***	.05
Depression (GDS)	.36**	.18
Apathy (AES)	.38**	.32*
Social support (FSozU)	-.05	-.04

(R² = .36; F = 5.2***)