Coping with disabilities

Preserving an emotional balance
Maintaining a positive self image
Preparing for an uncertain future
Dealing with treatment and environment
Developing adequate care relationships
Maintaining social relationships

Errorless learning
Cognitive rehabilitation

Author: L Clare*, BA Wilson, G Carter, K Breen, A Gosses, & JR Hodges
Year: 2000
Country: United Kingdom
Email*: l.clare@ucl.ac.uk

Objective: To examine whether errorless learning principles can be used effectively to design practical interventions for everyday memory problems of persons with dementia.

Setting: Community

Participants: People with minimal or mild Dementia Alzheimer Type (DAT) who lived with a caregiver willing to participate in the study.
Mean age: 69.3 (± 3.9)
Gender: 3 female, 3 male
MMSE: 24 (± 2)

Design: Multiple single case experimental design
Sample size: n=6
Follow-up: 1, 3, and 6 months

Intervention: In errorless learning memory performance is facilitated by the elimination or the reduction of incorrect or inappropriate responses of persons with dementia during a training session. Participants have the opportunity to experience success at every level of the learning stage. In errorless learning relatively straightforward discrimination tasks are applied. The interventions were tailored to the individual participant and involved learning or re-learning of specific information and learning to use a memory aid (with the aim to reduce repetitive questioning). Various strategies like vanishing cues or expanding rehearsal were used.
Frequency: one training session for each item
Duration: -
Facilitator: therapist and informal carer

Outcome measures: People with dementia:
General intellectual functioning:
- National Adult Reading Test (NART; Nelson, 1982)
- Speed and Capacity of Language Processing (SCOLP; Baddeley et al., 1992)
- Standard Progressive Matrices (Raven, 1976)
Memory:
- Doors and People (Baddeley et al., 1994)
- Riverhead Behavioural Memory Test (RBMT; Wilson et al., 1985)
Visuospatial perception:
- Visual Object and space Perception Battery (VOSP; Warrington & James, 1991)
Facial recognition:
- Facial Recognition Test (Benton et al., 1983)
- Famous Faces Test (described by Green & Hodges, 1996)
Self reports on mood, behaviour and memory functioning of the person with
### Dementia:

- Behaviour rating scale from the Clifton Assessment Procedures for the Elderly (CAPE; Pattie & Gilleard, 1979)
- Dysexecutive questionnaire from the Behavioural Assessment of the Dysexecutive Syndrome (BADS; Wilson et al., 1996)
- Memory problems questionnaire (Kapur & Pearson, 1983; Wilson & Moffat, 1992)
- Hospital Anxiety and Depression Scale (HADS; Snaith & Zigmond, 1994)

### Caregiver:

- Caregiver on mood and burden:
  - Hospital Anxiety and Depression Scale (HADS; Snaith & Zigmond, 1994)
  - Caregiver Strain Index (CSI; Robinson, 1983)

### Results

#### Persons with dementia:

**Mood and behaviour:** Informal carers tended to rate less memory problems of the persons with dementia in the follow-up phases. No changes in behaviour and anxiety of the people with dementia were found at follow-up, but people with dementia reported slightly higher levels of depression.

**General intellectual functioning:**

- Patients involved in the face-learning or recall interventions all improved as compared to baseline, with maintained effects at follow-up.
- Patients who learned to use a memory aid showed reductions in the frequency of repetitive questioning. One person chose to use the aid only during the intervention and the effect was lost at follow-up. The person who continued the use of the memory aid maintained the achieved effects.

### Implementation material

- E = experimental group; C = control group
- * Corresponding author