

Supplementary Table S1.

Analysis of the *who*, *why* and *how* of the included intervention studies.

| Author and year | Intervention | Who | Why | How | | | | | |
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| | | Target group | Aim of person-centred rehabilitation | Ethical principles, existential support and supporting personhood | Professional tools and methods | Holistic assessment | Activate and empower the patient | Building relationships | Organization and structure |
| Amieva et al., 2016 [31] | Individualized cognitive rehabilitation therapy | Dementia and his/her caregiver. The caregivers received weekly telephone contact during which he/she could discuss particular difficulties or ask questions | The psychologist had to adapt the program according to participants' cognitive abilities in order to anticipate and avoid as much as possible failures. | Sessions (individual) dedicated to select meaningful activities. The psychologist had to adapt the program according to patients' cognitive abilities in order to anticipate and avoid as much as possible failures. | The activities (activities of daily living or leisure activities) to be trained selected according to goals of personal relevance to patients. | | | | |
| Brueggen et al., 2017 [21] | Cognitive rehabilitation - an integrative | To monitor activities at home, | | The order of the modules varied flexibly | | Identification of problems and definition | | | The order of the modules varied flexibly in response |

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| | multimodal intervention (CORDIAL) | caregivers were called by phone once a week. | | <p>in response to the participants' needs.</p> <p>Sessions were extended from a one-hour session per week to one two-hour session per week, allowing sufficient time to address individual needs despite the group setting.</p> <p>Organization and implementation of pleasurable and meaningful activities.</p> <p>Evaluation of achieved goals and planning of future procedures.</p> | | <p>of treatment goals. This included determining obstacles to independent living e.g., the inability to utilize cooking devices, and aspects that reduce the quality of life.</p> | | | <p>to the participants' needs.</p> <p>Sessions were extended from a one-hour session per week to one two-hour session per week, allowing sufficient time to address individual needs despite the group setting.</p> <p>The complexity of the worksheets was reduced according to the cognitive state of the participants.</p> |
| Brunelle-Hamann et | Cognitive rehabilitation | When a caregiver | The level of assistance was | | | | | | Home setting either in the community or |

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| al., 2014 [27] | | agreed to participate as an informant, he/she had to be available and sufficiently involved in the patient's care to provide reliable information about the patient's history, symptoms and his/her own burden and distress. | provided according to the performance of each participant, in order to limit potential mistakes (per the errorless learning paradigm). | | | | | | in homes for the elderly. |
| Chew et al., 2015 [30] | Multimodal cognitive and physical rehabilitation | Patient and caregiver. Caregivers as informants on caregiver burden. | | Based on individual goal-setting. Identified problems were translated into goals, without restriction on the types of goals that can be set. Tailored individualized activities delivering person-centred | Goal attainment scaling was a tool for measuring treatment effects relevant to the individual, defining individual treatment goals at the outset and monitoring for goal attainment. | | | | Group therapy sessions. Regular feedback on progress was provided to the participant and his/her caregiver in the form of a progress card during the program, with advice to continue the learned activities at home between therapy sessions. |

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| | | | | care. | | | | | |
| Clare et al., 2010 [22] | Cognitive rehabilitation | People with dementia Carers, where available, were invited to join the last 15 minutes of each session to support between- session implementation. | | Individualized intervention addressing personally meaningful goals. | The Canadian Occupational Performance Measure was used to enable all participants to identify up to five personally relevant goals in areas relating to self- care, leisure, and productivity. | | Participants were encouraged to work on goals, and practice strategies, between sessions. | | Assessments and interventions were conducted in participants' homes. |
| Fernandez- Calvo et al., 2015 [23] | Multicomponent cognitive stimulation program | Patients and informal caregivers were involved in the training at home. | | These activities (cognitive tasks, daily problem- solving strategies, learning or re- learning information, or compensatory strategies) were implemented in partnership with patients, taking into account their needs and motivation. | | | The activities were implemented in partnership with patients. The therapists provided encouragement as a form of positive reinforcement during the session, focusing on positive outcome and feelings. | Implemented in the patients' homes by occupational therapists. The difficulty of the tasks used in the sessions were progressively increased from an easier level to maintain a perception of control over performance while ensuring the tasks eventually became sufficiently challenging. | |

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| Kim et al., 2015 [33] | Cognitive rehabilitation | Patient | | An individualized intervention focusing on a personally meaningful goal | The individual sessions for the Cognitive rehabilitation approach involved an individualized intervention focusing on a personally meaningful goal indicated by The Canadian Occupational Performance Measure. | | | | |
| Lee et al., 2013 [57] | Computer errorless learning-based memory training program | | | The level of difficulty of questions was set appropriate to the level of cognitive function of the subjects. The programs were designed using a culturally relevant training program with familiar daily | | | | | |

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| | | | | life training content, and gradation of training was based on the level of functioning, habits, and interests of older Chinese adults with early Alzheimer's disease. | | | | | |
| Laakkonen et al., 2016 [28] | Self-management group rehabilitation | <p>Couples were advised to do homework together between sessions.</p> <p>Offered people with dementia and their spouses possibilities for shared information and support</p> | | <p>All activities and discussions were adjusted according to participant preferences.</p> <p>Participants were able to invite experts to group sessions.</p> <p>To provide positive prospects and goal-setting for the future.</p> | | | <p>Empowerment, self-efficacy and mastery over one's own life with better ability to manage living with dementia.</p> <p>Participants were encouraged to give anonymous feedback on their experiences.</p> | | <p>Group facilitators visited couples' homes before the first session and encouraged them to express their preferences for topics in the group sessions.</p> <p>Principles guiding the group facilitators were respecting participant autonomy, enhancing their empowerment, use of own resources, problem-solving skills, and mastery of</p> |

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| | | | | | | | | | everyday life. |
| Ochmann et al., 2017 [37] | Cognitive rehabilitation | | | Identifying individual problems, defining personal goals, biographical work, implementation of pleasant activities and external memory aids, concluded by an evaluation session with individual plans for the future | | Identifying individual problems, defining personal goals, biographical work, implementation of pleasant activities and external memory aids. | | | |
| Regan et al., 2017 [29] | Individualized face-to-face cognitive rehabilitation | Delivered to client–supporter dyads | | The focus of strategies was on positive resources, intact functions, retained skills, and activities clients could still take part in Individualized intervention addressing personally | The Canadian Occupational Performance Measure was used to assist clients to identify up to five personally relevant goals in areas relating to self-care, leisure, and productivity. Questionnaires | | Clients were encouraged to practice techniques with assistance from their supporter between sessions. Clients and supporters were encouraged to help brainstorm and select the most appropriate strategies. | | All sessions were conducted in participants' homes. Although the basic structure of sessions was prescribed in a manual, their content could be adapted flexibly to meet specific client goals. |

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| | | | | meaningful goals. | assessing mood, illness adjustment, quality of life, and carer burden were also administered. | | | | |
| Schiffczyk et al., 2013 [24] | Short-Term inpatient rehabilitation | Patient and caregiver. | | Tailored to the individual needs | | | | | The study was conducted in the families' households to identify the impact of disease in their familiar environment. |
| Tanaka et al., 2017 [32] | The five principles of brain-activating rehabilitation were categorized as cognitive rehabilitation and involved reminiscence therapy, reality orientation, and physical activity. | Patients in a group setting and individually. | The primary expected effect was that participants will regain a desire for living as well as their self-respect. | Enjoyable and comfortable activities in an accepting atmosphere. The primary expected effect was that participants will regain a desire for living as well as their self-respect. | | | Through this process, participants were expected to regain their self-confidence and to take on the social function of passing on knowledge to younger generations. When the participants did so, the intervention staff praised them naturally. | | |
| Tay et al., | MINDVital | Accompanied by | | All participants | | | Regular feedback | | To ensure each |

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| 2016 [25] | rehabilitation | a reliable caregiver. | | and their caregivers attended a brief interview at the beginning of the program to define their individual treatment goals. | | | on participant's progress was provided to the participant and caregiver in the form of a progress card during the program, with advice to continue the learned activities at home between therapy sessions. | | participant receives individualized attention, group sizes were limited to 10 participants. |
| Thivierge et al., 2014 [26] | Cognitive rehabilitation | Patient and caregiver. | | The instrumental activities of daily living to be trained was chosen in collaboration with the patient and his/her caregiver in order to target the patient's needs and interests. | The performance on the instrumental activities of daily living to be trained was assessed by a Direct Measure of Training (DMT), an observational instrument adapted from the well validated activities of daily living. Situational Test. ³¹ . | | | | All evaluation and training sessions were carried out at the patient's home. |
| Toba et al., | Intensive | | | | First, the | | | | |

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| 2014 [38] | rehabilitation | | | | individual functional profiles were assessed with regard to both abilities and disabilities to evaluate how to enhance the abilities and compensate for disabilities. Second, training activities were selected; the decision was shared between therapists and participants. | | | | |
| Tsuchiya et al., 2016 [35] | Brain-Activating rehabilitation | | | Enjoyable and comfortable activities to be performed in an atmosphere underpinned by values of acceptance. Brain-activating rehabilitation | | | The patients should be praised to enhance their motivation. The patients to be offered social roles that enhance their remaining abilities; and supportive care | The activities should be associated with empathetic 2-way communication between the staff and the patients as well as between the patients. | |

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| | | | | <p>were also considered to enable participants to recover both a desire for life and their self-respect.</p> <p>Various activities were selected based on the patients' physical function, cognitive function, life history, and preferences.</p> <p>The patients should be offered social roles that enhance their remaining abilities; and supportive care should be provided to prevent task failure that causes confusion.</p> | | | <p>should be provided to prevent task failure that causes confusion.</p> | | |
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| Van Paasschen et al., 2013 [34] | Cognitive rehabilitation | | | All participants initially learned and practiced all 3 strategies (strategies for acquiring new information, including verbal and visual mnemonics, semantic elaboration, and expanding rehearsal) and then chose 1 preferred strategy to implement in daily life. | The cognitive rehabilitation intervention was tailored to each participant's personal difficulties in daily life as identified by the Canadian Occupational Performance Measure. One or 2 rehabilitation goals were selected to work on during the intervention. Participants identified up to 5 personally relevant goals. Participants rated their performance and their satisfaction on each goal prior to and | | | | |
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| | | | | | following the intervention period. | | | | |
| Werheid et al., 2015 [58] | Cognitive rehabilitation and cognitive- behavioral- treatment. | | | | | | | | |

For Peer Review

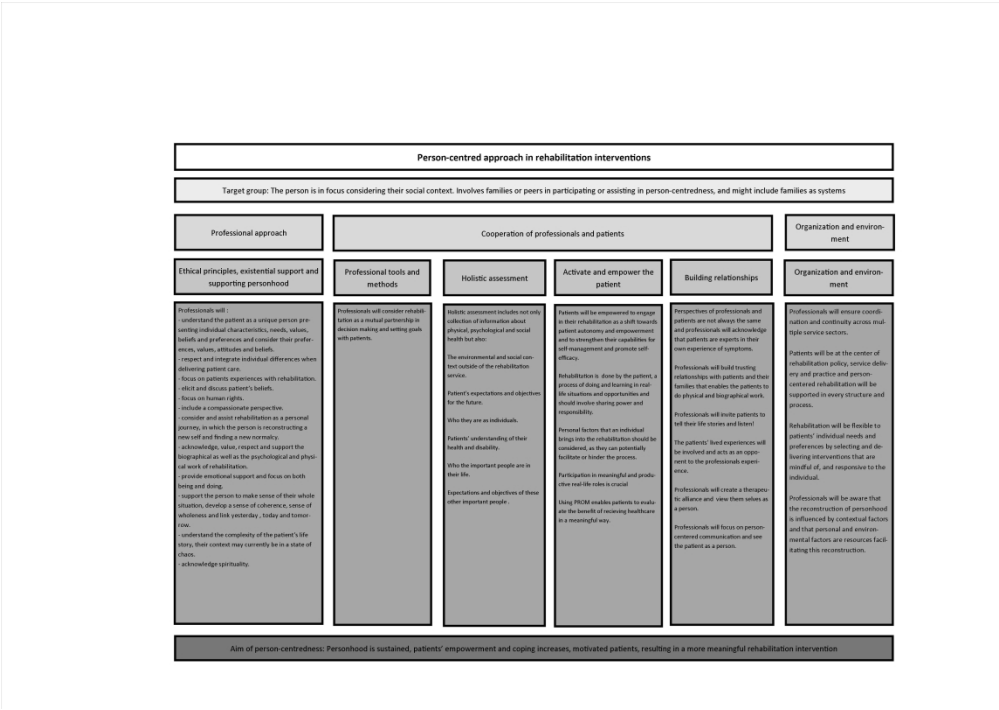


Figure 1, program theory

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