

Self-efficacy in day care program for people with dementia: a case study

Belief in self-efficacy

Master Clinical Health Sciences, Nursing Science
Course, Research Internship 2: Master's Thesis

Name: Leonie Withag
Student number: 3333353
Status: Final master's thesis
Date: 1 July 2011
Mentor: Drs. Truus van der Hooft
Course lecturer: Drs. Janneke de Man
Study organization: Stichting Zorgfederatie Oldenzaal
Contact person: Drs. Angélique Lamme
Journal: International Psychogeriatrics (not a fixed word limit)
Reference style: Harvard
Words: 3925 (including references, excluding tables)
Dutch abstract: 284
English abstract: 267

Introduction

Dementia is the disease of the future. Worldwide about 24 million people suffer from dementia today and this number will increase to 81 million people in 2040 assuming no changes in mortality will take place and no effective prevention strategies or curative treatments will be developed (Prince and Jackson, 2009; Ferri *et al.*, 2005). In 2010, about 230 thousand people suffered from dementia in the Netherlands, with an expected increase of more than 500 thousand in 2050 (Trimbos instituut, 2010). Dementia is described as brain disorders that have a common loss of cognitive function that is progressive (Voigt-Radloff *et al.*, 2009), including a decline in a person's ability to remember, understand, communicate and use learned skills (Hamilton-West *et al.*, 2010). In the early stage of dementia people may become forgetful, confused or unable to make decisions. Because of their cognitive impairments people with dementia (PWD) need to adapt to changing circumstances (Droës and Breebaart, 1994). PWD are faced with the challenge of adapting to limitations, maintaining their (positive) self-esteem, coping with an uncertain future, maintaining social relationships and developing a good relationship with others (Dröes, 1991). Potential problems in everyday life can affect self confidence and belief in capabilities of PWD.

When PWD live independently at home, they often rely on both informal (family) caregivers and professional care. Informal caregivers, mostly family, provide unpaid care and have an important responsibility to ensure PWD can stay at home. In the Netherlands professional care for PWD who live independently can include home care, case management and day care (Dröes *et al.*, 2004). Professional caregivers, like nurses in home care and case management, as well as social workers and activity therapists or nurses in day care, coordinate the care of PWD. They should support to ensure welfare of both PWD and family caregivers. In the Netherlands professional day care for the elderly focuses on structural everyday activities with a specific purpose in which the individual PWD is involved and gives meaning to life (Nederlandse Zorgautoriteit, 2011). Dutch policy focuses on activities that stimulate independent living by PWD. Interventions in day care should give meaning to life and increase the quality of life of people with moderate to severe disabilities.

Intervention and setting

Regular day care for older adults with physical impairments and/or dementia was offered from a small health service organization for (home)care, residential home and welfare, in a city with about 35 thousand inhabitants in the east of the Netherlands. This regular day care program, was characterized by offering (mostly) leisure activities by professional caregivers and volunteers. Elderly are largely passive in regular day care and easily show a dependent

attitude. Because of discrepancies in needs a new day care program (DCP) for PWD started February 2011 to improve the quality of life and to stimulate independent living with the support of caregivers. A new approach by professional caregivers and volunteers requires they should not intervene and take over, but stimulate PWD in their daily activities. In this way, it was expected PWD would feel more useful and responsible and that self-esteem would increase. Eight to ten PWD of 60 years or older visit the new DCP for one till three days a week from 10.00 a.m. till 16.00 p.m. in a community centre for welfare and education for young and older people and was located at a primary school. One activity therapist and one or two volunteers supported PWD in daytime activities as part of the DCP and focused on four activities: cooking (preparing meals and eating together), exercise (walking and other physical activities), activities focused on the individual needs of PWD (hobbies and interests) and activities together with PWD and their family caregivers once a month (meetings or short trips). The following objectives of the DCP were formulated:

1. Improve an understanding of the needs of PWD and develop an appropriate individual day program according to the individual care plan
2. Motivate and encourage PWD in their skills
3. Enhance expertise and knowledge about dementia by professional caregivers and volunteers
4. Stimulate independence and control over PWD's own lives according to Dutch Responsible Standards Home Care (Kwaliteitskader Verantwoorde Zorg Verpleging Verzorging, 2010)
5. Reinforce cooperation among family caregivers, professional care and volunteers
6. Encourage collaboration with other welfare organizations in the community centre

Theoretical background

People who are convinced of their capabilities will not give up (Bosscher *et al.*, 1997).

According to Bandura (1977) belief in one's capabilities to succeed in a particular situation is called self-efficacy ('the conviction that one can successfully execute the behavior required to produce the outcomes'). Bandura's theory emphasizes that the strongest relationships exist between beliefs regarding a specific behavior performance and the performance of that behavior (Bosscher and Smit, 1998). Positive view of faith in one's capabilities and skills leads to a more positive self-esteem. Bandura describes four types of being self-efficacious: (1) performance accomplishments 'I know I can'; (2) vicarious experience 'what the other can, I can'; (3) verbal persuasion 'you can' and (4) emotional arousal 'I feel' (Bandura, 1977; Bosscher *et al.*, 1997). Positive expectations of competence depend on: the types of activity

people choose to engage in (initiative), the level of effort they spend (effort) and perseverance in the face of difficulties (persistence) (Bosscher and Smit, 1998).

Problem statement

Family caregivers, professional caregivers and volunteers who support PWD in living independently, have an important role in stimulating skills they are good at and still perform in order to increase self-confidence. It was expected PWD would feel more self-efficacious in the DCP when professionals and volunteers would not intervene and take over. Furthermore promoting cooperation with family caregivers and other welfare organizations in the community centre could contribute to increasing quality of life of PWD. It is unknown how interaction, behavior and reflection of self-efficacy between PWD, family caregivers and volunteers occurred in the DCP. To date no studies have been published on self-efficacy of PWD in day care. Also, there is a need of empirical evidence to guide the process to improve health services for PWD (McCrae and Banerjee, 2011). It was envisaged DCP would be maintained after program completion depending on evaluation evidence.

Research question

What interaction, behavior and reflection about self-efficacy of PWD between family caregivers, professional caregivers and volunteers occurred to achieve objectives of new day care program?

Aim

The aim of this study is to understand interaction, behavior and reflection of self-efficacy of PWD based on the theory of Bandura. Results of the current study could provide information whether new day care achieved objectives in this setting or should be modified.

Methods

Design

Evaluation-research is a type of practical scientific research and focuses on obtaining information about the process or a program in practice (Polit and Beck 2008; Swanborn 2007; Swanborn 2000). For a process evaluation in a small context, a case study was designed to determine how people think, behave or develop over time. Quantitative and qualitative methods were used to answer the research question.

Participants

For this case study, a convenience sample was used. Eight diagnosed PWD who started DCP and their family caregiver were eligible. Researcher contacted family caregivers by telephone to invite them for an individual conversation to explain study and confidentiality of data. Two family caregivers refused to participate; one family caregiver said she has too much to cope with at the moment and second family caregiver doubted DCP was suitable for her partner. Both agreed on observing their partners with dementia if it not influenced their behavior. Two activity therapists were approached, who had knowledge and experience in care for PWD and worked most of the time with the DCP. Four of six volunteers were eligible, because two of them had no experiences in day care before the new DCP started. Approached volunteers and activity therapists agreed to participate. Signed informed consent of all participants was obtained before study started. Demographic variables were collected to present a good description of the case. The study protocol was approved by the Ethics Committee at Medisch Spectrum Twente, Enschede. Permission for the study was given by the Managing Director and Client Board of the organization.

Data collection

Data were collected during ten weeks from February 2011 till end April 2011 and consisted of structured and participant observations, two focus group interviews and questionnaire. Table 1 shows a flowchart.

< Table 1 >

Structured and participant observations

During daily activities researcher held structured observations for a maximum of five minutes based on the four types of being self-efficacious according to the theory of Bandura and transcribed verbatim. From week eight till ten structured observations were enhanced by a modest degree of participation to give meaning to human behaviors and experiences.

Structured and participant observations provided a broad overview (Polit and Beck, 2008) to gain insight self-efficacy of PWD in practice.

Focus group interviews

After two and eight weeks, researcher held focus group interviews with different participants. One family caregiver intended to participate, but had to work both times. One volunteer and one family caregiver did not appear during the interview without a reason. Focus group interviews were held in a conference room for one and a half hour, tape recorded and transcribed verbatim.

ALCOS-12-SF

The validated Dutch version of the General Self-Efficacy Scale, called ALCOS- Short Form (ALCOS-SF-12) was used to determine self-efficacy of PWD (initiative, effort or persistence) on 5-points Likert Scale. Internal consistency was 0.69 and 0.78 (Bosscher *et al.*, 1997); stability over one year 0.67 expressed as Pearson's *r* (Bosscher and Smit, 1998). Volunteers and activity therapists were linked to PWD they already knew from regular day care. Family caregivers, volunteers and activity therapists were asked to complete questionnaire as the person with dementia would have answered the questions.

Data analysis

MAXQDA was used to process qualitative data. Behavior of PWD during observations was analyzed as initiative, effort or persistence and assessed to the four types of expectations of the theory of self-efficacy of Bandura and scored as a positive (satisfied, be able to), negative (fear, fright, withdraw) or no effect on PWD. First step in intra-case analysis (Miles and Huberman, 1994) was to examine all relevant data sources to extract a description of what was found about self-efficacy in terms of expectations of competence in the study. After data reduction and data display, findings were checked in feedback sessions with mentor (TvdH) to draw conclusions about interaction, behavior and reflection of self-efficacy. Field notes, interpretations and reflective memos of researcher's own role were maintained during and after observations and focus group interviews. Member checking was conducted by one activity therapist after first focus group interview, but could not take place after second focus group interview due to a lack of time. Results from ALCOS-12-SF were analyzed in means, standard deviations and modus of outcome with SPSS 17.0 software package. Seven of twelve questions were formulated as negative and decoded before item scores were counted. Wilcoxon on rank test was used to assess changes in outcomes of the ALCOS-12-SF between baseline and after six weeks ($p < 0.05$). A metamatrix according to Miles and Huberman (1994) was developed to respond a deeper understanding and explaining of the intra-case analysis and to reveal patterns and common themes of self-efficacy.

Results

Participants

All included participants completed the study. Caregivers were all family members of PWD. On average, PWD visited two or three times a week DCP. Two PWD extended their visit with one day at the end of the study. Three PWD visited both new DCP and regular DCP in studied organization. Table 2 shows results of demographic variables of participants.

< Table 2 >

Competences and expectations of self-efficacy

During the study 37 structured and participant observations were collected in the morning (N=12) and afternoon (N=25) in the meeting room (N=25), kitchen (N=10) and other places, like outside the building and inside the supermarket (N=4). In two participant observations researcher observed in two different places. Initiative was measured (N=33), effort (N=20) and persistence (N=34). Expectations of self-efficacy was identified as a positive effect (N=55) in the observations, no effect (N=6) and a negative effect (N=22). Frequency of the expectations 'I know I can' (N=40) and 'you can' (N= 29) was higher in comparison with the expectations 'what the other can, I can' (N=17) and 'I feel' (N=6). Table 3 shows a meta matrix of similarities and differences collected from questionnaires, observations and focus group interviews to describe what was found about self-efficacy. Table 4 shows quotes of outcome of day care program objectives from interviews and observations.

< Table 3 >

< Table 4 >

Motivating and stimulating skills

In both focus group interviews activity therapists and volunteers explained family caregivers what kind of activities PWD performed in DCP. When trying to learn new things in daily activities, PWD primary reaction was they said that they couldn't do it. Professional caregivers and volunteers gave instructions, assisted and stimulated PWD in 'you can' performing activities and resulted in PWD expectations 'I know I can'. They explained in focus group interviews there were no activities PWD could not perform to this moment. Daily activities, like preparing meals or cleaning up the table, became structural events in the DCP. When activities looked too complicated PWD felt safe to tell, so activity therapists or volunteers could help them.

After attending DCP PWD found out where they could find things they needed for preparing meals or cleaning up the table. An activity therapist explained in focus group interview and in the first evaluation of DCP with PWD and family caregivers, they intensively stimulated and encouraged PWD in what they are still able to do. A few PWD performed activities they never did at home, like peeling potatoes. Family caregivers were surprised their relative was able to perform daily activities.

When PWD made plans and decisions, they discussed with each other what they wanted. They changed their opinion to get consensus about what to eat. From observations it was shown PWD adapted to circumstances and opinions of others. For example they laughed about their own wavering behavior and said they have a pleasure time with others in new DCP.

Individual day care program

Before new day care started activity therapists discussed with family caregivers about the needs to formulate an individual care plan. The researcher observed that communication between family caregivers and professional caregivers became more important to improve care. Family caregivers gained insight into the experiences what PWD still could perform written on a note they received after day care. In observations and from focus group interviews it was found volunteers and professional caregivers were excited about DCP, because of the results they achieved when stimulating PWD in what they still could perform. Their interventions were focused on a safe environment and supporting PWD by observing them in their activities.

Enhance expertise and knowledge about dementia

During observations and in both focus group interviews the researcher gradually became a role model for family caregivers, activity therapists and volunteers. Researcher enhanced knowledge of the consequences of dementia and gave advice or suggestions.

Cooperation and collaboration

To reinforce cooperation the first evaluation of DCP with family caregivers, PWD and activity therapists was successful. Family caregivers evaluated DCP where PWD felt like being at home. Some of the family caregivers agreed to support in DCP when no volunteers would be present. DCP provided collaboration with primary school by an activity once a week with PWD and six years old school children. PWD participated in some of the organized activities for elderly in the community centre, such as singing with the choir every week.

ALCOS-12-SF

From Wilcoxon rank test ten participants (family caregivers, professional caregivers or volunteers) assessed higher degree of self-efficacy after six weeks from ALCOS-12-SF (table 5). Five participants assessed lower self-efficacy and for three participants no differences were found. Low self-efficacy was assessed at baseline in all groups. After six weeks in all groups ALCOS-12-SF showed improvement of assessing self-efficacy of PWD, but not significant (p 0.11). A main difference at baseline and after six weeks was found for family caregivers. In all groups of participants, except for volunteers in assessing persistence and effort, there was an overall increase of assessing self-efficacy of PWD.

< Table 5 >

Discussion

The aims of this case study were to understand interaction, behavior and reflection of self-efficacy between PWD, family caregivers, professional caregivers and volunteers in DCP and evaluating DCP objectives. The expectations that PWD felt more useful and responsible if they were supported in daily activities was confirmed based on the theory of Bandura. Being self-efficacious was most identified from performance accomplishments 'I know I can' as a positive effect in structured and participant observations. After six weeks a higher degree of self-efficacy was assessed by family caregivers, professional caregivers and volunteers. This study showed the importance of interaction between family caregivers and professional caregivers to communicate about what PWD still can perform to increase self-efficacy of PWD and enhance family caregiver's knowledge about dementia. The enthusiasm of professional caregivers and volunteers in DCP contributed to achieve objectives.

Although promising, the findings in this study should be interpreted with caution for several reasons. First, the role of researcher was threefold: researcher, member of the project team for implementation of DCP and finally researcher was manager and responsible for day care. During the study, the researcher became a role model to demonstrate which behavior is necessary to perform the program and this might have influenced program outcome. Researcher was aware of this and paid attention by using memos. To increase validity data method triangulation was used for collecting qualitative and quantitative data by three different types of data collection. The capabilities of PWD to assess their own self-efficacy with ALCOS-12-SF was underestimated by researcher. The results confirmed that PWD could reflect on their own behavior, despite cognitive impairments. Second limitation was that after ten weeks new themes still emerged in structured and participant observations. Because of limited study period data saturation was not achieved, but trends emerged. Third, three participants attended second focus group interview. Polit and Beck (2008) described a group of four or fewer may not generate sufficient interaction and decreased internal validity of the study. Last, before the start of the new day care PWD were not screened by Mini-Mental State Examination (MMSE) to assess cognitive functioning and to estimate the severity of dementia. In this study, PWD live independently with or without a family caregiver, so it is possible PWD had mild to moderate memory problems. This might contribute to the positive effects of the study, but decreases generalizability. Nevertheless, this is the first study which gained insight into self-efficacy of PWD in day care and contributed to the empirical evidence to improve health services for PWD.

Theory of Bandura was used to determine a positive faith in one's capabilities and skills which leads to a more positive self-esteem of PWD. In this study professional caregivers and

volunteers applied a reserved approach and created a safe environment so PWD were encouraged in their skills they felt safe. This was confirmed in a study of Lange *et al.* (1999), where the creation of safe environment supported PWD to behave according to their own values. Furthermore, in a previous study Jong and Boersma (2009) described family caregivers wanted to see professionals acting in a way that inspires confidence and provides a feeling of security.

Communication between family caregivers and professional caregivers is important to evaluate what PWD still can. Family caregivers expressed a wish to be kept informed about the experiences of PWD at day care (Jong and Boersma, 2009). This can help caregivers to maintain independent living of PWD and alleviate stress of family caregivers and PWD (Whitlatch *et al.*, 2005) in everyday life. PWD performed daily activities in DCP they were used to at home which gave meaning to their lives, like washing the dishes and preparing meals. To inform family caregivers the written note with a description of the activities at new DCP and personal details in relation to PWD's individual DCP is an appropriate intervention. This also applies to photos family caregivers received during the evaluation meeting. The intervention to reinforce cooperation between family caregivers, professional caregivers and volunteers, like group sessions or short trips, can help family caregivers to plan and involve PWD in decision making in everyday life (Dröes *et al.*, 2004; Dröes *et al.*, 2004; Zarit *et al.*, 2004).

Professional caregivers and volunteers and reflected on what PWD still can perform or experienced from what was described in the individual care plan. When PWD are stimulated ('you can') and supported in performing daily activities it suggests that belief in what they still can increases self-efficacy. Two studies (Dechamps *et al.*, 2011; van Tilborg *et al.*, 2011) show elderly with mild dementia are able to acquire new skills that are relevant for daily life. Van Tilborg *et al.* (2011) conclude helping older people with dementia with cognitive deficits by retraining old skills and learning new ones may prolong their ability to function independently. Errorless training (teaching technique that prevents people from making mistakes during learning) helps PWD to learn new skills (Dechamps *et al.*, 2011; Dirkse *et al.*, 2011). In this study, PWD learn new skills in a similar way, because they are supported in a safe environment with professionals or volunteers nearby to intervene when necessary. Dirkse *et al.* (2011) described this kind of learning as implicit learning or 'automatic learning'. Making plans often proceeds entirely unconsciously (Dijksterhuis and Aarts, 2010) and is still intact at PWD despite their cognitive impairments (Dirkse *et al.*, 2011). Implicit learning can enhance self-esteem, self-efficacy and self-confidence (Benbow, 2009). Learning (new) skills, such as daily activities and stimulation of PWD in their individual needs gives meaning to their lives and is shown in DCP.

One of the strengths of DCP was the frequency of physical activities. Movement, like walking to the supermarket and using the stairs, is already embedded in DCP itself and goes automatically. The importance of this activity to slow down disease progression was confirmed in previous studies (Dirkse *et al.*, 2011; Benbow, 2009; Jong and Boersma, 2009; Rolland *et al.*, 2008).

Conclusion

Although exploratory, this study offers insight interaction, behavior and reflection of self-efficacy of PWD between family caregivers, professional caregivers and volunteers. DCP can contribute to stimulate and encourage PWD in what they still can and should be an essential part in daily practice. Belief of family caregivers, professional caregivers and volunteers in self-efficacy of PWD increases self-confidence and a positive self-esteem. The study evaluated DCP objectives and as a result this program should not be modified. Cooperation between family caregivers, professional caregivers, volunteers and others in the community centre is essential to support independent living and quality of life of PWD.

Implications

This study illustrated the theory of self-efficacy according to Bandura applies to PWD, despite of cognitive impairments. To improve quality of life it is important to belief in self-efficacy of PWD and supporting skills without intervening in a safe environment, like this DCP. Independent living for the increasing amount of PWD could be achieved by collaboration between PWD, family caregivers, professional caregivers, volunteers and other welfare organizations. For further research it would be interesting to measure PWD's own perspective on self-efficacy and the effect of implicit learning in day care.

Conflict of interest declaration

None.

Description of authors' roles

Leonie Withag designed the study, collected and analyzed data and wrote the paper. Truus van der Hooft participated in designing the study and data analysis. Truus van der Hooft and Janneke de Man supervised the study.

References

- Bandura, A.** (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, (84), 191-215.
- Benbow, S. M.** (2009). Older people, mental health and learning. *International Psychogeriatrics*, 21, 799-80-4.
- Bosscher, R.J., and Smit, J.H.** (1998). Confirmatory factor analysis of the General Self-Efficacy Scale. *Behaviour research and therapy*, 36(3), 339-43.
- Bosscher, R.J., Smit, J.H. and Kempen, G.** (1997). Algemene competentieverwachtingen bij ouderen; een onderzoek naar de psychometrische kenmerken van de Algemene Competentieschaal (ALCOS). *Ned. Tijdschr. Psychol.* 52, 239-248.
- Dechamps, A. et al.** (2011). Effects of Different Learning Methods for Instrumental Activities of Daily Living in Patients With Alzheimer's Dementia: A Pilot Study. *American journal of Alzheimer's disease and other dementias*. Doi: 10.1177/1533317511404394.
- Dijksterhuis, A., and Aarts, H.** (2010). Goals, attention and (un)consciousness. *Annual review of psychology*, 61, 467-90. Doi: 10.1146/annurev.psych.093008.100445.
- Dirkse, R., Kessels, R.P.C., Hoogeveen, F. and Dixhoorn I. van.** (2011). *(op)nieuw geleerd, oud gedaan. Over het lerend vermogen van mensen met dementie* (Eerste druk). Utrecht/Antwerpen: Kosmos Uitgevers.
- Droës, R.M., and Breebaart, E.** (1994). Amsterdam Meeting Centres. *IPA Bulletin*, 11 (2)12.
- Droës, R.M., Meiland, F., Schmitz, M., Tilburg, W. van.** (2004). Effect of combined support for people with dementia and carer versus regular day care on behaviour and mood of persons with dementia: results from a multi-centre implementation study. *International Journal of Geriatric Psychiatry*, 19 (7), 673-684.
- Droës, R.M.** (1991). In *Beweging: over psychosociale hulpverlening aan dementerende ouderen*. *Intro: Nijkerk*.
- Droës, R.M., Breebaart, E., Meiland, F., Tilburg, W. van. and Mellenbergh, G.** (2004). Effect of Meeting Centres Support Program on feelings of competence of family carers and delay of institutionalization of people with dementia. *Aging & mental health*, 8(3), 201-11. Doi: 10.1080/13607860410001669732.
- Ferri, C. et al.** (2005). Global prevalence of dementia: a Delphi consensus study. *Lancet*, 366, 2112-2117. Doi: 10.1016/S0140-6736(05)67889-0.
- Hamilton-West, K.E., Milne, A.J., Chenery, A., and Tilbrook, C.** (2010). Help-seeking in relation to signs of dementia: a pilot study to evaluate the utility of the common-sense model of illness representations. *Psychology, health & medicine*, 15(5), 540-9. doi: 10.1080/13548506.2010.487109.
- Jong, J. de. and Boersma, F.** (2009). Dutch psychogeriatric day-care centres: a qualitative study of the needs and wishes of carers. *International Psychogeriatrics*, 21, 268-277.

- Lange, J. de., Droës, R.M., Finnema, E. and Kooij C. van der.** (1999). Aansluiting bij de belevingswereld: effectieve zorg voor dementerenden. *Alzheimer magazine*, 12, 16-19.
- McCrae, N. and Banerjee, S.** (2011). Modernizing mental health services for older people: a case study. *International Psychogeriatrics*, 23(1), 10-9. doi: 10.1017/S1041610210001407.
- Miles, M. and Huberman, A.M.** (1994). *Qualitative data analysis: An expanded sourcebook* (2nd.ed). Thousand Oaks, CA: Sage Publications.
- Nederlandse Zorgautoriteit** (2011). *Prestatiebeschrijvingen en tarieven dagbesteding*. Available at: <http://www.nza.nl/137706/142055/CA-45.pdf> (last accessed 25 June 2011).
- Polit, D.E. and Beck, C.** (2008). *Nursing Research: generating and assessing evidence for nursing practice* (8th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Prince, M. and Jackson, J.** (2009). *World Alzheimer Report*. Available at: <http://www.med.upenn.edu/aging/documents/WorldAlzheimerReportdesignedvers9-09.pdf> (last assessed 25 June 2011).
- Rolland, Y. Abellan van Kan, G. and Vellas, B.** (2008). Physical activity and Alzheimer's disease: from prevention to therapeutic perspectives. *Journal of the American Medical Directors Association*, 9(6), 390-405. doi: 10.1016/j.jamda.2008.02.007.
- Swanborn, P.** (2000). *Case-study's: Wat, wanneer en hoe?* (2^{de} druk). Amsterdam/Meppel: Boom.
- Swanborn, P.** (2007). *Evalueren*. (Tweede druk). Amsterdam: Boom Onderwijs.
- Tilborg, I.A.D.A. van, Kessels, R.P.C. and Hulstijn, W.** (2011). How should we teach everyday skills in dementia? A controlled study comparing implicit and explicit training methods. *Clinical rehabilitation*. doi: 10.1177/0269215510396738.
- Trimbos instituut** (2010). *Feiten en cijfers dementie*. Available at: <http://www.trimbos.nl/onderwerpen/psychische-gezondheid/dementie/feiten-en-cijfers> (last assessed 20 May 2011).
- Voigt-Radloff, S. et al.** (2009). WHEDA study: effectiveness of occupational therapy at home for older people with dementia and their caregivers - the design of a pragmatic randomised controlled trial evaluating a Dutch programme in seven German centres. *BMC geriatrics*, 9, 44. doi: 10.1186/1471-2318-9-44.
- Whitlach, C., Feinberg, L. and Tucke, S.** (2005). Measuring the Values and Preferences for Everyday Care of Persons With Cognitive Impairment and Their Family Caregivers. *The Gerontologist*, 45(3), 370-380.
- Zarit, S., Femia, E., Watson, J., Rice-Oeschger, L. and Kakos, B.** (2004). Memory Club: a Group Intervention for People With Early-Stage Dementia and Their Care Partners. *The Gerontologist*, 44(2), 262-269.

Kwaliteitskader Verantwoorde Zorg Verpleging Verzorging (2010). *Handboek Kwaliteitskader Verantwoorde Zorg Verpleging Verzorging & Thuiszorg*. Available at: http://www.zichtbarezorg.nl/mailings/FILES/htmlcontent/VV&T/Handboek_kwaliteitskader_VZ_VV&T_versie_12-05-2010.pdf (last assessed 21 May 2011).

Tables

Table 1. Flowchart

Data collection	Variables	Participants (N)
<i>Permission and characteristics participants (T=0)</i>	Informed consent	FCG (6) PCG (2)
	Demographic variables	V (4)
<i>ALCOS-12-SF (T=0 and T=6)</i>	Self-efficacy of PWD (initiative, effort and persistence)	FCG (6) PCG (2) V (4)
<i>Focus group interviews (T=2 and T=8)</i>	<ul style="list-style-type: none"> • Results observations • Explanation interaction, behavior and reflection from observations • Objectives new day care 	<i>First:</i> FCG (3) PCG (1) V (2)
		<i>Second:</i> FCG (1) PCG (1) V (1)
<i>Structured observations (T=0 to T=8)</i>	Self-efficacy (initiative, effort and persistence) scored on four types with effect (+, -, 0)*: <ul style="list-style-type: none"> • 'I know I can' • 'You can' • 'What the other can I can' • 'I feel' 	PWD (8) FCG (8) PCG (2) V (6)
<i>Participant observations (T=8 to T=10)</i>	Give meaning to experiences and behavior Being role model and enhance knowledge	PWD (8) FCG (8) PCG (2) V (6)

T = weeks

PWD = people with dementia, FCG = family caregivers, PCG = professional caregivers, V = volunteers

*+ =positive effect (satisfied, able to), 0 = no effect, - = negative effect (fear, fright, withdraw)

Table 2. Demographic variables

Characteristics people with dementia (N=6)	Mean % (range)
Gender	
Female	66.7
Age (years)	79 (70-83)
Living conditions	
Living together with spouse	50
Living alone	50
Diagnosis	
Alzheimer disease	83.3
Multi infarct dementia	16.7
Diagnosed	
2009	83.3
2010	16.7

Characteristics family caregivers (N=6)	
Gender	
Female	66.7
Mean age (years)	67 (49-80)
Caregiver relationship	
Spouse	50
Child	33.3
Sibling	16.7
Caregiver for PWD (years)	3 (1-8)

Characteristics activity therapists (N=2)	
Gender	
Female	100
Age (years)	34 (24-43)
Caregiver for PWD (years)	13 (2-25)

Characteristics volunteers (N=4)	
Gender	
Female	66.7
Mean age (years)	52 (16-66)
Volunteer (years)	3 (1-6)

Table 3. Meta matrix of interaction, behavior and reflection of self-efficacy

PARTICIPANTS	INTERACTION	BEHAVIOR	REFLECTION
<i>PWD</i>	Care for the others Conform to the opinion of others Asking for support to V and PCG	Performing individual and group activities Pleasure Feeling insecure Own values	'What the other can I can' and 'I can' 'I cannot do that, I have not done this before' 'I have to know exactly what you mean'
<i>Family caregivers</i>	Communication with PCG	Encourage individual and physical activities	Did not expect self-efficacious behavior of PWD in day care
<i>Professional caregivers</i>	Positive feedback to stimulate PWD self-confidence Experience to learn new skills	Support and stimulating PWD Information and advice to FCG and V about dementia Observing and wait till PWD perform Give instructions Stimulate independent behavior	Learn from experiences 'You can' Don't force, but tempt PWD to achieve goals
<i>Volunteers</i>	Discus and advice PWD in decision making	Feel responsible for safety of PWD Learn from PCG Care for pleasant day time	'You can' PWD can more than thought before

PWD = people with dementia, FCG = family caregivers, PCG = professional caregivers, V = volunteers

Table 4. Examples of quotes regarding to self-efficacy and objectives of DCP objectives

Initiative	<p>One of the PWD is very busy in making greeting cards on the new day care. From the individual care plan we know she has made a lot of greeting cards herself at home. Now, she knows where she can find the material when she is interested in to make cards (<i>activity therapist, focus group interview 1</i>)</p> <p>Recently we bought a new television set for my mother. Almost the same she had before. She could use the old remote control, but every time she pulled out all the electronic. Then we wrote a note and I instructed her how to use it. After that she knew how to use the television (<i>family caregiver, focus group interview 1</i>)</p> <p>When I ask my husband to go to the shop together, he always says he likes to join me. But when I say nothing he will not take initiative to go (<i>family caregiver, focus group interview 1</i>)</p>
Effort	<p>Activity therapist asks after the meal: 'Who wants to assist in washing the dishes?' None of the PWD wants to. She asks one of them to help. He wants to help, because they have eaten all there was. He says: 'So, let's clean up' (<i>PWD and activity therapist, observation 11</i>)</p> <p>Two PWD and a volunteer are peeling potatoes. 'Is this good?', she asks volunteer, who confirms. The other PWD says she has to peel small. He answers: 'Yes I do, I'm from the war' (<i>2 PWD and volunteer, observation 16</i>)</p> <p>Playing games with children makes PWD sometimes insecure. They don't know what to do and asks the children if it is going right (<i>2 PWD, observation 24 and 25</i>)</p> <p>When it is possible, people use the stairs. If they see others using the stairs, they also want to do so (<i>activity therapist, focus group interview 2</i>)</p>
Persistence	<p>When she washes the dishes, she can't find the dish brush. 'Where can I find the dish brush?' she asks. When someone helps her to find, she and another PWD clean up the kitchen together (<i>2 PWD and volunteer, observation 19</i>)</p> <p>Two PWD preparing a cake with help from the activity therapist. 'I never did this before' one of them said. 'It goes very well' activity therapist compliments her. When PWD needs a wooden spoon, she feels uncomfortable, because she never used a spoon for the cake (<i>2 PWD and activity therapist, observation 21</i>)</p> <p>My partner says he can't do much, but he still can do some things I hear now (<i>family caregiver, observation 22</i>)</p> <p>'What a meeting. Now we are trying for more than twenty minutes already to decide what to eat'. They all laughed about it (<i>PWD, observation 23</i>)</p>
Needs and individual day care program	<p>'My husband said he had listened to Louis Armstrong at day care.' Activity therapist agreed and said she knew from the individual care plan he likes this music (<i>focus group interview 1</i>)</p> <p>'She says she wants to do something. Then I give her some opportunities, but most of the time she wants to make greeting cards. She get the things she needs herself (<i>activity therapist, focus group interview 2</i>)</p> <p>In the morning most group activities take place, like deciding what to eat, walking to the supermarket and preparing the meal. In the afternoon PWD perform individual activities, like reading the newspaper or a book, making cards or painting (<i>observations</i>)</p>
Motivate and stimulate skills	<p>'We focus on stimulating and encouraging PWD in performing skills. We discover PWD can still do many things by themselves' (<i>activity therapist, focus group interview 1</i>)</p> <p>'In the supermarket we sometimes choose something else from the shopping list and we support PWD in making choices. When an article is on special offer for example (<i>volunteer, focus group interview 2</i>)</p> <p>He helps cleaning up the table. Yesterday I spoke an activity therapist on regular day care. When she asks cleaning up the table for preparing the meal he immediately stood up and wanted to help (<i>activity therapist, focus group interview 1</i>)</p>

Enhance expertise volunteers and professional caregivers	<p>'He seems a bit lost between the others. The other people care for themselves and play cards, make puzzles or read the paper. I know he likes memory training from regular day care. You know, he is very intelligent and it would be a pity if he lost that skill now' (<i>volunteer, focus group interview 2</i>)</p> <p>In the beginning I thought I should give more efforts to support. But now, I'm surprised what they can do by themselves. Especially the things they were used to do at home. And when they don't know how to use, for example the stove, they ask (<i>activity therapist, focus group interview 2</i>)</p> <p>Daily activities themselves are central events in day care, time is no issue. Sometimes it was two o'clock when we were ready with the meal and were washing the dishes, but it did not matter (<i>activity therapist, focus group interview 2</i>)</p>
Stimulate independence	<p>'A few people are preparing the meal and when it's almost ready I tell them to clean up the table. I don't have to intervene, because they know where they can find the things they need' (<i>activity therapist, focus group interview 1</i>)</p> <p>'In the beginning I gave support when someone wanted to go to the toilet, because it was a new environment for them. After a couple of weeks they knew where they could find the toilet and they went alone' (<i>activity therapist, focus group interview 1</i>)</p> <p>The role of the professional caregiver or volunteer was to care and support and people get control over their own lives. They wait, don't interrupt but take care everyone can say what he or she wants to say (<i>observations</i>)</p>
Reinforce cooperation	<p>First evaluation to share experiences was considered very useful and important. Family caregivers appreciated the note PWD received about the activities, experiences and details of the individual PWD. Pictures of the day care confirmed what PWD have done in daily activities, so family caregivers can communicate with PWD about the activities in day care (<i>observation 22</i>).</p> <p>'They feel like being at home and have pleasure time' (<i>family caregiver, focus group interview 1</i>)</p>
Encourage collaboration	<p>Every week the choir sings in the community centre. We form a kind of audience and they let us join in the singing. We have a lot of pleasure together (<i>activity therapist, focus group interview 1</i>)</p> <p>During Monday afternoons, about six primary school children come under supervision to the meeting room to play games with the people in day care. This is a very pleasant activity for both parties (<i>observations and activity therapist in focus group interview 1</i>)</p>

Table 5. Results ALCOS-12-SF

	<i>FCG (N=6)</i>		<i>PCG (N=2)</i>		<i>V (N=4)</i>	
	<i>T=0 Mean (s.d.)</i>	<i>T=6 Mean (s.d.)</i>	<i>T=0 Mean (s.d.)</i>	<i>T=6 Mean (s.d.)</i>	<i>T=0 Mean (s.d.)</i>	<i>T=6 Mean (s.d.)</i>
<i>ALCOS-12-SF</i>	26.7* (10.0)	32.4 (3.8)	37.2 (4.4)	40.5 (7.4)	37 (10.8)	39.5 (5.9)
<i>INITIATIVE</i>						
If it looks too complicated, not even bother to try it	1**	1	3	4	2	2
Avoid trying to learn new things when they looked too difficult	1	1	3	4	1	2
When trying to learn something new, soon give up when not successful	1	3	2	4	1	3
<i>EFFORT</i>						
When set important goals rarely achieve them	2	***	4	4	2	3
Not seem capable to deal with problems in life	1	1	2	3	3	3
When unexpected problems occur, don't handle them well	1	1	3	3	2	3
Feeling insecure about ability to do things	2	3	2	3	5	3
<i>PERSISTENCE</i>						
Making plans certain to make it work	4	5	3	3	4	4
Can't do a job first time, keep trying	1	4	3	4	4	4
When something unpleasant to do, stick to it until finishing it	1	3	4	3	4	4
Decide something to do, go right to work on it	1	4	4	4	4	4
Failures makes try harder	2	3	3	3	4	2

FCG = family caregivers, PCG= professional caregivers, V= volunteers

T = weeks

*low (12-38), average (39-54) and high (55-60) competences of self-efficacy

**disagree (1), more disagree (2), undecided (3), more agree (4), agree (5)

*** missing value

Nederlandse samenvatting

Achtergrond: Mensen met dementie krijgen te maken met veranderingen en onzekerheden in het uitvoeren, organiseren en plannen van dagelijkse activiteiten, vanwege cognitieve beperkingen. Professionele dagbesteding voor ouderen met dementie in Nederland kan bijdragen aan het zelfstandig blijven wonen. Een nieuwe vorm van dagbesteding richt zich op het ondersteunen van dagelijkse activiteiten om een positief zelfbeeld en 'het geloof in eigen kunnen' (self-efficacy) te vergroten.

Methodes: In deze case study worden interactie, gedrag en reflectie tussen dementerenden, mantelzorgers, professionele zorgverleners en vrijwilligers aan de hand van de doelen van de nieuwe dagbesteding geëvalueerd. Het concept van 'geloof in eigen kunnen' volgens de theorie van Bandura richt zich op positieve competentieverwachtingen (initiatief, inspanningen om iets af te maken en doorzetten bij tegenslag). Kwantitatieve en kwalitatieve data worden gebruikt om 'het geloof in eigen kunnen' van mensen met dementie te beschrijven en om vast te stellen of de doelen van de nieuwe dagbesteding zijn behaald.

Resultaten: Na zes weken werd het niveau van self-efficacy positiever beoordeeld door mantelzorgers, vrijwilligers en professionele zorgverleners gemeten aan de hand van de Nederlandse versie van de Algemene Competentie Schaal. Uit gestructureerde en participerende observaties en twee focusgroep interviews werd bevestigd dat mensen met dementie zich meer zelfredzaam voelen als ze worden ondersteund in hun dagelijkse activiteiten.

Conclusie: Deze studie bevestigt dat de theorie van self-efficacy volgens Bandura toegepast kan worden bij mensen met dementie. Geloof in 'het geloof in eigen kunnen' draagt bij tot een positiever zelfbeeld en het verhogen van de kwaliteit van leven. Belangrijk is dat mantelzorgers, professionele zorgverleners, vrijwilligers en welzijnsorganisaties samenwerken en mensen met dementie hierbij betrekken om op die manier zelfstandig wonen te stimuleren.

Sleutelwoorden: self-efficacy, interventie, dementie, case study, evaluatie, dagbesteding(programma), zelfstandig wonen

English abstract

Background: People with dementia cope with changes and uncertainties in performing, organizing and planning their daily activities, because of cognitive impairments. In the Netherlands, professional day care for older people with dementia can contribute to living independently at home. A new type of day care was started to support in daily activities to increase positive self-esteem and self-efficacy.

Methods: This case study evaluated interaction, behavior and reflection between people with dementia, family caregivers, professional caregivers and volunteers on the basis of new day care objectives. The concept of self-efficacy according to the theory of Bandura is focused on positive expectations of competence (initiative, effort and persistence). It comprises quantitative and qualitative data to explain self-efficacy of people with dementia in order to measure achievement of new day care objectives, structured and participant observations and focus group interviews were used.

Results: After six weeks the level of self-efficacy was more positively assessed by family caregivers, volunteers and professional caregivers measured by means of the Dutch version of General Self-Efficacy Scale. From structured and participant observations and two focus group interviews it was confirmed people with dementia feel more self-efficacious when they are supported in their daily activities.

Conclusion: This study implicates the theory of self-efficacy according to Bandura is applicable to people with dementia. 'Belief in their self-efficacy' contributes to a more positive self-esteem and increases quality of life. Collaboration between family caregivers, professional caregivers, volunteers and welfare organizations in which people with dementia are involved as well is important to stimulate independent living.

Keywords: self-efficacy, intervention, dementia, case study, evaluation, day care (program), independent living