

**Staff Training using STAR (Staff Training in Assisted Living
Residences): A Pilot Study in UK Residential Care Homes**

Judith Goyder

D.Clin.Psy. Thesis (Volume 1), 2011

University College London

Overview

This thesis focuses on the use of staff training intervention to reduce the Behavioural and Psychological Symptoms of Dementia (BPSD) in residents living in care homes. Part I is a literature review investigating the overall effectiveness of staff training interventions for treating BPSD. The 20 studies included in the review were categorised according to the theoretical approach utilised and the intensity of the training intervention. The effectiveness of these training programmes for reducing BPSD was discussed. The review then discusses the secondary effects of these training programmes on staff outcomes, such as attitudes, behaviour and well-being.

Part 2 is an empirical study designed to address a gap identified in the literature review, in which evidence-based staff training programmes need to be replicated in different care contexts. This was a pilot study to evaluate the feasibility of delivering the Staff Training in Assisted Living Residences (STAR; Teri et al, 2005) programme to staff in UK care homes. It evaluated the effects on BPSD in residents with dementia and the influence on staff attitudes and competency.

Part 3 is a critical appraisal which provides a more detailed interpretation of the findings and a reflection on the process of delivering the training intervention. It discusses the possible mechanisms of change, the barriers to implementing the programme and the wider implications for improving the quality of care for residents with dementia living in care homes.

Table of Contents

Part 1: Literature Review	1
The Effectiveness of Staff Training Interventions for Treating the Behavioural and Psychological Symptoms of Dementia: A Systematic Review.....	1
Abstract	2
<i>Behavioural and Psychological Symptoms in Dementia</i>	3
<i>Quality of care for people with dementia living in care homes</i>	4
<i>Staff training</i>	4
<i>Theoretical understanding of staff training</i>	5
<i>Existing reviews of staff training</i>	5
<i>Current literature review</i>	6
<i>Literature review questions</i>	7
Method	7
<i>Inclusion criteria</i>	8
<i>Exclusion criteria</i>	8
<i>Quality rating</i>	9
<i>Classification of training programmes according to content and intensity</i>	10
Results	11
<i>Overview of results</i>	11
<i>Study design and quality</i>	12
<i>Outcome measures</i>	12
<i>Description of staff training programmes</i>	23
<i>Effectiveness of staff training for reducing BPSD in care home residents</i>	26
<i>Secondary effect of training programmes on staff outcomes</i>	31
Discussion	34
<i>Overview of evidence</i>	34
<i>Methodological issues</i>	35
<i>Summary of findings</i>	36
<i>Impact of theoretical approach on effectiveness</i>	37
<i>Impact of intensity on effectiveness</i>	38
<i>Impact of training on staff outcomes</i>	39
<i>The influence of organisational factors on staff training</i>	40
<i>Implications for future research and clinical practice</i>	40
<i>Conclusion</i>	41
References	43
 Part 2: Empirical Paper	 55
Staff Training using STAR (Staff Training in Assisted Living Residences): A Pilot Study in UK Residential Care Homes	
Abstract	56
<i>Behavioural and psychological symptoms in dementia</i>	57
<i>Staff training in dementia care</i>	58
<i>Staff training research in the UK</i>	58
<i>Staff training as a treatment for BPSD</i>	59
<i>The STAR programme</i>	60
<i>Current study</i>	61
<i>Aim</i>	61
<i>Hypotheses</i>	61
Method	62

<i>Design</i>	62
<i>Setting</i>	62
<i>Participants</i>	63
<i>Inclusion criteria</i>	64
<i>Exclusion criteria</i>	64
<i>Power analysis</i>	65
<i>Procedure</i>	65
<i>Intervention</i>	66
<i>Measures</i>	68
<i>Data analysis</i>	73
Results	74
<i>Recruitment of residents</i>	74
<i>Resident characteristics</i>	74
<i>Staff characteristics</i>	76
<i>Changes in resident symptoms</i>	77
<i>Changes in staff outcomes</i>	81
<i>Feasibility of delivering STAR in UK care homes</i>	83
<i>Acceptability of STAR</i>	84
Discussion	94
<i>Summary of results</i>	94
<i>Comparison with previous research</i>	95
<i>Interpretation of findings</i>	96
<i>Limitations</i>	97
<i>Implications for care practice</i>	98
<i>Implications for future research</i>	99
References	100
Part 3: Critical Appraisal	110
<i>Introduction</i>	111
<i>Transfer of learning</i>	111
<i>The work environment: culture of care and management style</i>	112
<i>Implementation of the STAR programme</i>	113
<i>Trainee characteristics</i>	118
<i>Mechanisms of change</i>	119
<i>The process of conducting the research</i>	120
<i>Implementing the training</i>	122
<i>Implications for care practice</i>	123
<i>Directions for future research</i>	124
<i>Conclusions</i>	125
References	126
Appendices	130
Appendix A	131
<i>Quality review criteria</i>	131
Appendix B	132
<i>Invitation letter to care homes</i>	132
Appendix C	134
<i>Ethics</i>	134
<i>Letter of approval from the Research Ethics Committee</i>	136
Appendix D	140
<i>Resident information sheets and consent forms</i>	140

Staff information sheets and consent forms	140
<i>Information for personal consultees</i>	151
<i>Information for nominated consultees</i>	151
Appendix E	162
<i>STAR programme modules</i>	162
<i>Manager Feedback Form</i>	166

List of Tables

Literature Review

Table 1: <i>Description of studies reviewed</i>	14
-------------------------------------------------	----

Empirical Paper

Table 1: <i>Overview of STAR programme</i>	67
Table 2: <i>Demographic and clinical characteristics of 32 residents</i>	75
Table 3: <i>Demographic characteristics of 25 staff participants</i>	77
Table 4: <i>Impact on BPSD in 32 residents with dementia</i>	80
Table 5: <i>Impact on attitudes and sense of competency in 25 care staff</i>	82
Table 6: <i>Quantitative feedback from 23 care staff</i>	86
Table 7: <i>Qualitative feedback from 22 care staff: aspects of the programme found to be helpful</i>	87
Table 8: <i>Qualitative feedback from 17 care staff: aspects of the programme which could have been improved</i>	89
Table 9: <i>Qualitative feedback from 17 care staff: their overall experience of attending the training</i>	89
Table 10: <i>Quantitative feedback from nine managers</i>	90
Table 11: <i>Qualitative feedback from nine managers</i>	92

Acknowledgements

This thesis is dedicated to the care staff who took part in the training programme; I was constantly impressed by the compassion and energy they brought to their work with people with dementia and it was a pleasure to work with them on this project. I am also grateful to the residents and their families who agreed to participate in this study and to all the care home staff and managers for being so welcoming. I am hugely grateful to my supervisors, Aimee Spector and Martin Orrell, for their excellent guidance, Jennifer Wenborn and Susan Sadek for their invaluable help with running the training and to Kat Alcock for her support and encouragement throughout the course. I also need to say a huge thank you to Warren for being so patient when I was so pre-occupied and for making me smile. Finally, I am grateful to all my friends and family for their constant support, with a particular thank you to Fiona and Jess for proof reading and to Rachel for letting me share the journey and making it much more enjoyable.

Part 1: Literature Review

The Effectiveness of Staff Training Interventions for Treating the Behavioural and Psychological Symptoms of Dementia: A Systematic Review.

Abstract

Background: The behavioural and psychological symptoms of dementia (BPSD) are very common in people with dementia living in care homes. Training care home staff to understand and manage these symptoms is a potentially valuable intervention. This review aimed to understand the effectiveness of staff training interventions for reducing BPSD.

Method: A systematic literature search was conducted. The search identified 273 studies. Twenty studies, published between 1998 and 2010, were found to meet the inclusion criteria. They were screened for quality using pre-specified criteria.

Results: Overall the studies were found to be of adequate quality, although the majority of studies did not adhere to the recommended guidelines for the conduct of Cluster Randomised Controlled Trials. There were also a number of other methodological weaknesses. Twelve studies found evidence that staff training can reduce BPSD, four studies found positive trends and four studies found no evidence that staff training can reduce BPSD.

Conclusions: The review found good evidence for the effectiveness of staff training interventions for reducing BPSD, although the methodological limitations made it difficult to draw definitive conclusions. No links were found between the theoretical orientation of training programmes and their effectiveness. There was good evidence that staff behaviour is improved following attendance at training programmes, but training was found to be less effective for improving the psychological well-being of care staff.

Behavioural and Psychological Symptoms in Dementia

There are estimated to be over 750,000 people in the UK with dementia and the number of people with dementia is expected to double in the next thirty years (Department of Health, 2009). Depression (Ames, 1991), anxiety (Seignourel, Kunik, Snow, Wilson, & Stanley, 2008) and behavioural problems (Fisher, Fink, & Loomis, 1993) are all common in people with dementia. The International Psychogeriatric Association (Finkel, Costa e Silva, Cohen, Miller, & Sartorius, 1996) have used the term 'Behavioural and Psychological Symptoms of Dementia' (BPSD) to describe both observed behaviours, such as wandering or aggression, and psychological symptoms, such as depression or anxiety. These symptoms can also be described as the 'neuropsychiatric symptoms of dementia' (Livingston, Johnston, Katona, Paton, & Lyketsos, 2005). These symptoms reduce quality of life, increase caregiver burden and increase the likelihood of admission to residential care (Gilley et al., 2004).

The estimated prevalence of BPSD is between 50% and 65% for people with dementia living in the community (Aalten et al., 2007; Lyketsos et al., 2000; Savva et al., 2009). The symptoms are experienced more commonly by people living in care, with an estimated prevalence of between 79% and 84% (Margallo-Lana et al., 2001; Selbaek, Kirkevold, & Engedal, 2008; Zuidema, Koopmans, & Verhey, 2007). Anti-psychotic medication has traditionally been used to treat BPSD in people with dementia, but there are concerns about their efficacy and associated side effects (Ballard, Corbett, Chitramohan, & Aarsland, 2009). Banerjee (2009) estimated that 180,000 people with dementia were treated with antipsychotic medication. Only 36,000 people were thought to derive some benefit from taking them, however they were estimated to be responsible for 1,800 additional deaths per year due to

cerebrovascular events. As a result of these concerns, there has been an emergence of research investigating the effectiveness of psycho-social interventions for the treatment of BPSD (Lawlor, 2002). For example, Verkaik, van Weert and Francke (2005) found good evidence for the use of multi-sensory therapy for reducing apathy and implementation of pleasant events to treat depression.

Quality of care for people with dementia living in care homes

There have been long-term concerns about the quality of care provided in care homes (Ballard et al., 2001). The majority of staff lack basic training in dementia care and often even nursing staff have very limited mental health training (Hsu, Moyle, Creedy, & Venturato, 2005). Kitwood (1997) stated that poor quality care and a lack of day to day interactions between care staff and residents may even exacerbate the symptoms of dementia. The National Dementia Strategy (Department of Health, 2009) proposed the need to improve the skills of staff working with people with dementia through effective training and continuous professional development.

Staff training

Following Kitwood's (1997) work, there is an increasing understanding that care homes need to provide a more person-centred approach to managing behavioural problems in people with dementia (Andrews, 2006). A qualitative study by Kolanowski, Fick, Frazer and Penrod (2010) identified that staff had a lack of knowledge about BPSD, were unable to identify the psychological need driving residents' behaviour and experienced difficulties tailoring psychosocial interventions towards the needs of specific residents. Staff training interventions, which provide staff with strategies for managing BPSD, offer a potentially viable treatment option (Lawlor, 2002). Despite frequent recommendations within policy documents that

staff training could improve the standard of care in residential homes (CSCI, 2008), there is limited research to demonstrate which training programmes are the most effective.

Theoretical understanding of staff training

The factors influencing the implementation of training programmes in care home environments can be examined through the concept of ‘transfer of learning’. Transfer of learning involves the application, generalisability, and maintenance of new knowledge and skills (Ford & Weissbein, 2008). Baldwin and Ford (1988) proposed that this is affected by trainee characteristics, including ability, personality and motivation; training design, with the need for a strong design and appropriate content, and the overall work environment, with the need for support and the opportunity to use what has been learned. A recent meta-analytic review (Blume, Ford, Baldwin, & Huang, 2009) found that individual trainee characteristics and the work environment contribute equally to training outcomes. Support to implement skills in practice, in the form of supervision, was found to be the most important organisational factor.

Existing reviews of staff training

Three reviews have investigated the impact of staff training interventions on both staff and resident outcomes. Aylward, Stolee, Keat and Johncox (2003) reviewed 48 studies published between 1985 and 2000. They found evidence for short term effectiveness yet limited evidence for longer term effectiveness, with improvements in staff knowledge often not accompanied by changes in staff behaviour. They suggested that staff trainees may require additional support with applying ideas from training in their daily work. More recently, Kuske et al. (2007)

reviewed 21 studies published between 1990 and 2004. The majority of the studies found that training programmes had some positive effects on either staff or resident outcomes. However, many of the studies were of poor methodological quality which made it difficult to draw definitive conclusions. Meanwhile, McCabe, Davison and George (2007) reviewed 19 studies, published between 1990 and 2005, aimed at reducing behavioural problems in people with dementia. Half the studies they reviewed found no effects of staff training on the behaviour of residents, even when levels of staff knowledge and behaviour management skills improved. However staff training was found to impact on staff outcomes, such as job satisfaction and staff turnover.

Some authors have reviewed staff training research as part of wider reviews of non-pharmaceutical treatments for BPSD. A review of nine studies found good evidence for the overall effectiveness of staff training interventions (Livingston, Johnston, Katona, Paton, & Lyketsos, 2005). Meanwhile, a meta-analysis of four RCTs found that staff training interventions can have a mildly positive effect on behaviour (Olazarán et al., 2010). However a review by Snowden, Sato, and Roy-Byrne (2003) found limited evidence for their effectiveness. A number of reviews in this area have instead specifically focused on behavioural management approaches, usually using single case designs, and have found good evidence for this approach (Landreville et al., 2006; O'Connor, Ames, Gardner, & King, 2009; Spira & Edelstein, 2006).

Current literature review

There has been no review to date which has specifically investigated the effectiveness of training programmes for reducing BPSD in care home residents. McCabe et al's (2007) review was focused on staff training studies to reduce

behavioural problems in dementia, although did not include studies to reduce affective distress. Previous reviews have also not investigated the link between the theoretical content of training programmes and their effectiveness. Many reviews have also focused on staff outcome measures (Aylward et al., 2003; Kuske et al., 2009; Moyle, Hsu, Lieff, & Vernooij-Dassen, 2010). There have also been no recent reviews in this field, although BPSD as a clinical concept has only recently attracted attention from a therapeutic and research perspective (Lawlor, 2002) and psychological treatments for BPSD have only recently emerged (Kraus et al., 2008).

Literature review questions

The review addressed the following research questions:

1. Are staff training programmes effective for reducing BPSD in people with dementia living in care homes?
2. Does the effectiveness of training programmes vary according to the theoretical orientation utilised or the intensity of the training programme?
3. Can staff training programmes have secondary benefits on staff behaviour, attitudes and psychological well-being?

Method

The methodology in this review followed the framework for conducting systematic reviews outlined by the University of York (2009). It was necessary to include both randomised and non-randomised trials in this review because there have been a limited number of randomised controlled trials (RCTs) carried out in this field. In order to focus the review on recent evidence in the field, only studies published between 1998 and 2010 were included in the review. This date was

selected because there was an emergence of research in the dementia field after Kitwood (1997) published his work on person-centred care.

Inclusion criteria

- Randomised Controlled Trials (RCTs), quasi-experimental designs and patient as own comparison designs.
- Studies evaluating staff training intervention for staff working in nursing homes, care homes or assisted living residences.
- Studies in which the training interventions were designed to help staff manage BPSD in residents.
- Studies published in English, between January 1998 and December 2010 and in peer-reviewed journals.
- Studies investigating the mood and behaviour of residents as a primary outcome measure.

Exclusion criteria

- Non-RCT designs rated as 'poor' using the York Centre for Systematic Reviews (University of York, 2009) criteria.
- Studies in acute geriatric services.
- Studies with home carers.
- Studies which have only included staff outcome measures.
- Studies in which participants were not diagnosed with dementia.
- Studies which exclusively used non-psychological outcome measures, such as the use of restraint by staff or medication prescribing practices.
- Case study designs or studies with less than 20 resident participants.

Search strategy

The PsychInfo, PubMed, EMBASE, Medline and Cumulative Index to Nursing and Allied Health Literature (CINALH) databases were searched in December 2010. Keywords were entered to request studies involving staff training interventions (Staff Training, Staff Education) which were delivered to care staff (Nursing Staff, Nursing, Care, Caregivers, Staff, Care Assistants, Carers). Keywords were also used to specify a care home setting (Nursing Home, Care Home, Assisted Living Residence, Residential Care Institution, Long-term Care) and to identify studies with people diagnosed with dementia (Dementia, Alzheimer's Disease). Finally, keywords were used to identify studies evaluating the impact on BPSD (Behavioural Problems, Psychological Symptoms, Psychiatric Symptoms, Agitation, Aggression, Depression, Anxiety, Challenging Behaviour). Titles, abstracts and excerpts were reviewed according to the inclusion and exclusion criteria. The reference lists of articles meeting the inclusion criteria were also reviewed to identify additional publications.

Quality rating

The quality of randomised trials was rated using Jadad et al's (1996) criteria (see Appendix A). The criteria, which provides a rating from zero to five, rates studies according to the quality of procedures used for randomising, double blinding and the description of withdrawals and drop-outs. The criteria were chosen because they provide a method for comparing the quality of trials and are the most frequently used quality rating criteria. However there are limitations with using them to rate RCTs of psychological interventions because a maximum score requires double blinding, yet only single blinding is possible in psychological research. The maximum Jadad score which was assigned to studies in this review is four. The

instrument also relies on all aspects of the study methodology being reported in order for points to be awarded (Juni, 2001).

All the randomised trials in this review used a cluster randomisation design, in which groups of participants rather than individual participants were randomised. There are specific methodological procedures required in the conduct of Cluster Randomised Controlled Trials (CRCTs), which are outlined in the CONSORT guidelines (Campbell, Elbourne & Altman, 2004). These guidelines were consulted during the quality review process. The quality of non-randomised designs were rated using The York Centre for Systematic Reviews (2001) criteria (see Appendix A). These incorporate eight quality criteria questions; marks were awarded for description of participants, the use of reliable and valid outcome measures, a low drop-out rate, a good follow-up period, the use of comparison groups and the blinding of assessors.

Classification of training programmes according to content and intensity

In order to usefully compare the studies included in the review, it was necessary to classify the training programmes according to content and intensity. The author examined the description of the training programmes outlined in each study and categorised the content of the training programmes according to the theoretical approach used in the programme. Five categories were chosen: 'Behavioural-Oriented Approaches with Person-Environment Fit', 'Communication Approaches', 'Person-Centred care', 'Emotion-Oriented Approaches' and 'Other Approaches'. The categories were chosen to represent the differing theoretical approaches which have emerged in the dementia training literature.

The intensity of the training programmes were also categorised by the author. The number of training hours received by each staff participant were calculated from

the description of each training programme. A list of the total training hours provided in each study was then compiled. This list was divided into three categories of training intensity, based on the median duration of all the studies included in the review. If participants received 10 hours of training or less the programme was categorised as low intensity, programmes providing between 11 and 18 hours of tuition were rated as medium intensity and programmes providing more than 19 hours of tuition were categorised as high intensity. Table 1 lists the theoretical approach and intensity of each training programme.

Results

Overview of results

A total of 273 articles were identified from the database search. The final review included 20 studies; the database search yielded 17 studies and a further three studies were identified from reference lists. The remaining studies were excluded because they were unrelated to the topic being reviewed (89 studies) or did not utilise a staff training intervention despite being related to the topic (103 studies). Studies were also excluded if the aim of the training programme was not to reduce BPSD (20) or did not include resident outcome measures (11). In addition, studies were excluded if they included people who were not diagnosed with dementia or were conducted in acute care settings (7). The remaining studies were not published in English (6), were review articles (13) or were small case study designs (4). One study was excluded because of the poor quality of the design (Chrzescijanski, Moyle & Creedy, 2007).

Study design and quality

Thirteen RCTs were included in the review. They all utilised a CRCT trial design but only two identified themselves as a CRCT in the title or abstract, as recommended in the CONSORT guidelines (Campbell et al., 2004). In CRCT designs, observations between individuals are likely to be correlated. As a result, they require a higher sample size to be adequately powered and the analysis should be adjusted to account for this correlation (Kerry & Bland, 1998). Only three studies (Chenoweth et al., 2009; Fossey et al., 2006; Proctor et al., 1999) accounted for clustering effects in their sample size calculation by using an appropriate power analysis. Meanwhile only three authors (Chenoweth et al., 2009; Fossey et al., 2006; Teri, Huda, Gibbons, Young, & van Leynseele, 2005) adjusted for clustering effects in the analysis of their data. According to the Jadad criteria, two RCTs were rated as high quality, two studies were rated as good quality, seven studies were rated as adequate quality and three studies were rated as poor quality. Seven non-randomised studies were included: four studies used a control group and three studies used single group designs. One study was rated as good and six studies were rated as adequate.

Outcome measures

The majority of studies evaluated the symptoms of residents using staff report measures, in which staff were interviewed about the recent mood and behaviour of residents. One study assessed resident behaviour using a staff observation measure (DeYoung, Just, & Harrison, 2002) and one study used a resident self report measure (Lyne et al., 2006). Magai et al. (2002) and Finnema et al. (2005) also incorporated researcher-rated observational measures in addition to staff report measures. A heterogeneous range of staff outcome measures were utilised across the studies, with nine different outcome measures used to assess behavioural problems. The Cohen

Mansfield Agitation Index (CMAI; Cohen-Mansfield, Marx, & Rosenthal, 1989) was the most frequently used measure for assessing behavioural problems. There was also very little consistency in the choice of outcome measures used to assess for affective symptoms. Three studies used the Cornell (Alexopoulos, Abrams, Young, & Shamoian, 1988), three studies used the Neuropsychiatric Inventory (Cummings et al., 1994) and three studies used a range of other outcomes measures for depression.

Table 1

*Description of studies reviewed**Behavioural Oriented Approach with Person-Environment Fit*

Authors	Design, setting and description of intervention.	N	Outcome measures and assessment points	Results	Quality rating and comments
Teri et al (2005)	CRCT Intervention vs. control group <i>Single blind</i> 4 Assisted Living Residences, US. <i>Duration:</i> 8 weeks <i>Total</i> = 10 hours Medium intensity <i>Supervision:</i> 2 hours	<i>Residents</i> 31 <i>Staff</i> 25	<i>Residents</i> GDS, CAS, RMBPC ABID, NPI <i>Staff</i> SSQC Job satisfaction <i>Baseline & 8 week follow up.</i>	<i>Residents</i> Sig reduction in behaviour problems (RMBPC, NPI, ABID), depression (GDS) & anxiety (CAS) for intervention group. <i>Staff</i> No sig increase in sense of competency (SSCQ) or job satisfaction. Staff reaction to behaviour improved (RMBPC & NPI)	<i>Jadad</i> = 2/4 <i>Pos:</i> Analysis adjusted for clustering effects, blind assessors. <i>Neg:</i> No power analysis to estimate sample size. Method of randomisation not described.
Davis-on et al (2007)	CRCT Training + peer support vs. training only vs. control group. <i>Non blind</i> 6 Residential Care Homes, Australia. <i>Duration:</i> 8 weeks <i>Total</i> = 10 hours Low intensity <i>Supervision:</i> None	<i>Residents</i> 113 <i>Staff</i> 90	<i>Residents</i> CMAI <i>Staff</i> MBI, SEDC, SNPA <i>Baseline, 8 week & 6 month follow up.</i>	<i>Residents</i> Non sig reduction in agitation (CMAI), with a positive trend, for training group in between baseline & 8 week follow-up. <i>Staff</i> No effect on burnout (MBI), improvement in self efficacy (SEDC) for training group. Improved ratings by nursing staff for training + peer support group at follow up.	<i>Jadad</i> = 1/4 <i>Pos:</i> 6 month follow-up, residents were assessed by two staff raters. <i>Neg:</i> Randomisation method unclear, no power analysis, no blinding of assessors, no adjustment for clustering effects, no description of drop-outs, no intention to treat analysis.

Visser et al (2008)	<p>CRCT Training + peer support vs. training only vs. control group <i>Non-blind</i></p> <p>3 Residential Care Homes, Australia. <u>Duration:</u> 8 weeks <u>Total</u> = 10 hours Medium intensity <u>Supervision:</u> None</p>	<p><u>Residents</u> 76 <u>Staff</u> 52</p>	<p><u>Residents</u> CMAI, ADRQL, restraint. <u>Staff</u> SAQ, MBI. <i>Baseline, 8 weeks, 3 & 6 month follow-up.</i></p>	<p><u>Residents</u> No sig. reduction in aggression (CMAI) or sig. increase in quality of life scores (ADRQL) across time or group. <u>Staff</u> Training + peer support group improved on skills & knowledge subscale of the SAQ at 8 week & 3 month follow-up, no effect on burnout (MBI) across time or group.</p>	<p><u>Jadad</u> = 1/4 <u>Pos:</u> 6 month follow up. <u>Neg:</u> Method of randomisation not described, no power analysis, staff group sizes small, high attrition rate, no description of drop-outs, no intention to treat analysis or adjustment for clustering effects.</p>
Burgio et al (2002)	<p>Quasi-experimental. Training with motivational system (FSM) vs. conventional management (CSM). <i>Non-blind.</i></p> <p>2 Nursing Homes, US <u>Duration:</u> 4 weeks <u>Total</u> = 12.5 hours Medium intensity <u>Supervision:</u> 15 care interactions observed.</p>	<p><u>Residents</u> 88 <u>Staff</u> 106</p>	<p><u>Residents</u> CMAI <u>Residents & Staff:</u> BMSC, CABOS <i>Baseline, 4 weeks, 3 & 6 months follow-up.</i></p>	<p><u>Residents</u> Sig. decrease in agitation (CMAI) at 4 week follow up, maintained at 3 & 6 month follow-up. <u>Staff</u> Sig. reduction in use of ineffective communication strategies (BMSC & CADOS). No sig. increase in use of behaviour management strategies. No sig. difference between FSM and CSM groups at 4 week follow-up, but the FSM system was more effective for maintaining skills at 6 month follow-up.</p>	<p><u>York</u> = Adequate <u>Pos:</u> Included observational measures, 6 month follow-up period. <u>Neg:</u> No control group. No blinding of assessors.</p>
Oh et al (2005)	<p>Quasi-experimental One group time series design</p> <p>1 Nursing Home, South Korea <u>Duration:</u> 12 weeks <u>Total</u> = 9 hours Low intensity <u>Supervision:</u> Approx 5 hours per trainee.</p>	<p><u>Residents</u> 32 <u>Staff</u> 36</p>	<p><u>Residents</u> RASI, RASII, ABMS translated into Korean. <i>Baseline, 12 & 16 weeks follow-up.</i></p>	<p><u>Residents</u> Non-sig. reduction in aggression scores (RAS1 & RASII) between baseline, 12 week & 16 week follow up with a positive trend. <u>Staff</u> Significant increase in staff abilities to manage behaviour (ABMS).</p>	<p><u>York</u> = Adequate <u>Pos:</u> 16 week follow-up, use of observational measure (RASII). <u>Neg:</u> One group design lacked internal validity, translated outcome measures, no power analysis, inter rater reliability not calculated.</p>

DeYoung et al (2005)	Quasi-experimental pilot study One group time series design 1 Long-term care unit, US <u>Duration:</u> 6 mths <u>Total</u> = 28 hours High Intensity <u>Supervision:</u> None	<u>Residents</u> 32	<u>Residents</u> NHBPS <u>Staff</u> Interviews on problem management <u>Baseline, 3 & 6 months follow-up.</u>	<u>Residents</u> Sig. decrease in problem behaviours (NHBPS) between baseline & 6 month follow-up, non-sig. decrease between baseline & 3 month follow-up. Seven behaviours sig. reduced at 6 month follow-up. <u>Staff</u> Increased use of behaviour management strategies at follow-up.	<u>York</u> = Adequate <u>Pos:</u> 6 month follow-up period, use of observational measures. <u>Neg:</u> One group design lacked internal validity, inter rater reliability not calculated.
Landreville et al (2005)	Quasi-experimental One group time series design 1 Long-term care unit, Canada. <u>Duration:</u> 2 months <u>Total</u> = 15.5 hours Medium intensity <u>Supervision:</u> 8 hours	<u>Residents</u> 21 <u>Staff</u> 26	<u>Residents</u> CMAI <u>Staff</u> Self efficacy & satisfaction measure <u>Baseline & 2 month follow-up</u>	<u>Residents</u> Sig. decrease in agitated behaviour (CMAI) at 2 month follow-up. <u>Staff</u> Sig. increase in the use of behaviour management techniques, sig. increase in self efficacy, high satisfaction with training.	<u>York</u> = Adequate <u>Pos:</u> Validity demonstrated for newly designed measures. Included detailed data on behaviour change in 2 residents. <u>Neg:</u> One group design lacks internal validity, follow-up would have strengthened the study.

ABID = Agitated Behaviours in Dementia, ABMS = Aggressive Behaviour Management Scale, ADRQL = Alzheimer Disease Related Quality of Life, BMSC = Behaviour Management Skills Checklist, CABOS = Computer-Assisted Behavioural Observation System, CAS = Clinical Anxiety Scale, CMAI = Cohen Mansfield Agitation Inventory, GDS = Geriatric Depression Scale, MBI = Maslach Burnout Inventory, Neg = Negative aspects of design, NHBPS = Nursing Home Behaviour Problem Scale, NPI = Neuropsychiatric Inventory, Pos = Positive aspects of design, RASI = Ryden Aggression Scale 1, RASII = Ryden Aggression Scale 2, RMBPC = Revised Memory and Behaviour Problem Checklist, SAQ = Staff Attitude Questionnaire, SEDC = Self Efficacy of Dementia Care, Sig = Significant, SNPA = Scale of Nursing Performance Adapted, SSCQ = Short Sense of Competency Questionnaire.

Communication Approach

McCall -ion et al (1999)	CRCT NASCP training vs. wait list control <i>Single blind</i> 2 Nursing Homes, US <u>Duration:</u> 3 months <u>Total</u> = 7.8 hours Low intensity <u>Supervision:</u> 4 hours	<u>Residents</u> 105 <u>Staff</u> 88	<u>Residents</u> Cornell, CMAI, MOSES, medication, restraint. <u>Staff</u> KAT, MHQ <i>Baseline, 3 & 6 months</i>	<u>Residents</u> Sig. reduction in depression (Cornell) & agitated behaviour (CMAI) for training group at 3 and 6 months. No consistent impact on irritability, withdrawal and disorientation (MOSES). <u>Staff</u> No change in KAT scores. Improvements in staff ability to manage problems at 3 months, not maintained at 6 months.	<u>Jadad</u> = 1/4 <u>Pos:</u> 6 month follow-up, blind assessor. <u>Neg:</u> Did not account for clustering in design or analysis, no power analysis. Method of randomisation not described, no description of withdrawals or drop-outs, no intention to treat analysis.
Magai et al (2002)	CRCT Training group vs. placebo training group vs. wait list control <i>Single blind</i> 3 Nursing Homes, US. <u>Duration:</u> 2 weeks <u>Total</u> = 10 hours Medium intensity <u>Supervision:</u> None	<u>Residents</u> 91 <u>Staff</u> 20	<u>Residents</u> BEHAVE- AD, CMAI, Cornell, MAX. <u>Staff</u> BSI Baseline, 3, 6, 9, 12 weeks.	<u>Residents</u> Non-sig. reduction in behaviour problems (BEHAVE-AD, CMAI) and depression (Cornell) between baseline and follow-up. Residents in training group showed sig more positive affect. Effect not maintained at follow-up. <u>Staff</u> Depression, anxiety and somatic symptoms (BSI) decreased sig. over time in both training groups in comparison to the non-training group.	<u>Jadad</u> 2/4 <u>Pos:</u> Three group design, four follow-up points, assessors and trainer was all blind to hypotheses of study, inter rater reliability measured on the staff rating scales. <u>Neg:</u> Did not account for clustering in design or analysis, staff sample was small, randomisation method not described, inadequate handling of attrition.

BEHAVE-AD = Behavioural Pathology in Alzheimer's Disease Rating Scale, BSI = Brief Symptom Inventory, Cornell = Cornell Scale for Depression in Dementia, CMAI = Cohen Mansfield Agitation Inventory, MOSES = Multidimensional Observation Scale for Elderly Subjects, KAT = Knowledge of Alzheimer's Test, MAX = Maximally Discriminative Facial Movement Coding System, MHQ = Mental Health Questionnaire, Neg = Negative aspects of design, NPI = Neuropsychiatric Inventory, Pos = Positive aspects of design, Sig = Significant.

Person-Centred Care

Chenoweth et al (2009)	<p>CRCT Person-centred care training vs. dementia care mapping vs. usual care Single blind 15 Care Homes, Australia <u>Duration:</u> 4 months <u>Total</u> = 18 hours Medium intensity <u>Supervision:</u> None</p>	<p><u>Residents</u> 289 <u>Staff</u> 30</p>	<p><u>Residents</u> CMAI, NPI, QUALID, QUIS, TESS-NH, incidents of problem behaviour, hospital admissions <u>Baseline, 4 months & 8 months follow-up.</u></p>	<p><u>Residents</u> Sig. decrease in problem behaviours (CMAI) at PCC and DCM sites at 4 & 8 month follow-up. Psychiatric symptoms (NPI) did not improve sig. in PCC group. No improvement in quality of life (QOLID) for PCC or DCM group.</p>	<p><u>Jadad</u> = 4/4 <u>Pos:</u> Allocation method appropriate, adjustment for clustering effects, good handling of attrition, 8 month follow-up. <u>Neg:</u> Experimental and control groups were not matched at baseline, although this was accounted for in the analysis.</p>
Lyne et al (2006)	<p>Quasi-experimental non equivalent group design (natural control group) 14 Residential Care Homes, UK <u>Duration:</u> 120 weeks <u>Total</u> = 12 hours Medium intensity <u>Supervision:</u> None</p>	<p><u>Residents</u> 256 <u>Staff</u> 166</p>	<p><u>Residents</u> GMS-DS <u>Baseline, 10, 21 & 33 week follow-up.</u></p>	<p><u>Residents:</u> Sig. reduction in depression (GMS-DS) between baseline & 10 week follow-up for those who received the intervention. No change for those who did not receive intervention. Effectiveness of the intervention reduced for those with more severe dementia.</p>	<p><u>York</u> = Adequate <u>Pos:</u> Assessors blind to hypotheses, 33 week follow-up. <u>Neg:</u> No planned control group, self report measure may not have been valid with residents with moderate dementia.</p>

Moniz Cook et al (1998)	Quasi-Experimental Non-equivalent group design Training Group vs. control group 3 Care Homes, UK <i>Duration:</i> 5 weeks <i>Total</i> = 15 hours Medium intensity <i>Supervision:</i> None	<u>Residents</u> 84 <u>Staff</u> 83	<u>Residents</u> PBI <u>Staff</u> PBI <i>Baseline, 4 & 13 months follow-up.</i>	<u>Residents:</u> No change in the frequency of behavioural problems (PBI) at 4 month follow-up, but problems were rated as less severe. <u>Staff</u> Staff rated an improved ability to manage problems although the effect was not maintained at 13 month follow-up.	<i>York</i> = Adequate <u>Pos:</u> 13 month follow-up, inter rater reliability calculated on PBI. <u>Neg:</u> Assessors non blind, no discussion of validity of PBI, small sample size, no discussion of power analysis.
-------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------	-------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

GMS-DS = Geriatric Mental State Schedule, *Neg* = Negative aspects of design, *Pos* = Positive aspects of design, *PBI* = Problem Behaviour Index, *TESS-NH* = Therapeutic Environment Screening Survey for Nursing Homes, *QUALID* = Quality of Life in Late Stage Dementia, *QUIS* = Quality Interactions Schedule, *Sig* = Significant.

Emotion-Oriented Care

Schrijmaeker et al (2002)	CRCT Emotion oriented care vs. control group <i>Non-blind</i> 16 Homes for Aged, Netherlands <i>Duration:</i> 3 months <i>Total</i> = 52.5 hours High intensity <i>Supervision:</i> 10.5 hours	<u>Residents</u> 151 <u>Staff</u> 128	<u>Residents</u> DBRSP, GRGS, CMAI, ADL <i>Baseline, 3, 6 & 12 month follow-up.</i>	<u>Residents</u> No reduction in problem behaviours (DBRSP and GRGS) or agitation (CMAI).	<i>Jadad</i> = 2/4 <u>Pos:</u> 12 month follow-up, attrition adequately handled, analysis adjusted for clustering, intention to treat analysis used. <u>Neg:</u> Assessors not blind, no description of method of randomisation.
---------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------	-----------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Finnema et al (2005)	CRCT Emotion oriented care vs. usual care <i>Non-blind</i> 14 Nursing Homes , Netherlands <u>Duration:</u> 7 months <u>Total</u> = 16 hours Medium intensity <u>Supervision:</u> None	<u>Residents</u> 146 <u>Staff</u> 99	<u>Residents</u> ASEP, Cornell, CMAI GRGS, PGCMS Baseline, 7 months <u>Staff</u> OSS, GHQ, DWSS	<u>Residents</u> Emotion oriented care sig. improved emotional adaption (aggregate score from CSDD, BIP & CMAI) & maintenance of a positive self image (aggregate score from PGCMS & BIP) for residents with mild - moderate dementia, not found in residents with moderate to severe dementia. <u>Staff:</u> Sig. reduced stress symptoms (GHQ) for sub-group of staff who applied more emotion focused strategies. No changes for experience of stress (OSS) or job satisfaction (DWSS).	<i>Jadad</i> = 2/4 <u>Pos:</u> 7 month follow-up, inter rater reliability assessed on observational measures, adjusted for clustering in analysis, adequate handling of attrition. <u>Neg:</u> Method of randomisation not described, no blinding of assessors, no adjustment for clustering effects in sample size calculation.
----------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------	----------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

ADL = Activities of Daily Living, ASEP = Assessment Scale for Elderly Patients, CMAI = Cohen Mansfield Agitation Inventory, Cornell = Cornell Scale for Depression in Dementia, DBRSP = Dutch Behaviour Rating Scale for Psycho-geriatric inpatients, DWSS = Dutch Work Satisfaction Scale GHQ = General Health Questionnaire, GRGS = Geriatric Resident Goal Scale, Neg = Negative aspects of design, OSS = Organization and Stress Scale, PGCMS = Philadelphia Geriatric Centre Moral Scale, Pos = Positive aspects of design, Sig = Significant.

Other Approaches

Fossey et al (2006)	CRCT Training intervention vs. control group <i>Single blind</i> 12 Nursing Homes, UK <u>Duration:</u> 10 months <u>Total</u> = approx 25 hours for each staff trainee. High intensity <u>Supervision:</u> None	<u>Residents</u> 306 <u>Staff</u> Not stated	<u>Residents</u> CMAI, prescription of neuroleptics. DCM	<u>Residents:</u> No sig. reduction in agitated behaviour (CMAI) between intervention and control homes. Sig. reduction in proportion of residents taking neuroleptics in the intervention group. No sig. difference in well-being according to DCM.	<i>Jadad</i> = 4/4 <u>Pos:</u> Assessors blind, methods of blinding & randomisation methods described, power analysis & data analysis adjusted to account for clustering effects. <u>Neg:</u> No follow-up period post intervention.
---------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------	-------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Proctor et al (1999)	CRCT Intervention group vs. control group <i>Non-blind</i> 12 Residential Care Homes, UK <u>Duration:</u> 6 months <u>Total</u> = 19 hours High intensity <u>Supervision:</u> 24 visits	<u>Residents</u> 120	<u>Residents</u> AGECAT depression, Crichton Scale, Barthel Index Visits by health professionals.	<u>Residents</u> Sig. decrease in depression symptoms (AGECAT) for the intervention group at follow-up. No sig. decrease in behaviour (Crichton) or activities of daily living (Barthel). Fewer visits by GPs to intervention homes.	<u>Jadad</u> = 3/4 <u>Pos:</u> Method of randomisation described, analysis adjusted for clustering effects, attrition handled appropriately. <u>Neg:</u> Sample size calculation did not adjust for clustering effects, assessors non blind, longer term follow-up required.
Testad et al (2005)	CRCT Intervention vs. control group <i>Single blind</i> 4 Nursing Homes, Norway <u>Duration:</u> 7 months <u>Total</u> = 13 hours Medium intensity <u>Supervision:</u> None	<u>Residents</u> 151 <u>Staff</u> 36	<u>Residents</u> BARS Use of restraint	<u>Residents</u> Non-sig. decrease in agitation at follow-up for the intervention group but a positive trend. Restraint declined by 54% in the treatment group and increased by 18% in the control group.	<u>Jadad</u> = 3/4 <u>Pos:</u> Blind assessors, description of drop-outs. <u>Neg:</u> Method of randomisation not described, no adjustment for clustering effects, no intention to treat analysis, follow-up required.
Deudon et al (2009)	CRCT Intervention group vs. control group. <i>Single blind</i> 16 Nursing Homes, France <u>Duration:</u> 18 weeks <u>Total</u> = 25.5 hours High intensity <u>Supervision:</u> 24 hours	<u>Residents</u> 306 <u>Staff</u> Not stated	<u>Residents</u> CMAI, NPI, OS <i>Baseline, 8 & 12 week follow-up</i>	<u>Residents:</u> Sig. decrease in agitation symptoms (CMAI) at post intervention and at follow-up. Reduction in hyperactivity on NPI for intervention group. Reduction in observed agitation in residents (OS).	<u>Jadad</u> = 2/4 <u>Pos:</u> 12 week follow-up, blind assessor, observational measure included. <u>Neg:</u> Method of randomisation not described, no adjustment for clustering effects in sample size calculation or analysis, no inter rater reliability on observational measure, no intention to treat analysis.

Testad et al (2010)	CRCT Single blind Intervention vs. control group 4 Nursing Homes, Norway <u>Duration:</u> 6 month <u>Total</u> = 20 hours Medium intensity <u>Supervision:</u> None	<u>Residents</u> 145 <u>Staff</u> 197	CMAI (Norwegian version), proportion of residents given restraint. <i>Baseline, 6 & 12 month follow-up</i>	<u>Residents:</u> Sig. reduction in aggression (CMAI) for intervention group at 6 month & 12 month follow-up. Proportion of residents restrained reduced at 6 months, although reduction not maintained at 12 month follow-up.	<u>Jadad</u> = 1/4 <u>Pos:</u> 12 month follow-up, good description of drop-outs, blind assessors. <u>Neg:</u> No adjustments for clustering effects, groups not equivalent at baseline, no intention to treat analysis.
Wells et al (2000)	Quasi-experimental design. 1 training unit (randomly selected) vs. 3 control units 4 units in a Geriatric Care Centre, Canada. <u>Duration:</u> 6 months <u>Total</u> = 5.8 hours Low intensity <u>Supervision:</u> None	<u>Residents</u> 40 <u>Staff</u> 44	<u>Residents</u> MIBM, PAS, LPRS <u>Staff</u> IBM, NHUS ease of caregiving. <i>Baseline, 3 & 6 month follow up.</i>	<u>Residents:</u> Increased interactions & calmer behaviour (MIBM), reduced aggression (PAS) & improved functional abilities (LPRS) for residents in training group. <u>Staff:</u> Caregivers interacted with residents in a more person-centred and flexible way (IBM). No change in staff rating on ease of caregiving or stress levels.	<u>York</u> = Good <u>Pos:</u> Researcher blind to group allocation, inter rater reliability demonstrated for observational measures, staff rated for use of new skills. <u>Neg:</u> Groups not allocated at random.

AGECAT = Automatic Geriatric Examination for Computer Assisted Taxonomy, BARS = Brief Agitation Rating Scale, Barthel = Barthel Activity of Daily Living Index, CMAI = Cohen Mansfield Agitation Inventory, Crichton = Crichton Royal Behavioural Rating Scale, DCM = Dementia Care Mapping, IBM = Interactional Behaviour Measure, LPRS = London Psychogeriatric Rating Scale, MIBM = Modified Interaction Behaviour Measure, Neg = Negative aspects of design, NHUS = Nurses Hassles and Uplift Scale, NPI = Neuropsychiatric Inventory, OS = Observation Scale, PAS = Pittsburgh Agitation Scale, Pos = Positive aspects of design, Sig = Significant.

Description of staff training programmes

Behavioural-Oriented Approach with Person-Environment Fit

A number of training programmes have incorporated Social Learning Theory (Bandura, 1978) which states that behaviours are maintained through reinforcement. Meanwhile the concept of person environment fit (Lawton, 1990) considers how the demands of the environment must be adapted to suit each individual. Seven studies in the review combined elements of both the behavioural approach and the theory of person environment fit. These programmes helped staff to understand and modify the sequence of events which led to behavioural problems by identifying activators, behaviours and consequences (ABC's). Two of these authors (DeYoung et al., 2002; Oh et al., 2005) specifically evaluated staff training programmes which used the Progressively Lowered Stress Threshold model (Hall & Buckwalter, 1987). This model states that the environment must be adapted to suit the needs of people with dementia because they have a lowered ability to handle stress.

As an adjunct to the workshop training sessions, four of these programmes also provided individual supervision sessions to help staff to incorporate the training strategies into their everyday practice (Burgio et al., 2002; Landreville et al., 2005; Oh et al., 2005; Teri et al., 2005), whilst some programmes assisted staff to develop individualised care plans for residents (Davison et al., 2007; Visser et al., 2008).

Communication Approaches

Two studies from the United States trained staff exclusively using a communication approach (Magai, Cohen, & Gomberg, 2002; McCallion, Toseland, Lacey, & Banks, 1999). McCallion and colleagues implemented a programme which

taught staff practical communication strategies and helped them to understand how communication can trigger problem behaviours. Staff also created 'life story boards' to encourage conversations between residents and care staff. Meanwhile Magai and colleagues' training programme was targeted at staff working with residents with poor language capacity and focused on non-verbal communication. The programme also helped staff to recognise emotional cues in others and taught them to validate the emotions of residents.

Person-Centred Approaches

A number of researchers have explored the effectiveness of using a person-centred approach (Kitwood, 1997) to train care staff. This model was used by Chenoweth et al. (2009) and Moniz-Cook et al. (1998), who taught staff to understand how residents express their emotional needs through their behaviour, and helped them to carry out 'life history reviews' for residents. Meanwhile Lyne et al. (2006) delivered a personalised care planning intervention (Barrowclough, 1986) to treat depression in care home residents.

Emotion-Oriented Approaches

The emotion-oriented approach extends from the validation therapy model developed by Feil (1992), which emphasises validating and respecting the feelings of people with dementia. It has become popular in the Netherlands (Finnema et al., 2005; Schrijnemaekers et al., 2002). In both studies, staff were trained in communication skills and were encouraged to reflect on the emotions of people with dementia. Schrijnemaekers and colleagues also taught staff to use reminiscence

therapy and multi-sensory tools with residents whilst Finnema and colleagues helped staff to develop care plans.

Other Approaches

In contrast to the training programmes which stem from one theoretical model, some programmes have integrated a number of theoretical approaches or have evolved directly from clinical practice. A research group based in Norway (Testad, Aasland, & Aarsland, 2005; Testad, Ballard, Brønnick, & Aarsland, 2010) designed a programme which reduced the need for staff to use restraint with people with dementia by teaching them skills to reduce agitated behaviour. Similarly Deudon et al. (2009) gave staff instruction cards with advice about how to manage everyday care tasks.

In the United Kingdom, Fossey et al. (2006) used a systemic consultation approach (Smyer, Cohn, & Brannon, 1990) in which they introduced behaviour management techniques, positive care planning, communication skills and reminiscence techniques. Similarly, Proctor et al. (1999) applied a goal planning intervention (Barrowclough & Fleming, 1986) in which they carried out a detailed assessment and helped staff to develop care plans for individual residents. Finally Wells, Dawson, Sidani, Craig and Pringle (2000) used a different approach to targeting problem behaviour. They implemented an enablement approach in which staff were taught to use an abilities focused morning care routine with residents. Staff were taught to give residents verbal prompts before carrying out care tasks and to help residents to carry out care tasks independently as much as possible.

Effectiveness of staff training for reducing BPSD in care home residents

Behavioural-Oriented Approach with Person-Environment Fit

Randomised designs. A single blind CRCT by Teri et al (2005) demonstrated that their programme significantly reduced the symptoms of depression, anxiety and behavioural problems in residents, although one limitation of the study was the lack of follow-up assessment. Meanwhile, Davison et al. (2007) used a CRCT design to evaluate the impact of a training programme delivered in the context of a peer support group. The training was not found to significantly reduce agitated behaviour, although there was a positive trend which approached significance. A CRCT by the same research group (Visser et al., 2008) found no improvement in residents' symptoms following the implementation of their training programme. Attendance at a peer support group did not improve the effectiveness of the programme. However, both studies were rated as poor quality and may have been underpowered due to a lack of adjustment for clustering effects in the power analysis. Visser and colleagues' staff sample was also very small and one group was excluded from follow-up analysis due to a high attrition rate. The authors commented on the organisational difficulties they experienced at their study sites, including a lack of management support for the training, which may have affected the successful implementation of the training. Davison and colleagues were also concerned that their training programme may have had a weaker effect because only a small proportion of staff in each care home attended the training.

Non- randomised designs. Positive results were obtained in a quasi-experimental design by Burgio et al. (2002); agitation symptoms reduced significantly following the implementation of the training programme and this effect

was maintained at six month follow-up. However the study did not include a non-training control group which made it difficult to draw conclusions about the effectiveness of the training programme.

Landreville, DiCaire, Verreault and Levesque (2005), DeYoung et al.(2005) and Oh et al. (2005) all conducted one group studies to investigate the effectiveness of their behavioural management programmes. The frequency of aggressive behaviours reduced significantly in both Landreville and colleagues' and DeYoung and colleagues' studies. Meanwhile, Oh and colleagues found a positive trend in which aggressive behaviour decreased after the intervention and at follow-up, although this difference was not found to be statistically significant. Unfortunately the evidence provided by these studies was weak due to the lack of control group; issues such as interfering events, regression to the mean, measurement reactivity and expectancy effects may have all threatened the internal validity. DeYoung and colleagues and Oh and colleagues both incorporated observational measures of aggressive behaviour, although a calculation of inter rater reliability would have strengthened the design. An additional difficulty with Oh and colleagues' study was the use of translated outcome measures, which have only been found to be valid and reliable in their English versions.

Communication Approaches

McCallion et al (1999) found that residents whose carers were trained using the communication approach displayed significantly reduced symptoms of both depression and agitation in comparison to a control group. However, the study was rated as poor quality (see Table 1). Meanwhile, Magai et al's (2002) training programme did not significantly reduce residents' behavioural symptoms in

comparison to either a control group or a group receiving a placebo training intervention. However there was a trend for symptoms to reduce over time in the treatment group and residents in the training group displayed significantly more positive affect than residents in other groups. The study was rated as adequate quality and there were some strengths of the study, although the method of randomisation was not described and there was no discussion of how attrition was managed.

Person-Centred Approaches

Chenoweth et al (2009) found good evidence that training a small number of staff in person-centred care can reduce behavioural distress in residents. Residents whose carers were trained using person-centred care or Dementia Care Mapping displayed a significant reduction in behavioural symptoms in comparison to residents in a control group. There was a reduction after the four month intervention and a further drop at four month follow-up. The study adhered to the recommended guidelines for conducting CRCT's (Campbell et al., 2004) and was rated as high quality.

Other studies using the person-centred care approach were of poorer quality (Lyne et al., 2006; Moniz-Cook et al., 1998). Lyne and colleagues obtained a significant and clinical improvement in depression scores over time for residents who received the care planning intervention, with no improvements for residents who did not receive the intervention. Strengths of the design included the incorporation of a long follow-up period and the use of blind assessors, however the lack of an appropriate control group did limit the evidence which could be obtained from the study. Meanwhile, Moniz Cook and colleagues found that incidences of challenging behaviour did not improve following the implementation of their programme. Staff

did rate residents' behavioural problems as less severe and reported an improvement in their ability to manage problems after attending the training, although these improvements were not maintained at 13 month follow-up. The authors attributed these difficulties to the organisational context in one care home. The study was rated as adequate quality, with limitations from a lack of blind assessors and a lack of power analysis (see Table 1).

Emotion-Oriented Approaches

Evidence for the emotion-oriented approach remains inconsistent. Finnema et al. (2005) found their training to be helpful for reducing affective distress, although this effect was limited to residents with mild to moderate dementia. Meanwhile, Schrijnemaekers et al (2002) found their training programme to have no impact on the behaviour of residents with dementia. A qualitative study (Van Heusdon, Widdershoven, Schrijnemaekers, & van Rossum, cited in Finnema et al) revealed that there may have been a number of organisational difficulties which may have hindered the implementation of the programme. Both studies were rated as adequate in quality; they both included a follow-up period, the appropriate handling of attrition and an adjustment for clustering effects in the analysis. Finnema and colleagues also included a calculation of inter-rater reliability on the observational assessment measures. However, the assessors were not blind to treatment allocation, the method of randomisation was not described and clustering effects were not accounted for in the sample size calculations.

Other Approaches

The evidence from studies which have evolved directly from clinical practice are reasonably positive. Testad et al (2010) obtained a significant reduction in resident's symptoms of agitation after care staff participated in their training intervention, which was maintained at one year follow-up. The use of restraint was also significantly reduced after the intervention, although this reduction was not maintained at follow-up. This indicates that staff may have found it difficult to consistently implement the strategies they learnt from the training. The study was rated as poor quality with no adjustments for clustering effects, inadequate handling of attrition and the use of non-equivalent groups at baseline. An earlier study by Testad et al (2005) found that the agitation of residents did not reduce significantly after the training intervention, although a positive trend was indicated.

Meanwhile Deudon et al (2009) conducted a large single blind CRCT which demonstrated a significant decrease in resident agitation at eight week and 12 week follow-up. This difference was also shown to be clinically significant and was comparable to the reduction observed in pharmacological studies (De Deyn et al., 1999). Limitations included the lack of equivalent groups at baseline, the lack of adjustment for clustering effects and the failure to calculate inter-rater reliability on the observational measure.

There was mixed evidence from training programmes which have integrated a number of clinical approaches. Proctor et al (1999) found their goal planning intervention to significantly reduce depression in comparison to a control group of residents who received usual care. The number of visits by General Practitioners also significantly reduced. The study was found to be of good quality and the analysis adjusted for clustering effects, although the assessors were not blind and a longer

term follow-up period would have strengthened the study. Meanwhile, a large CRCT by Fossey et al. (2006) found that agitated behaviour did not reduce following the implementation of their training programme, although prescriptions for neuroleptics were found to reduce. The study was rated as very high in quality (see Table 1).

Finally, Wells et al. (2000) evaluated an abilities-focused morning care training programme using a quasi-experimental design. Residents whose carers received the programme showed less aggression, behaved more calmly and interacted more with their carers. The study also included a number of strong methodological characteristics. The researchers were blind to group allocation and inter rater reliability was calculated for staff rated outcome measures. The authors also incorporated an observational checklist to evaluate the implementation of the training programme by staff. However the lack of a randomised control group did limit the quality of the study.

Secondary effect of training programmes on staff outcomes

A review of 12 studies which additionally studied the influence of training interventions on staff factors, such as behaviour, attitudes and psychological well-being, found the majority of studies to have at least one positive finding. Only one study (Visser et al, 2008) found no effects on staff outcomes.

Influence on staff behaviour

Five studies found that staff reported an improved ability to manage behavioural problems after attending the training (DeYoung et al., 2002; Landreville et al., 2005; Moniz-Cook et al., 1998; Oh et al., 2005; Teri et al., 2005). Staff who took part in DeYoung and colleagues' study reported an increased ability to cope with the behaviour of residents, although this was not assessed using a psychometric outcome measure. Meanwhile staff who participated in Teri and colleagues' training

programme became less distressed when behavioural problems occurred in residents. Similarly, care staff who took part in the training programmes delivered by Moniz Cook et al. (1998) and Oh et al. (2005) both reported an increased ability to manage problem behaviours, although the frequency of resident's behavioural distress did not change.

Three studies found that observers rated the performance of staff more highly following their attendance at training programmes (Burgio et al., 2002; Davison et al., 2007; Wells et al., 2000). For example, Davison et al. (2007) found that nurses rated the performance of care staff more highly after attending both a training programme and an additional peer support group, even though this did not translate into an improvement in resident symptoms. Meanwhile, Wells et al (2000) utilised an observation measure to study the impact of their abilities-focused morning care programme on staff and resident interactions. Caregivers who received the training were shown to interact with residents in a more person-centred and flexible way.

Burgio et al (2002) used two observational measures to study the communication styles used by care staff. Staff increased their use of positive communication strategies, although found it more difficult to apply proactive behaviour management strategies. Burgio and colleagues also demonstrated that a specialised supervision system, incorporating observations, feedback and incentives for staff was more effective for maintaining skills over time in comparison to a conventional supervision model. This finding indicates that even a relatively subtle change in staff behaviour can significantly impact on residents' symptoms, but that staff will often revert back to previous styles of working without a specially tailored supervision system.

Evidence for effect on staff attitudes and psychological well-being

Although some researchers have reported positive changes in staff behaviour, evidence for the influence of training on staff attitude and well-being has been less favourable. Two studies found that staff training increased staff self-efficacy (Davison et al., 2007; Landreville et al., 2005). Meanwhile, Magai et al (2002) found that staff psychological symptoms, such as depression, anxiety and somatic symptoms, reduced significantly after their attendance at training, even though residents in this study did not themselves display a significant reduction in symptoms. Finnema et al (2005) also found a significant decrease in staff stress symptoms for the sub-group of staff who applied the emotion-focused strategies, although staff did not rate their job satisfaction more highly after the training.

Meanwhile Wells et al (2000) found that attending their abilities-focused care programme had no influence on ease of caregiving or staff stress levels, despite the positive influence on residents' symptoms. Teri et al (2005) also found no improvement in job satisfaction or staff sense of competence for staff who participated in their training programme. McCallion et al. (1999) found that staff who attended their training programme demonstrated an increased knowledge about the management of mental health problems. However this effect was not maintained at follow-up and knowledge about dementia did not improve. Finally, Visser et al. (2008) found a positive effect on the skills and knowledge subscale of the Staff Attitude Questionnaire for staff who attended the training programme and the peer support group, but no found no effects on staff burnout.

Discussion

Overview of evidence

The studies included in this review have evaluated a range of different training programmes. The most commonly implemented programmes have followed a behavioural approach (Bandura, 1978) and have incorporated ideas from the concept of person environment fit (Lawton, 1990). These programmes have been popular in the United States, Canada and Australia. They have never been applied in Europe. Meanwhile person-centred and integrated approaches have been consistently implemented in the United Kingdom, following Kitwood's (1997) legacy. Researchers in the United Kingdom have also implemented training programmes which have integrated a range of theoretical approaches. A number of different interventions have been in development in mainland Europe. There has been an emergence of an emotion-oriented approach in the Netherlands and researchers in France and Norway have developed practical, skills-based programmes directly from practice.

A number of different designs have been implemented to understand the impact of these staff training programmes on BPSD. These have ranged from small, clinically driven one group designs to large scale multi site CRCT's. A total of 13 RCTs and seven non-randomised studies were included in this review. Although, the evidence provided by non-randomised designs is weak due to a loss of internal validity, there are many difficulties inherent in conducting research within care home settings which make randomised designs more difficult to conduct; challenges

include attrition due to illness and death, high levels of staff turnover, reduced staff to resident ratios and inflexible institutional policies (Murfield, Cooke, Moyle, Shum, & Harrison, 2011). Research studies in these settings have also often emerged from clinical practice where randomised designs may be unethical or impractical.

Methodological issues

Many of the studies reviewed suffered from methodological weaknesses. A common problem was a failure to account for clustering effects in the analysis of data. When clustering is ignored, the standard error is reduced and there is an increased risk of a type 1 error (Bland, 2004). This is a common problem across many research disciplines and has often been cited in the medical literature (Murray, Varnell, & Blitstein, 2004). Many studies did not account for the cluster design in the power calculation or failed to include a power analysis at all. Because CRCTs require a higher sample size to be adequately powered, some of these studies may also have been underpowered. Other frequent problems included the use of non-blind assessors in RCTs and the inadequate handling of attrition, which may have biased some of the findings.

Staff-rated outcome measures, such as the CMAI, were used very frequently. The CMAI has good inter rater reliability, construct validity and test re-test reliability (Koss et al., 1997) but some authors have expressed concerns about the quality of staff reporting. For example, McCann et al (1997) revealed that care staff may rate the frequency of resident behaviours differently to direct observers. Staff may also observe behaviour differently after participating in a training programme and may be more likely to report a positive change (McCabe, Davison, & George, 2007). A number of studies additionally incorporated observational measures, which reduce

bias in comparison to self report measure, however few authors have included an assessment of inter rater reliability (Barker, Pistrang, & Elliot, 2002).

Summary of findings

Effectiveness of staff training programmes for reducing BPSD

A detailed review of the available literature indicated that staff training is a potentially valuable method of reducing BPSD in residents with dementia living in care homes. However the poor quality of the available evidence and inconsistency of the findings does make it difficult to draw a firm conclusion. A similar finding has been obtained in other reviews (McCabe et al., 2007). A total of seven RCTs revealed that training interventions were effective for reducing BPSD (Chenoweth et al., 2009; Deudon et al., 2009; Finnema et al., 2005; McCallion et al., 1999; Proctor et al., 1999; Teri et al., 1992; Testad et al., 2010) whilst three RCTs found positive trends despite a lack of significant findings (Davison et al., 2007; Magai et al., 2002; Testad et al., 2005). Only three RCTs found no evidence in favour of the effectiveness of staff training interventions on BPSD (Fossey et al., 2006; Schrijnemaekers et al., 2002; Visser et al., 2008). Meanwhile five non-randomised designs (Burgio et al., 2002; DeYoung et al., 2002; Landreville et al., 2005; Lyne et al., 2006; Wells et al., 2000) obtained positive findings. One non-randomised study found a positive trend which failed to reach significance (Oh et al, 2000) and one study found no influence of staff training on BPSD (Moniz Cook et al., 1998).

Sixteen studies included a follow-up assessment. In the majority of studies, the positive effects of the training intervention were maintained at follow-up. This indicates that once changes to care practices are made, the positive effects can usually be maintained over time. The majority of the studies included in this review

have investigated the influence of staff training on the behavioural symptoms of dementia. Only five studies (Finnema et al., 2005; Lyne et al., 2006; McCallion et al., 1999; Proctor et al., 1999; Teri et al., 2005) additionally measured the influence of staff training programme on depression in residents with dementia and only one study measured the impact on anxiety (Teri et al., 2005). Given that four of these studies achieved a reduction in depression symptoms following the implementation of a staff training programme, this indicates that depression may be amenable to change through staff training programmes; beneficial interventions may include increasing awareness of depression amongst care staff (Lyne et al., 2006), enhancing communication (McCallion et al., 1999), introducing pleasant events (Teri et al., 2005) and using care planning (Lyne et al., 2006; Proctor et al., 1999). These findings are consistent with evidence that behavioural therapy with the use of pleasant events can be a beneficial treatment for depression in people with dementia living at home (Verkaik et al., 2005).

Impact of theoretical approach on effectiveness

From a theoretical perspective, there is no consistent link between the theoretical approach and the effectiveness of the intervention. This mirrors the results of psychological therapy studies which have found that many theoretical approaches can be equally beneficial, often described as the ‘dodo bird effect’ (Luborsky et al., 2006). The current evidence base indicates that behavioural theory with person environment fit may be the most promising model, although there is less evidence to show the maintenance of these improvements over time. The evidence indicates that the person-centred approach may also be effective for reducing BPSD and these benefits can be maintained over time, although this approach may be particularly

vulnerable to organisational problems because it requires systemic changes to be implemented.

The evidence from studies drawing on other approaches is also reasonably promising. There is good evidence from studies which have evolved directly from clinical practice, with two significant results (Deudon et al., 2009; Testad et al., 2010). There is also good evidence for one programme which has integrated a range of theoretical approaches for treating depression (Proctor et al., 1999) and from one study which has used a unique enablement approach (Wells et al., 2000). Meanwhile there is a less evidence in favour of the systemic consultation approach for reducing agitation, even though it has been found to be helpful for changing prescribing practices (Fossey et al., 2006).

There is less evidence for emotion-oriented approaches and communication approaches. The results indicate that training staff using these approaches can potentially have a positive impact on BPSD, but the evidence is weak and the results are inconsistent. The communication approach is also one of the few training approaches which have been successfully evaluated with residents with more severe dementia.

Impact of intensity on effectiveness

There does not appear to be a link between the intensity of training programmes and their effectiveness for reducing BPSD, which indicates that low or medium intensity programmes may be more cost effective than higher intensity programmes. However, training programmes which are too brief, such as the programme delivered by Magai et al (2002), may not provide a sufficient dose of training to change care practice. Unfortunately none of the studies reviewed have

included a measure of effect size, which would have allowed more comparisons to be made between studies.

The studies reviewed indicate that implementing additional supervision sessions may improve the overall effectiveness of training programmes. If programmes are only run over a relatively short period of time, these additional supervision sessions may maximise the transfer of learning (Ford & Weissbein, 2008), Training programs also require excellent attendance to be effective but attendance at these programs has often been very poor and care homes can find it difficult to allow a large proportion of staff to attend training. One potential risk is that if only a proportion of staff attend training programmes the effect of the training may become too diluted (Davison et al., 2007).

Impact of training on staff outcomes

There is evidence to suggest that training can impact positively on staff behaviour, although it is less clear how this effect is maintained over time. There is some evidence to suggest that self efficacy and stress symptoms can be reduced by training interventions, although factors such as burnout and job satisfaction are less amenable to change. The evidence that staff training does influence staff behaviour is reassuring and indicates that there may be benefits from training which are not revealed through resident symptoms. The evidence that training can increase staff members' sense of self efficacy shows the potential for training to impact on how staff feel about themselves more generally. Given the more promising results elsewhere, it seems surprising that the evidence for staff psychological factors is poor. One explanation may be a shortage of outcome measures which are sensitive enough to pick up on some of these factors. In many cases the ingredient of change may be abstract and difficult to measure in quantitative research.

The influence of organisational factors on staff training

This review has revealed that staff training programmes are very dependent on organisational factors, such as management style, care culture and rifts between staff groups. These factors have been frequently discussed in previous reviews (Kuske et al., 2009). A number of authors were concerned that organisational factors may have limited the implementation of programmes (Finnema et al., 2005) or prevented staff from applying ideas from training consistently in practice (Moniz-Cook et al., 1998; Visser et al., 2008). The model used by Chenoweth et al. (2009) was successfully implemented, with only a small number of staff being required to attend the training. This showed that changes in care practices can occur on an organisational level, although staff who attend the training need to be in a position to implement changes, be dedicated to the approach and require appropriate support and supervision.

Implications for future research and clinical practice

This review has found promising evidence for the effectiveness of staff training programmes for reducing BPSD, although further research is required in this area. There is a limited use of evidence-based practice in the selection of training interventions, with certain approaches being more popular in some countries due to their cultural origins. The next step will be for researchers to replicate successful training programmes to yield high quality evidence for their effectiveness (McCabe et al., 2007). Although some of the training programmes state that a manual is available from the authors, none of the manuals are published or easily accessible. Given the promising evidence in favour of some of these programmes, authors will now need to make these manuals more accessible. These programmes should also

become utilised more in clinical practice to provide more practice-based evidence in this area.

Future research designs will need to be conducted on a large scale, be adequately powered and adhere to recommended guidelines (Campbell et al., 2004). Because there are many logistical barriers to conducting research in care homes (Murfield et al., 2011), future studies will need to be carefully planned and conducted. The only issue with broadening the application of these training designs internationally is ensuring the generalisability of these programmes. Because these research designs are dependant on organisational factors there may be cultural differences between care settings which impacts on the implementation and effectiveness of training programmes.

Meanwhile, authors developing and modifying staff training within dementia care should consult the literature currently available on professional training to understand how to maximise the transfer of learning (Blume, Ford, Baldwin, & Huang, 2009). For example, few authors have studied the characteristics of care staff being trained in these programmes, even though trainee characteristics contribute to the transferability of learning. Finally, in order to understand the effects of training interventions on care staff and understand the experience of participants and mechanisms of change, future research will need to combine qualitative work alongside RCTs and find innovative ways of combining quantitative and qualitative findings (Lewin, Glenton, & Oxman, 2009).

Conclusion

In conclusion, there is evidence that staff training programmes can reduce BPSD in people with dementia living in care homes. Training programmes which have a strong theoretical base, are of sufficient intensity and are supplemented by

additional supervision with good overall management support may be the most beneficial. There is a need for more evidence-based practice in this area and the development of high quality research designs is essential. This was recently recommended by the Ministerial Advisory Group on Dementia Research (2011) , who stated that research into the effective management of BPSD is a current priority in dementia research. It is becoming increasingly clear that providing care home staff with skills to work with people experiencing BPSD, without resorting to the use of antipsychotic medication, is essential for the safety and quality of life of people with dementia living in care homes (Banerjee, 2009).

References

- Aalten, P., Verhey, F. R. J., Boziki, M., Bullock, R., Byrne, E. J., Camus, V., Caputo, M., et al. (2007). Neuropsychiatric syndromes in dementia. Results from the European Alzheimer Disease Consortium: part I. *Dementia and Geriatric Cognitive Disorders*, 24(6), 457-463. doi:10.1159/000110738
- Alexopoulos, G. S., Abrams, R. C., Young, R. C., & Shamoian, C. A. (1988). Cornell Scale for Depression in Dementia. *Biological Psychiatry*, 23(3), 271-284.
- Ames, D. (1991). Epidemiological studies of depression among the elderly in residential and nursing homes. *International Journal of Geriatric Psychiatry*, 6(6), 347-354. doi:10.1002/gps.930060604
- Andrews, G. J. (2006). Managing challenging behaviour in dementia. *BMJ (Clinical Research Ed.)*, 332(7544), 741. doi:10.1136/bmj.332.7544.741
- Aylward, S., Stolee, P., Keat, N., & Johncox, V. (2003). Effectiveness of continuing education in long-term care: a literature review. *The Gerontologist*, 43(2), 259-271.
- Baldwin, T.T., & Ford, J. Kevin. (1988). Transfer of Training: a Review and Directions for Future Research. *Personnel Psychology*, 41(1), 63-105. doi:10.1111/j.1744-6570.1988.tb00632.x
- Ballard, C, Fossey, J, Chithramohan, R., Howard, R, Burns, A., Thompson, P., Tadros, G., et al. (2001). Quality of care in private sector and NHS facilities for people with dementia: cross sectional survey. *BMJ (Clinical Research Ed.)*, 323(7310), 426-427.
- Ballard, Clive, Corbett, A., Chitramohan, R., & Aarsland, D. (2009). Management of agitation and aggression associated with Alzheimer's disease: controversies and

- possible solutions. *Current Opinion in Psychiatry*, 22(6), 532-540.
doi:10.1097/YCO.0b013e32833111f9
- Bandura, A. (1978). Social Learning Theory of Aggression. *Journal of Communication*, 28(3), 12-29. doi:10.1111/j.1460-2466.1978.tb01621.x
- Banerjee, S. (2009). *The use of antipsychotics in people with dementia: time for action. A report for the minister of state for care services*. London: Department of Health.
- Barker, C., Pistrang, N., & Elliot, R. (2002). *Research methods in clinical psychology*: an introduction for students and practitioners (2nd ed.). New York: J. Wiley.
- Barrowclough, C., & Fleming, I. (1986). *Goal planning with elderly people*: how to make plans to meet an individual's needs: a manual of instruction. Manchester UK: Manchester University Press.
- Bland, J Martin. (2004). Cluster randomised trials in the medical literature: two bibliometric surveys. *BMC Medical Research Methodology*, 4, 21. doi:10.1186/1471-2288-4-21
- Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2009). Transfer of Training: A Meta-Analytic Review. *Journal of Management*, 36(4), 1065-1105. doi:10.1177/0149206309352880
- Burgio, L. D., Stevens, A., Burgio, K. L., Roth, D. L., Paul, P., & Gerstle, J. (2002). Teaching and maintaining behavior management skills in the nursing home. *The Gerontologist*, 42(4), 487-496.
- Campbell, M. K., Elbourne, D. R., & Altman, D. G. (2004). CONSORT statement: extension to cluster randomised trials. *BMJ (Clinical Research Ed.)*, 328(7441), 702-708. doi:10.1136/bmj.328.7441.702

- Chenoweth, L., King, M. T., Jeon, Y. H., Brodaty, H., Stein-Parbury, J., Norman, R., Haas, M., et al. (2009). Caring for Aged Dementia Care Resident Study (CADRES) of person-centred care, dementia-care mapping, and usual care in dementia: a cluster-randomised trial. *The Lancet Neurology*, 8(4), 317-325. doi:10.1016/S1474-4422(09)70045-6
- Chrzescijanski, D., Moyle, W., & Creedy, D. (2007). Reducing dementia-related aggression through a staff education intervention. *Dementia*, 6(2), 271-286. doi:10.1177/1471301207080369
- Cohen-Mansfield, J., Marx, M. S., & Rosenthal, A. S. (1989). A description of agitation in a nursing home. *Journal of Gerontology*, 44(3), M77-84.
- Commission for Social Care Inspection. (2008). *See me not just the dementia: understanding people's experiences of living in a care home*. London: CSCI.
- Cummings, J. L., Mega, M., Gray, K., Rosenberg-Thompson, S., Carusi, D. A., & Gornbein, J. (1994). The Neuropsychiatric Inventory: comprehensive assessment of psychopathology in dementia. *Neurology*, 44(12), 2308-2314.
- Davison, T. E., McCabe, Marita P., Visser, S., Hudgson, C., Buchanan, G., & George, K. (2007). Controlled trial of dementia training with a peer support group for aged care staff. *International Journal of Geriatric Psychiatry*, 22(9), 868-873. doi:10.1002/gps.1754
- Department of Health. (2009). *Living well with Dementia: A National Dementia Strategy*. London: Department of Health.
- Deudon, A., Maubourguet, N., Gervais, X., Leone, E., Brocker, P., Carcaillon, L., Riff, S., et al. (2009). Non-pharmacological management of behavioural symptoms in nursing homes. *International Journal of Geriatric Psychiatry*, 24(12), 1386-1395. doi:10.1002/gps.2275

- De Deyn, P P, Rabheru, K., Rasmussen, A., Bocksberger, J. P., Dautzenberg, P. L., Eriksson, S., & Lawlor, B. A. (1999). A randomized trial of risperidone, placebo, and haloperidol for behavioral symptoms of dementia. *Neurology*, 53(5), 946-955.
- DeYoung, S., Just, G., & Harrison, R. (2002). Decreasing aggressive, agitated, or disruptive behavior: participation in a behavior management unit. *Journal of Gerontological Nursing*, 28(6), 22-31.
- Feil, N. (1992). Validation therapy. *Geriatric Nursing*, 13(3), 129-133.
- Finkel, S. I., Costa e Silva, J., Cohen, G., Miller, S., & Sartorius, N. (1996). Behavioral and psychological signs and symptoms of dementia: a consensus statement on current knowledge and implications for research and treatment. *International Psychogeriatrics / IPA*, 8 Suppl 3, 497-500.
- Finnema, E., Dröes, R.-M., Ettema, T., Ooms, M., Adèr, H., Ribbe, M., & van Tilburg, W. (2005). The effect of integrated emotion-oriented care versus usual care on elderly persons with dementia in the nursing home and on nursing assistants: a randomized clinical trial. *International Journal of Geriatric Psychiatry*, 20(4), 330-343. doi:10.1002/gps.1286
- Fisher, J., Fink, C., & Loomis, C. (1993). Frequency and Management Difficulty of Behavioral Problems Among Dementia Patients in Long-Term Care Facilities. *Clinical Gerontologist*, 13(1), 3-12. doi:10.1300/J018v13n01_02
- Ford, J. Kevin, & Weissbein, D. A. (2008). Transfer of Training: An Updated Review and Analysis. *Performance Improvement Quarterly*, 10(2), 22-41. doi:10.1111/j.1937-8327.1997.tb00047.x
- Fossey, Jane, Ballard, Clive, Juszczak, E., James, I., Alder, N., Jacoby, R., & Howard, R. (2006). Effect of enhanced psychosocial care on antipsychotic use in nursing

- home residents with severe dementia: cluster randomised trial. *BMJ (Clinical Research Ed.)*, 332(7544), 756-761. doi:10.1136/bmj.38782.575868.7C
- Gilley, D. W., Bienias, J. L., Wilson, R. S., Bennett, D. A., Beck, T. L., & Evans, D. A. (2004). Influence of behavioral symptoms on rates of institutionalization for persons with Alzheimer's disease. *Psychological Medicine*, 34(6), 1129-1135. doi:10.1017/S0033291703001831
- Hall, G. R., & Buckwalter, K. C. (1987). Progressively lowered stress threshold: a conceptual model for care of adults with Alzheimer's disease. *Archives of Psychiatric Nursing*, 1(6), 399-406.
- Hsu, M. C., Moyle, W., Creedy, Debra, & Venturato, L. (2005). An investigation of aged care mental health knowledge of Queensland aged care nurses. *International Journal of Mental Health Nursing*, 14(1), 16-23. doi:10.1111/j.1440-0979.2005.00350.x
- Jadad, A. R., Moore, R. A., Carroll, D., Jenkinson, C., Reynolds, D. J., Gavaghan, D. J., & McQuay, H. J. (1996). Assessing the quality of reports of randomized clinical trials: is blinding necessary? *Controlled Clinical Trials*, 17(1), 1-12.
- Juni, P. (2001). Systematic reviews in health care: Assessing the quality of controlled clinical trials. *BMJ*, 323(7303), 42-46. doi:10.1136/bmj.323.7303.42
- Kerry, S. M., & Bland, J. M. (1998). Statistics Notes - Sample size in cluster randomisation. *Brit Med J*, 316, 549.
- Kitwood. (1997). *Dementia Reconsidered* (1st ed.). Maidenhead: Open University.
- Kolanowski, A., Fick, D., Frazer, C., & Penrod, J. (2010). It's About Time: Use of Nonpharmacological Interventions in the Nursing Home. *Journal of Nursing Scholarship*, 42(2), 214-222. doi:10.1111/j.1547-5069.2010.01338.x

- Koss, E., Weiner, M., Ernesto, C., Cohen-Mansfield, J., Ferris, S. H., Grundman, M., Schafer, K., et al. (1997). Assessing patterns of agitation in Alzheimer's disease patients with the Cohen-Mansfield Agitation Inventory. The Alzheimer's Disease Cooperative Study. *Alzheimer Disease and Associated Disorders*, *11 Suppl 2*, S45-50.
- Kraus, C. A., Seignourel, Paul, Balasubramanyam, V., Snow, A. L., Wilson, N. L., Kunik, M. E., Schulz, P. E., et al. (2008). Cognitive-behavioral treatment for anxiety in patients with dementia: two case studies. *Journal of Psychiatric Practice*, *14*(3), 186-192. doi:10.1097/01.pra.0000320120.68928.e5
- Kuske, B., Hanns, S., Luck, T., Angermeyer, M. C., Behrens, J., & Riedel-Heller, S. G. (2007). Nursing home staff training in dementia care: a systematic review of evaluated programs. *International Psychogeriatrics / IPA*, *19*(5), 818-841. doi:10.1017/S1041610206004352
- Kuske, B., Luck, T., Hanns, S., Matschinger, H., Angermeyer, M. C., Behrens, J., & Riedel-Heller, S. G. (2009). Training in dementia care: a cluster-randomized controlled trial of a training program for nursing home staff in Germany. *International Psychogeriatrics*, *21*(02), 295. doi:10.1017/S1041610208008387
- Landreville, P., Bédard, A., Verreault, R., Desrosiers, J., Champoux, N., Monette, J., & Voyer, P. (2006). Non-pharmacological interventions for aggressive behavior in older adults living in long-term care facilities. *International Psychogeriatrics*, *18*(01), 47. doi:10.1017/S1041610205002929
- Landreville, P., Dicaire, L., Verreault, R., & Lévesque, L. (2005). A training program for managing agitation of residents in long-term care facilities: description and preliminary findings. *Journal of Gerontological Nursing*, *31*(3), 34-42; quiz 55-56.

- Lawlor, B. (2002). Managing behavioural and psychological symptoms in dementia. *The British Journal of Psychiatry: The Journal of Mental Science*, *181*, 463-465.
- Lawton, M. P. (1990). Residential environment and self-directedness among older people. *American Psychologist*, *45*(5), 638-640. doi:10.1037/0003-066X.45.5.638
- Lewin, S., Glenton, C., & Oxman, A. D. (2009). Use of qualitative methods alongside randomised controlled trials of complex healthcare interventions: methodological study. *BMJ (Clinical Research Ed.)*, *339*, b3496.
- Livingston, G., Johnston, K., Katona, C., Paton, J., & Lyketsos, Constantine G. (2005). Systematic review of psychological approaches to the management of neuropsychiatric symptoms of dementia. *The American Journal of Psychiatry*, *162*(11), 1996-2021. doi:10.1176/appi.ajp.162.11.1996
- Luborsky, L., Rosenthal, R., Diguier, L., Andrusyna, T. P., Berman, J. S., Levitt, J. T., Seligman, D. A., et al. (2006). The Dodo Bird Verdict Is Alive and Well-Mostly. *Clinical Psychology: Science and Practice*, *9*(1), 2-12. doi:10.1093/clipsy.9.1.2
- Lyketsos, C G, Steinberg, M., Tschanz, J. T., Norton, M. C., Steffens, D. C., & Breitner, J. C. (2000). Mental and behavioral disturbances in dementia: findings from the Cache County Study on Memory in Aging. *The American Journal of Psychiatry*, *157*(5), 708-714.
- Lyne, K. J., Moxon, S., Sinclair, I., Young, P., Kirk, C., & Ellison, S. (2006). Analysis of a care planning intervention for reducing depression in older people in residential care. *Aging & Mental Health*, *10*(4), 394-403. doi:10.1080/13607860600638347

- Magai, C., Cohen, C. I., & Gomberg, D. (2002). Impact of training dementia caregivers in sensitivity to nonverbal emotion signals. *International Psychogeriatrics / IPA*, *14*(1), 25-38.
- Margallo-Lana, M., Swann, A., O'Brien, J., Fairbairn, A., Reichelt, K., Potkins, D., Mynt, P., et al. (2001). Prevalence and pharmacological management of behavioural and psychological symptoms amongst dementia sufferers living in care environments. *International Journal of Geriatric Psychiatry*, *16*(1), 39-44.
- McCabe, M P, Davison, T E, & George, K. (2007). Effectiveness of staff training programs for behavioral problems among older people with dementia. *Aging & Mental Health*, *11*(5), 505-519. doi:10.1080/13607860601086405
- McCallion, P., Toseland, R. W., Lacey, D., & Banks, S. (1999). Educating nursing assistants to communicate more effectively with nursing home residents with dementia. *The Gerontologist*, *39*(5), 546-558.
- McCann, J. J., Gilley, D. W., Hebert, L. E., Beckett, L. A., & Evans, D. A. (1997). Concordance between direct observation and staff rating of behavior in nursing home residents with Alzheimer's disease. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, *52*(2), P63-72.
- Ministerial Advisory Group on Dementia Research (2011). *Final report from the MAGDR subgroup 1 on priority topics in dementia research*. Medical Research Council.
- Moniz-Cook, E., Agar, S., Silver, M., Woods, R., Wang, M., Elston, C., & Win, T. (1998). Can staff training reduce behavioural problems in residential care for the elderly mentally ill? *International Journal of Geriatric Psychiatry*, *13*(3), 149-158.

- Moyle, W., Hsu, M. C., Lieff, S., & Vernooij-Dassen, M. (2010). Recommendations for staff education and training for older people with mental illness in long-term aged care. *International Psychogeriatrics*, 22(07), 1097-1106. doi:10.1017/S1041610210001754
- Murfield, J., Cooke, M., Moyle, W., Shum, D., & Harrison, S. (2011). Conducting randomized controlled trials with older people with dementia in long-term care: Challenges and lessons learnt. *International Journal of Nursing Practice*, 17(1), 52-59. doi:10.1111/j.1440-172X.2010.01906.x
- O'Connor, D. W., Ames, D., Gardner, B., & King, M. (2009). Psychosocial treatments of psychological symptoms in dementia: a systematic review of reports meeting quality standards. *International Psychogeriatrics*, 21(02), 241. doi:10.1017/S1041610208008223
- Oh, H., Hur, M. H., & Eom, M. (2005). Development and analysis of the effects of caregiver training program on aggressive behavior in elders with cognitive impairment. *Taehan Kanho Hakhoe Chi*, 35(4), 745-753.
- Olazarán, J., Reisberg, B., Clare, L., Cruz, I., Peña-Casanova, J., Del Ser, T., Woods, B., et al. (2010). Nonpharmacological therapies in Alzheimer's disease: a systematic review of efficacy. *Dementia and Geriatric Cognitive Disorders*, 30(2), 161-178. doi:10.1159/000316119
- Proctor, R., Burns, A., Powell, H. S., Tarrier, N., Faragher, B., Richardson, G., Davies, L., et al. (1999). Behavioural management in nursing and residential homes: a randomised controlled trial. *Lancet*, 354(9172), 26-29. doi:10.1016/S0140-6736(98)08237-3
- Savva, G. M., Zaccai, J., Matthews, F. E., Davidson, J. E., McKeith, I., Brayne, C., & the Medical Research Council Cognitive Function and Ageing Study. (2009).

- Prevalence, correlates and course of behavioural and psychological symptoms of dementia in the population. *The British Journal of Psychiatry*, 194(3), 212-219. doi:10.1192/bjp.bp.108.049619
- Schrijnemaekers, Veron, van Rossum, Erik, Candel, M., Frederiks, C., Derix, M., Sielhorst, H., & van den Brandt, P. (2002). Effects of emotion-oriented care on elderly people with cognitive impairment and behavioral problems. *International Journal of Geriatric Psychiatry*, 17(10), 926-937. doi:10.1002/gps.681
- Seignourel, P, Kunik, M., Snow, L., Wilson, N., & Stanley, M. (2008). Anxiety in dementia: A critical review. *Clinical Psychology Review*, 28(7), 1071-1082. doi:10.1016/j.cpr.2008.02.008
- Selbaek, G., Kirkevold, Ø., & Engedal, K. (2008). The course of psychiatric and behavioral symptoms and the use of psychotropic medication in patients with dementia in Norwegian nursing homes: a 12-month follow-up study. *The American Journal of Geriatric Psychiatry: Official Journal of the American Association for Geriatric Psychiatry*, 16(7), 528-536. doi:10.1097/JGP.0b013e318167ae76
- Smyer, M., Cohn, M., & Brannon, D. (1990). *Mental health consultation in nursing homes*. New York: New York University Press.
- Snowden, M., Sato, K., & Roy-Byrne, P. (2003). Assessment and Treatment of Nursing Home Residents with Depression or Behavioral Symptoms Associated with Dementia: A Review of the Literature. *Journal of the American Geriatrics Society*, 51(9), 1305-1317. doi:10.1046/j.1532-5415.2003.51417.x

- Spira, A. P., & Edelstein, B. A. (2006). Behavioral interventions for agitation in older adults with dementia: an evaluative review. *International Psychogeriatrics*, *18*(02), 195. doi:10.1017/S1041610205002747
- Teri, L., Truax, P., Logsdon, R., Uomoto, J., Zarit, S., & Vitaliano, P. P. (1992). Assessment of behavioral problems in dementia: the revised memory and behavior problems checklist. *Psychology and Aging*, *7*(4), 622-631.
- Teri, L., Huda, P., Gibbons, L., Young, H., & van Leynseele, J. (2005). STAR: a dementia-specific training program for staff in assisted living residences. *The Gerontologist*, *45*(5), 686-693.
- Testad, I, Aasland, A. M., & Aarsland, D. (2005). The effect of staff training on the use of restraint in dementia: a single-blind randomised controlled trial. *International Journal of Geriatric Psychiatry*, *20*(6), 587-590. doi:10.1002/gps.1329
- Testad, I., Ballard, C., Brønnick, K., & Aarsland, D. (2010). The effect of staff training on agitation and use of restraint in nursing home residents with dementia: a single-blind, randomized controlled trial. *The Journal of Clinical Psychiatry*, *71*(1), 80-86.
- University of York. (2009). *Systematic reviews*: CRD's guidance for undertaking reviews in health care. York: Centre for Reviews and Dissemination University of York.
- Verkaik, R., van Weert, J. C. M., & Francke, A. L. (2005). The effects of psychosocial methods on depressed, aggressive and apathetic behaviors of people with dementia: a systematic review. *International Journal of Geriatric Psychiatry*, *20*(4), 301-314. doi:10.1002/gps.1279

- Visser, S. M., McCabe, M P, Hudgson, C, Buchanan, G, Davison, T E, & George, K. (2008). Managing behavioural symptoms of dementia: effectiveness of staff education and peer support. *Aging & Mental Health, 12*(1), 47-55.
- Wells, D. L., Dawson, P., Sidani, S., Craig, D., & Pringle, D. (2000). Effects of an abilities-focused program of morning care on residents who have dementia and on caregivers. *Journal of the American Geriatrics Society, 48*(4), 442-449.
- Zuidema, S., Koopmans, R., & Verhey, F. (2007). Prevalence and predictors of neuropsychiatric symptoms in cognitively impaired nursing home patients. *Journal of Geriatric Psychiatry and Neurology, 20*(1), 41-49.
doi:10.1177/0891988706292762

Part 2: Empirical Paper

Staff Training using STAR (Staff Training in Assisted Living Residences): A Pilot Study in UK Residential Care Homes

Abstract

Background: Symptoms such as depression, anxiety and behavioural problems are very common in people with dementia living in care homes. Staff training has been identified as a promising psychosocial intervention. This pilot study investigated the feasibility and benefits of implementing the Staff Training in Assisted Living Residences (STAR; Teri et al, 2005) programme in the context of UK care homes.

Design: The eight week STAR programme was delivered in two care homes. Twenty five care staff attended the training. Thirty two residents, with clinically significant anxiety, depression or behavioural problems, were included in the study. Residents and staff were assessed at baseline and eight week follow up.

Results: Residents demonstrated significantly reduced symptoms of depression and behavioural problems following the implementation of the programme, although resident-rated quality of life and anxiety symptoms did not improve significantly. Staff sense of hopefulness towards people with dementia also improved significantly and staff rated themselves as more competent at forming relationships with residents with dementia. The programme was found to be acceptable to both care staff and managers. The implications for care practice and future research are discussed.

There are 750,000 people with dementia in the United Kingdom, one third of whom live in care homes (Alzheimer's Society, 2007). There have been long term concerns about the quality of care provided in care homes; residents spend the majority of their time inactive, with few opportunities to participate in activities or interact with staff (Brooker, 1995). Staff often lack basic training for working with people with dementia (Ballard et al., 2001) and the challenges of working with people with dementia can result in burnout and a high staff turnover (Hoeffler, Rader, McKenzie, Lavelle, & Stewart, 1997). Kitwood (1997) stated that poor quality care and a lack of day to day interactions between staff and residents in care homes, described as a Malignant Social Psychology, may even exacerbate the symptoms of dementia. The National Dementia Strategy (Department of Health, 2009) recommended that effective training and continuous professional development is required to improve the quality of care for people with dementia living in care homes.

Behavioural and psychological symptoms in dementia

Many people with dementia experience depression (Ames, 1991), anxiety (Seignourel, Kunik, Snow, Wilson, & Stanley, 2008) and behavioural problems (Fisher, Fink, & Loomis, 1993). The International Psychogeriatric Association (Finkel, Costa e Silva, Cohen, Miller, & Sartorius, 1996) have used the term 'Behavioural and Psychological Symptoms of Dementia' (BPSD) to describe these symptoms. The overall prevalence rate is between 50% and 65% (Aalten et al., 2007; Lyketsos et al., 2000; Savva et al., 2009) with a higher prevalence, of between 79% and 84%, for people with dementia living in care homes (Margallo-Lana et al., 2001; Selbaek, Kirkevold, & Engedal, 2008; Zuidema, Koopmans, & Verhey, 2007).

Staff training in dementia care

McCabe, Davison and George (2007), Kuske et al. (2009) and Aylward, Stolee, Keat and Johncox (2003) have reviewed the impact of staff training programmes on both staff and residents. Only half the studies reviewed by McCabe and colleagues found that staff training reduced symptoms for residents with dementia. However staff training was found to improve secondary outcomes, such as job satisfaction and staff turnover, in a number of studies. Meanwhile staff training was found to have positive effects, on either staff or resident outcomes, in the majority of studies reviewed by Kuske and colleagues. Finally, Aylward and colleagues found evidence that staff training can have a positive impact on staff outcomes in the short term. However these benefits were not always maintained over time and improvements in staff knowledge were not always accompanied by changes in staff behaviour. All the authors commented on the methodological weaknesses evident in many of the research designs.

Staff training research in the UK

There is a poverty of research on dementia care training and there is an urgent need to carry out research to develop a UK evidence base in this area. Because some promising training interventions have been developed, there is a need to evaluate existing training programmes using high quality randomised controlled trials (McCabe et al., 2007). However this process does raise a number of challenges. Firstly the success of training programmes depends on complex organisational factors, such as management style (Aylward et al., 2003; Kuske et al., 2009), which are very culturally influenced. Secondly there are many logistical barriers to conducting research in care homes, including inflexible institutional policies, high resident to staff ratios and high staff turnover (Murfield et al., 2011). Staff training interventions are also complex interventions; defined as interventions with many components and many possible

outcomes (Medical Research Council, 2008). These factors make it difficult to understand the active ingredient of change (Craig et al., 2008). Staff training interventions are particularly complicated because the intervention is targeted at the group level and lack of effectiveness may occur due to problems with implementation, rather than genuine ineffectiveness (Craig et al., 2008). Process evaluations can help to overcome some of these problems (Oakley, 2006) It has been suggested that a stepwise approach should be used to evaluate complex interventions, with much preparation work required prior to conducting a definitive randomised controlled trial (Medical Research Council, 2008).

Staff training as a treatment for BPSD

Overall, there is good evidence for the effectiveness of staff training programmes for reducing BPSD in residents with dementia living in care homes (Chenoweth et al., 2009; Deudon et al., 2009; Finnema et al., 2005; McCallion, Toseland, Lacey, & Banks, 1999; Proctor et al., 1999). However there are some staff training studies which have failed to find positive effects (Fossey et al., 2006; Schrijnemaekers et al., 2002; Visser et al., 2008). A number of training programmes have drawn on Social Learning Theory (Bandura, 1978), which states that behaviours are maintained through reinforcement, and person environment fit (Lawton, 1990), which considers how the demands of the environment must be adapted to suit each individual. These training programmes have had some promising results (Burgio et al., 2002; DeYoung, Just, & Harrison, 2002; Landreville, Dicaire, Verreault, & Lévesque, 2005; Oh, Hur, & Eom, 2005; Teri et al., 2005).

The STAR programme

The Staff Training in Assisted Living Residences (STAR) programme is one of the few training programmes to have been published as a manual (Teri, Huda, Gibbons, Young, & van Leynseele, 2001). It was developed in a large feasibility trial (Teri et al., 2005) involving 114 staff and 120 residents. It was specifically developed for staff working in Assisted Living Residences in the United States, where residents live in their own room or apartment, eat meals together and participate in social and recreational activities. They provide residents with support with activities of daily living although do not provide nursing care. Principally, STAR taught staff to understand and modify their interactions with residents by identifying activators, behaviours and consequences (ABC's). The programmes also included information about dementia, taught communication skills and encouraged staff to implement pleasant events with people with dementia.

The STAR programme was evaluated in a small randomised controlled trial (Teri et al., 2005) involving 25 staff and 31 residents. Four assisted living residences were randomly assigned to receive either the STAR training programme or usual onsite training. Pre-training and post-training assessments were carried out by blind assessors. Residents whose carers received the STAR training improved significantly on measures of behavioural problems, depression and anxiety in comparison to the control group. The programme was found to be feasible to be implemented by novice trainers in a variety of different locations (Teri, McKenzie, LaFazia, Farran, Beck, Piruz Huda, van Leynseele, & Pike, 2009a) and the group are currently disseminating the programme across the state of Washington.

Current study

A number of evidence based training programmes were reviewed which could be potentially implemented in the UK. The STAR programme was selected because of the promising evidence from an RCT in the United States (Teri et al, 2005), the successful results from a wider implementation (Teri et al., 2009) and the availability of the programme in a published manual (Teri et al., 2001). Although both the efficacy and effectiveness of the intervention had been demonstrated within the context of Assisted Living Residences in the United States, it had not yet been evaluated within the United Kingdom or within care homes. The complex organisational factors influencing this type of intervention and the cultural differences between the United Kingdom and the United States, influencing factors such as management style and the culture of care, made this stage of research very important. The study was classified as a Phase II exploratory trial (Medical Research Council, 2008).

Aim

The aim of this study was to evaluate the feasibility of delivering the STAR programme to staff in UK care homes. It aimed to evaluate the effects on BPSD in residents with dementia and the influence on staff attitudes and competency.

Hypotheses

1. The STAR programme can be feasibly implemented within UK care homes and will be acceptable to care staff and managers.
2. The STAR programme will reduce depression, anxiety and behavioural problems and improve quality of life for residents with dementia.
3. Staff will develop more positive attitudes toward people with dementia and will rate themselves as more competent in working with people with dementia after participating in the programme.

Method

Design

An experimental one group pre/post design was used to examine the feasibility of implementing the STAR staff training programme in UK care homes and the impact on the mood and behaviour of residents with dementia.

Setting

Selection of care homes

Two care homes were recruited to take part in pilot study. A search of the Care Quality Commission (2010) care directory identified 74 care homes of a suitable size (accommodating at least 40 residents with dementia) and quality (rated as good or excellent) to run the training programme within 15 London boroughs. All care home managers were sent an initial invitation letter (see Appendix B). A response was received from seven care homes. The remaining care homes were not contacted. The researcher visited six of these care homes and held a telephone conversation with one care home manager. It was not possible to conduct the research in five of these care homes due to a lack of approval from the managing organisation (3), a lack of resources to release staff for training (1) and the manager being unavailable during the research timescale (1). The remaining two care homes were selected to take part in the study.

Description of care homes

Care home A and B were both located in the outer London region and were owned by private care organisations. The quality of care was assessed using the published inspection reports available from the Care Quality Commission (2010), an independent body who inspect care organisations and provide a rating of poor, adequate, good or excellent. Both care homes were rated as 'good' in quality.

Care home A provided nursing care to 93 residents across three units, overseen by one full time care home manager. The majority of residents were diagnosed with dementia although they also provided care for people with physical health problems or severe and enduring mental health problems. There were two qualified nurses and six unqualified care staff on each unit per shift, with an overall staff/resident ratio of 1:4. Additionally two full time activity coordinators worked across three units.

Care home B accommodated 93 people with dementia across three units, overseen by one general manager and one deputy manager. Two units provided nursing care and one unit provided residential care. On the nursing units, there were two nurses on each shift and five carer staff working on each shift, with a staff/resident ratio of 1:4. One full time activity co-ordinator worked across all three units.

Participants

Ethics

Ethical approval was received from North West London REC which is a flagged committee for approving research carried out under the Mental Capacity Act (2005). The procedure for assessing capacity followed the guidelines published by the British Psychological Society (Dobson, 2008) and adhered to the Mental Capacity Act Code of Practice (2007). Firstly all prospective participants were assessed for their capacity to consent to take part in the research. If this assessment indicated that a resident did not have the capacity to consent to take part in the research, a personal consultee was identified to provide advice on their participation. They were asked to carefully consider the wishes of the person with dementia and their opinion about participating in research. If it was not possible to identify a personal consultee, a nominated consultee was consulted who was asked to consider the best interests of the potential participant. An

overview of the ethics procedures can be found in Appendix C and copies of the information sheets and consent forms can be found in Appendix D.

Inclusion criteria

Residents

- Diagnosed with Dementia according to the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV; APA, 2000) diagnostic criteria.
- Experiencing clinically significant depression, anxiety or behavioural problems, as indicated by a score above the clinical cut off on the assessment measures. To increase the generalisability of the study to all care home residents, residents were still included if they had a history of a DSM-IV axis 1 disorder such as Schizophrenia.

Care Staff

- Working in non qualified roles.
- Working at least 4 day shifts per week

Exclusion criteria

Residents

- Who were unable to speak English or could not communicate verbally due to the severity of their dementia.

Staff

- Who were not available on the training dates
- Who could not be certain they would be working at the care home at the time of follow up.

Power analysis

Residents

A power analysis was carried out using the G*Power 3 computer programme (Faul, Erdfelder, Lang, & Buchner, 2007). Estimating an effect size of 0.66 (obtained by Teri et al, 2005) and specifying alpha = 5% and desired power = 80%, the minimally desired resident sample size was 27.

Staff

The impact of staff outcomes was an exploratory hypothesis. There were no previous studies to inform a power analysis but a staff sample size of at least 22 was estimated to be sufficient based on Teri et al's (2005) sample.

Procedure

Residents

Following the consent procedures (see Appendix C), residents were assessed using the MMSE. Residents meeting the DSM - IV (APA, 2000) criteria for dementia were given a screening assessment which also functioned as a baseline assessment. This involved an interview with a member of staff and a shorter interview with the resident themselves. Residents were assessed at baseline and at eight week follow-up. As far as possible, the same caregiver was interviewed at baseline and follow up. However for six residents this was not possible due to annual leave, sickness and one staff member being dismissed. The same researcher carried out the assessments and delivered the training intervention.

Staff

A poster advertising the study was displayed in the staff rooms of the care homes, staff were left information leaflets and the researcher discussed the study with as

many staff as possible. Staff were invited to join the study on a first come, first served basis. Care staff were required to answer two questionnaires at baseline and eight week follow up. They were also required to answer a short feedback form at follow up. Care staff were required to provide informed consent in order to be included in the study and were given a gift voucher to thank them for participating in the study. Qualified nurses were invited to join the management training sessions.

Intervention

Description of STAR

The STAR programme incorporated two workshop sessions and four individual supervision sessions which were delivered over a eight week period. An overview of the workshop modules is provided in Table 1 and more detailed information can be found in Appendix E. Training involved the use of didactic teaching, discussion and group exercises with an emphasis on allowing staff to share experiences and learn from each other. The manual emphasised that the programme should be applied flexibly and should be kept very interactive. The STAR DVD was an integral part of the training. It contained eight scenes, played by actors, with interactions between staff and residents which depicted common behavioural problems. Each scene was presented twice, with the first scene showing only the problem behaviour and the second scene showing how the problem was successfully managed by the staff member.

The programme was adapted and delivered by the researcher, a Trainee Clinical Psychologist, under the supervision of an experienced clinical psychologist working in dementia care (Dr Aimee Spector). The programme ran for 8 weeks in each care home. The programme started with the first workshop session (4 hours), followed by two individual meetings with each staff participant. The second workshop session (4 hours) was delivered 4 weeks later, followed by the final two individual sessions.

The programme was run in care home A from October to December 2010 and in Care home B from January 2011 to March 2011. As outlined in the manual, each staff participant was allocated one or two residents to specifically consider when identifying problem behaviours and developing ABC plans.

Adaption of the manual

The manual was adapted for use in UK care homes by the researcher with assistance from an Occupational Therapist experienced in providing dementia training to staff teams (Dr Jennifer Wenborn). The original manual (Teri et al, 2001) was only available as a written script with overhead projector slides and handouts. The content of the manual was transferred to PowerPoint slides to allow the training to be more easily presented to staff groups. The content of the workshops adhered closely to the original manual. Some of the language was adapted slightly from American English to British English and some of the facts about dementia were updated.

Table 1

Overview of STAR programme

Module	Main Content
1	Understanding dementia and realistic expectations
2	Communicating with and without words
3	Using the ABCs
4	Problem solving: Get Active
5	Increasing Pleasant Events
6	Implementing STAR and preparation for individual training sessions
7	Review of STAR concepts and discussion of individual training sessions
8	Get Active with the environment
9	Team building
10	Families
11	More pleasant events
12	Implementing STAR and preparation for individual training sessions

Workshops

The workshops were primarily delivered by the researcher with the assistance of a co-facilitator at the majority of the sessions. Dr Jennifer Wenborn assisted with one session, Miss Susan Sadek (Research Assistant) assisted with two sessions and one session was delivered with only one facilitator. The workshops were delivered at a room on site with a television to display the PowerPoint slides. Staff who volunteered to take part in the programme attended the training during their normal working hours or were paid for their attendance outside of these hours.

Individual sessions

The individual sessions were designed to help staff apply the STAR concepts in everyday work situations. For example, the staff member could discuss a problem experienced by a resident with the facilitator who could help them to develop a plan for solving the problem using the ABC framework. The manual specified that each member of staff should receive four individual sessions, each lasting approximately 30 minutes. To pragmatically implement the programme in UK care homes, this criterion was adjusted slightly so that staff participants would receive the equivalent 120 minutes of additional training, but this could be delivered in three or four sessions.

Measures

The choice of outcome variables was based closely on the RCT conducted by Teri et al (2005). In addition to assessing the influence of the STAR programme on depression, anxiety and behavioural problems, quality of life was chosen because it has become a valued construct in dementia care (Spector & Orrell, 2006). It has also become an important outcome of staff training (Zimmerman et al., 2005). Meanwhile attitudes and sense of competency were selected as staff outcome variables because

competency was measured by Teri et al. (2005) and they are both considered valuable outcomes of staff training (Lintern, Woods & Phair, 2000; Williams, Hyer, Kelly, Leger-Krall, & Tappen, 2005). Measures were selected according to research evidence and professional consensus on the best available outcome measures for use with people with moderate dementia living in institutional settings.

Cognitive functioning

Cognitive functioning was assessed using the Mini Mental State Examination (MMSE; Folstein, Folstein, & McHugh, 1975), which is frequently used in clinical practice and research studies to assess cognitive functioning. It has good criterion and concurrent validity, inter-rater and test-retest reliability. The maximum score is 30, with 0-10 indicating a severe impairment, 11-20 indicating a moderate impairment and 21-24 indicating a mild impairment (Burns, Lawlor, & Craig, 1999).

Depression

The Cornell Scale for Depression in Dementia (Cornell; Alexopoulos, Abrams, Young, & Shamoian, 1988) was used to measure the frequency and severity of depressive symptoms. The 19 item instrument (score range 0-52) is based on an interview with carers and the results are corroborated in an interview with the person with dementia. It rates depression in five broad categories (mood related signs, behavioural disturbance, physical signs, biological functions and ideational disturbance) from absent (0) to severe (3). It is considered the gold standard for diagnosing depression in people with dementia and can be used to measure depressive symptoms in patients with dementia regardless of the level of cognitive impairment (Teri, McKenzie, & LaFazia, 2006). A cut off of eight or more on the Cornell indicates significant depressive symptoms (Burns, Lawlor, & Craig, 1999). The scale has good inter-rater reliability, internal consistency and has also been found to have good validity in

institutional settings (Alexopoulos, Abrams, Young, & Shamoian, 1988). The Revised Memory and Behavioural Problem Checklist (see below) provided an additional measure of depression symptoms.

Anxiety

Anxiety symptoms were assessed using the Rating Anxiety in Dementia scale (RAID, Shankar, Walker, Frost, & Orrell, 1999). It also uses a caregiver interview format, with additional information obtained from the person with dementia themselves and clinical notes. Symptoms are rated using 18 questions (score range 0-54) within five categories (worry, apprehension, vigilance, motor tension and autonomic hypersensitivity) from absent (0) to severe (3). A score of 11 or above indicates significant clinical anxiety. The authors demonstrated good inter-rater and test-retest reliability and it has been found to correlate with other anxiety rating scales.

Behavioural Problems

The Revised Memory and Behavioural Problem Checklist (RMBPC; Teri et al., 1992) was used to measure the frequency of behavioural disturbance, depression symptoms. The RMBPC is a 24 item self administered caregiver questionnaire based on behavioural observation. Caregivers answered the questionnaire with the researcher present to answer questions. The questionnaire is split into three categories; memory problems, depression and disruptive behaviours. Only the depression (score range 0-36) and disruptive behaviour (score range 0-32) frequency scales were used for this study. The frequency of behaviours are rated using a five point scale from never occurred (0) to daily (4). It has good internal validity and reliability. There is no clinical cut off on the RMBC but symptom ratings of moderate (2) or more were deemed to be clinically significant.

Quality of Life

The Quality of Life – Alzheimer’s Disease (QOL-AD: Logsdon, Gibbons, McCurry, & Teri, 2002) was used to assess quality of life. It uses a simple questionnaire format which is answered by the person with dementia with the assistance of the researcher. Each item is rated on a four point scale from poor (1) to excellent (4). A score is generated from 13 to 52 and higher scores indicate a higher quality of life. The scale has good internal consistency, acceptable test re-test reliability and good construct validity (Logsdon et al., 2002). The QOL-AD has also been found to be reliable and valid when completed with people with moderate to severe levels of dementia (Hoe, Katona, Roch, & Livingston, 2005). Logsdon et al. (2002) also developed a caregiver version, which was found to correlate well with the resident version. To reduce the number of measures to be completed by care staff, only the resident version was utilised in this study.

Staff attitudes

The Approaches to Dementia Questionnaire (ADQ: Lintern, Woods, & Phair, 2000) was used to measure staff attitudes towards people with dementia. Respondents rate the extent to which they agree with 19 different statements about dementia. The statements are rated on a five point scale from ‘strongly agree’ to ‘strongly disagree’. A total attitudes score can be calculated (score range 19-95) with a higher score indicating a more positive attitude. There are two sub-scores, measuring ‘hopefulness’ (score range 8-40) and the extent to which a carer’s attitude is ‘person-centred’ (score range 11-55). The ADQ has good internal consistency and test re-test reliability. The hope subscale has been found to predict the quality of physical care and the frequency of interactions between staff and residents (Lintern et al, 2000).

Staff sense of competence

Staff sense of competence was measured using the Sense of Competence in Dementia care Staff (SCID-S; Schepers, 2010). This contains 17 statements, rated on a four point scale ranging from 'not at all' to 'very much'. The scale yields a total score (score range 17 to 68 points) and four subscale scores. The 'professionalism' scale describes competence in being an active team member and maintaining a positive attitude (5-20). The 'building relationships' scale describes the ability to form relationships with people with dementia (4-16), the 'care challenges' scale (4-16) describes the ability to carry out tasks which normally require specialist training and the 'maintaining personhood' sub-scale describes the ability to provide for individual need (4-16). Internal consistency and inter-rater reliability were found to be good for the full scales and above adequate for each of the subscales. The measure was also found to have both predictive and convergent validity and was associated with job satisfaction, experience and use of person-centred approaches, however the sensitivity of the measure for assessing changed over time has not yet been measured.

Acceptability to staff

The acceptability of the intervention was assessed using a staff and manager feedback questionnaire. The staff questionnaire (see Appendix E) was developed by the researcher using the end of session feedback forms published in the STAR manual (Teri et al., 2001). In the first six questions, staff were asked to rate the usefulness of each aspect of the STAR programme using a five point likert scale, ranging from 0 (not useful) to 4 (very useful). In the final six questions, they were asked to rate the extent to which the STAR programme had improved their knowledge about dementia, their relationships with residents and colleagues, their confidence at work and their job satisfaction. They were also asked if they would recommend the programme to a

colleague. Finally, in an open comments section they were asked to describe the aspect of the programme which they had found the most helpful, the part that they felt could be improved and were asked to add any other comments about their experience of attending the training.

The manager questionnaire (Appendix E) was also developed by the researcher. It contained five questions on the usefulness of the management sessions, rated from 0 (not at all) to 4 (very much). Managers were also asked if they would carry out their management role any differently as a result of attending the management sessions, if they thought the care staff they managed were able to use the skills from the training and if they would recommend the programme to another care home. Finally, in an open comments section they were asked to describe the aspect of the programme which they found the most helpful, the part that they felt could be improved and were asked to comment on any difficulties which the care staff experienced in implementing the programme.

Data analysis

Data were entered and analysed using the Statistical Package for the Social Sciences version 17.0. Data missing at follow up were handled using the last point of observation method, in which the baseline score was carried forward to follow up. Data from the RAID, frequency scores on the RMBC, QOL-AD and SCID-S were all found to be normally distributed. Results from the Cornell measure violated normality assumptions and was transformed using a square root transformation. A series of paired sample T- Tests were carried out to evaluate the change in scores over time on each outcome measure.

Results from the ADQ were also found to violate normality assumptions due to outliers. It was not possible to transform this data but the non parametric Wilcoxon

Matched Pairs test was used as an alternative to the T-Test. Effect sizes were calculated using Cohen's d. The number of residents moving from the clinically significant range to the non clinically significant range was calculated for the Cornell and RAID data. The number of residents moving from the clinical range to the non clinical range was then analysed for statistical significance using the Mantel Haenszel procedure.

Results

Recruitment of residents

Forty nine residents were initially identified as prospective participants. Consent was obtained for 38 participants due to residents declining to take part (2), personal consultees stating that their friend or relative would not have wished to be involved in research (2) or personal consultees not being available to provide a decision on their participation (7). Six residents were then excluded because they were not found to experience clinically significant depression, anxiety or behavioural problems. Finally, 32 residents were included in the study; fifteen residents from care home A and 17 residents from care home B. Follow up data were not collected for one resident participant who was admitted to hospital at the end of the study. Meanwhile it was not possible to complete the QOL-AD with three residents because of the extent of their language or sensory problems. Data were analysed for 29 participants on the QOL-AD.

Resident characteristics

A description of resident characteristics can be found in Table 2 and a description of staff characteristics can be found in Table 3.

Dementia diagnosis

The majority of participants were experiencing moderate to severe dementia (\bar{x} MMSE = 11.3, SD = 4.7). Only 47% of participants were found to have been given a formal diagnosis of dementia by a doctor.

Table 2

Demographic and clinical characteristics of 32 residents

	N	%	Mean	SD	Range
Age (years)			83	6.2	(72-98)
Time living at care home (years)			3.1	3.3	(0.1-14.1)
Mini Mental State Examination			11.3	4.7	(3-22)
<i>Stage of Dementia:</i>					
Mild	2	6			
Moderate	15	47			
Severe	15	47			
<i>Gender:</i>					
Male	15	47			
Female	17	53			
<i>Ethnicity:</i>					
White British	14	44			
Black Caribbean	9	28			
White Irish	5	16			
White European	2	6			
Black African	1	3			
Asian Indian	1	3			
<i>Dementia diagnosis:</i>					
No specific diagnosis	17	53			
Alzheimer's Disease (AD)	9	28			
Vascular Dementia (VD)	3	6			
Lewy Body Dementia	2	3			
Mixed AD/VD	1	3			
<i>Marital Status:</i>					
Widowed	16	50			
Single	13	41			
Married	3	9			
<i>Language:</i>					
English as a first language:	18	53			
Other language	14	41			

Psychiatric symptoms

The mean baseline score was 15.8 (SD 8.8) on the Cornell, indicating a high frequency of depression symptoms across the sample. Scores fell in the mild depression range for 13 participants and in the moderate to severe range for 18 participants. Eleven residents (34%) scored above 20 on the Cornell. Staff ratings of depression on the RMBC were overall lower than on the Cornell, with scores clustered around the lower to middle end of the scale, with a high variability in baseline scores. The scores on the RAID were lower in comparison to the Cornell and there was also a high variability between scores ($\bar{x} = 11.6$, SD 8.4). Scores for disruptive behaviour on the RMBC were clustered around the lower to middle end of the scale ($\bar{x} = 10.6$, SD = 6.4). Quality of life scores clustered around the middle of the score range ($\bar{x} = 32.2$, SD 9.2). Six participants had a history of Schizophrenia and two participants had a history of Bipolar Affective Disorder.

Staff characteristics

The training programme was delivered to 25 care staff working in non qualified roles. The majority of staff were female (80%), spoke English as a second language (80%) and were from countries other than the UK (92%). Eleven members of staff (44%) had a qualification relevant to care work, such as a National Vocational Qualification level 2 or above or a non UK nursing qualification. Fourteen members of staff (56%) were in the process of studying for a qualification relevant to care work (see Table 3). All staff had received basic induction training in topics such as first aid, incontinence care and manual handling. Two staff participants did not complete the STAR training programme due to one staff member taking urgent leave and one staff member being dismissed.

Table 3

Demographic characteristics of 25 staff participants

	N	%	Mean	SD	Range
Age (years)			37.6	10.2	(19-59)
<i>Gender:</i>					
Male	5	20			
Female	20	80			
Time working at care home (years)			2.9	2.7	(.25-8)
Total experience working in care homes (years)			2.1	2.6	(.25-8)
<i>Ethnicity:</i>					
Black African	8	32			
Asian other	6	24			
White European	4	16			
Asian Indian	3	12			
Black British	1	4			
Black Caribbean	1	4			
White Irish	1	4			
White British	1	4			
<i>Language:</i>					
English as a first language	5	20			
English as a second language	20	80			
<i>Existing qualifications:</i>					
No qualifications relevant to care work	14	56			
NVQ3	4	16			
NVQ2	3	12			
Non UK nursing qualification	3	12			
<i>Currently studying for qualifications:</i>					
Not currently studying	11	44			
Studying for NVQ2	9	36			
Studying for NVQ3	2	8			
Studying for NVQ4	2	8			
Studying for diploma in nursing management	2	8			
<i>Job title:</i>					
Care Assistant	21	84			
Activity Co-ordinator	3	12			

Changes in resident symptoms

A summary of scores for resident depression, anxiety, behavioural problems and quality of life at baseline and follow up can be found in Table 4.

Depression

There was a decrease in depression symptoms, rated using the Cornell, between baseline and follow up with a large variability in change scores ($\bar{x} = 4.8$, SD 8.6). This reduction was found to be statistically significant, $t(31) = 3.403$, $p = .002$, with a medium effect size ($d = 0.6$). There was also a decrease in depression scores on the RMBC ($\bar{x} = 2.7$, SD = 7.2) which was found to be statistically significant, $t(31) = -2.12$, $p = .042$, with a small effect size ($d = 0.4$).

At baseline, 30 residents obtained Cornell scores in the clinical range for depression. Scores reduced and moved into the non clinical range for 14 residents (46%). The number of residents in the non clinical range at baseline in comparison to follow up was found to be statistically significant, $\chi^2 = 12.460$, $p = .001$. Overall, symptoms scores on the Cornell reduced for 20 (65%) residents, worsened for seven (23%) of residents and remained the same for four (13%) residents.

Anxiety

There was a small decrease in scores on the RAID and great variability between change scores ($\bar{x} = 1.3$, SD = 8.1). The reduction in scores was not found to be statistically significant, $t(31) = .874$, $p = .389$. At baseline, 13 residents obtained RAID scores in the clinical range. These scores reduced and moved from the clinical to the non-clinical range for 9 (69%) residents. The number of residents moving into the non clinical range was found to be statistically significant, $\chi^2 = 4.13$, $p = .042$. Overall, scores improved for 20 (65%) residents, worsened for eight (26%) residents and did not change for four (13%) residents.

Behavioural problems

Staff ratings of disruptive behaviour on the RMBC decreased between baseline and follow up with a large variability in the change scores ($\bar{x} = 2.3$, $SD = 5$). This difference was found to be statistically significant, $t(31) = 4.15$, $p = .013$, with a small effect size ($d = 0.3$). Disruptive behaviour reduced for 19 (61%) residents, worsened for eight (26%) residents and stayed the same for four (13%) residents.

Quality of Life

Resident quality of life scores did not improve after the training intervention, $\bar{x} = .2$, $SD = 4.4$, $t(28) = -2.09$, $p = .836$. Quality of life improved for 10 (32%) residents, remained the same for five (16%) residents and worsened for 13 (42%) residents.

Table 4

Impact on BPSD in 32 residents with dementia

	Baseline		Post training		Change		P	Effect size
	Mean	SD	Mean	SD	Mean	SD		
Cornell Scale for Depression in Dementia (Cornell)	15.8	8.8	10.8	7.6	4.8	8.6	.002	0.6
Rating Anxiety in Dementia (RAID)	11.6	8.4	10.4	8.4	1.2	8.1	.389	
Revised Memory and Behavioural Problem Checklist (RMBPC) – Frequency: Depression	9.7	8.2	7.0	5.7	2.7	7.2	.042	0.3
RMBPC – Frequency: Disruption	10.6	6.4	8.3	5.9	2.3	5	.013	0.4
Quality of Life – Alzheimer’s Disease (QOL-AD)	31.3	10.2	31.5	9.7	.2	4.4	.836	

Note. Data for 29 participants were analysed on the QOL-AD

Changes in staff outcomes

Attitude to Dementia

Staff participants were found to hold overall positive attitudes towards people with dementia, with scores clustered around the middle to higher end of the rating scale. There was a small improvement in overall attitude toward people with dementia between baseline and follow up, with a high variability between scores ($\bar{x} = 1.3$, $SD = 6.1$), although this reduction was not found to be statistically significant, $t(24) = -1.082$, $p = .290$.

Scores on the 'hopefulness' sub-scale were clustered around the middle of the score range ($\bar{x} = 2$, $SD = 5$) and were found to increase significantly between baseline and follow up, $z = -2.23$, $p = .026$, with a small effect size ($d = 0.4$). Scores on the 'person-centred' scale were also clustered at the higher end of the table, ($\bar{x} = .7$, $SD = 6.4$), and did not change significantly between baseline and follow up, $z = -.016$, $p = .987$.

Sense of Competence

Care staff also reported a high sense of competency, both on the total scale ($\bar{x} = 56.1$, $SD = 5.3$) and on the individual sub-scales. There was not a significant increase in overall competency scores between baseline and follow up, $t(24) = -.602$, $p = .553$. Scores on the 'professionalism' sub-scale, $t(24) = .569$, $p = .574$, the 'care challenges' subscale, $t(24) = -.744$, $p = .464$ and the 'maintaining personhood' sub-scale, $t(24) = .00$, $p = 1.0$, did not increase significantly. However there was a significant improvement in sense of competency on the 'building relationships' sub-scale ($\bar{x} = 2.6$, $SD = 2.7$), $t(24) = -.477$, $p = .000$, with a large effect size ($d = 1.2$).

Table 5

Impact on attitudes and sense of competency in 25 care staff

	Baseline		Post intervention		Change		P	Effect size
	Mean	SD	Mean	SD	Mean	SD		
Attitudes to Dementia (ADQ): Total	72	6	73.3	7.2	1.3	6.1	.290	
ADQ: Hope	25.7	4.7	27.7	4.6	2	5	.026	0.4
ADQ: Person centred	46.3	5	45.6	7.2	-.7	6.4	.987	
Sense of Competence in Dementia Care Staff (SCIDS): Total	56.1	5.3	56.7	5.7	.6	5	.553	
SCIDS: Professionalism	17.3	1.6	17.1	1.5	-.2	1.8	.574	
SCIDS: Building relationships	12	2.2	14.6	2.6	2.6	2.7	.000	1.2
SCIDS: Care challenges	13.2	1.7	13.5	1.9	.3	1.9	.464	
SCIDS: Sustaining personhood	13.6	1.3	13.6	1.4	.0	1.3	1.0	

Feasibility of delivering STAR in UK care homes

Workshop sessions

Overall there was an 88% attendance rate at the first workshop (n = 22) and an 84% attendance rate at the second workshop (n = 21). Absences occurred due to sickness, difficulties attending outside of work hours and staff shortages which made it difficult for units to release staff to attend the training. Staff who missed workshop sessions were offered an additional individual teaching session to provide them with an overview of the material they missed. Staff were generally very engaged with the workshop sessions and were keen to share their experiences with each other.

Individual sessions

It proved logistically challenging to implement the full number of individual sessions, mainly due to time constraints. Arrangements were made to meet each staff member at weekly intervals, but staff experienced difficulties attending the sessions. There were also difficulties due to staff sickness, annual leave and staff working night shifts. The average duration of individual sessions attended was 86 minutes. Only six staff members attended the full duration of individual sessions.

The manual (Teri et al., 2001) suggested that observation should be included in half the individual sessions. Only 11 staff (44%) were observed at least once during the programme due to time constraints. Staff were able to implement the 'Pleasant Events' module successfully but experienced more difficulties implementing the ABC behavioural plans. Despite recording discussions during individual sessions using an ABC card (Appendix E) and sharing a copy with the qualified nurses, staff often returned to the next ABC plan.

Management sessions

It was hoped that as many managers as possible would attend the three management sessions. All three sessions took place at care home A, with four managers attending out of a total of 11 managers. However, it proved extremely difficult to organise the management sessions at care home B. The same session was run on two separate occasions to allow as many nurses as possible to attend. However only five managers attended, out of a total of 12 managers, and the final two sessions did not take place.

Acceptability of STAR

Feedback from care staff

Care staff were asked to complete a feedback form at the end of the STAR programme (see Appendix F). They were asked to rate the usefulness of the different training modules using a likert scale. They were also asked to rate the extent to which the programme had impacted on factors such as their knowledge, job satisfaction and sense of confidence. They were also asked two open questions and were asked to include additional comments about their experience of attending the training.

Feedback forms were received from 23 staff who answered the 13 quantitative questions using a likert scale (see measures section for a description). Summary data from the staff feedback forms can be found in Table 6. Overall, the programme was rated as useful and the majority of participants stated they would recommend the programme to a colleague. The DVD and the module covering ABC's were reported to have been the most helpful aspects of the course. A number of staff reported that the training had improved their relationships with residents and

colleagues and had increased their knowledge about dementia, depression and anxiety. Some staff also stated that they felt more confident in their role and had developed a higher sense of job satisfaction after attending the training.

Twenty two staff answered the first open question (which asked ‘what part of the training did you find most helpful?’) with many staff listing more than one part of the programme as helpful. Only 17 staff answered the second question (which asked ‘what aspect of the training do you think needs to be improved?’). Ten staff provided comments and seven staff stated that they could not suggest any aspects of the programme which needed to be improved. Seventeen staff included additional comments about their experience of attending the STAR programme. Themes expressed by participants are summarised in Tables 7, 8 and 9. In concurrence with the quantitative feedback, the majority of staff described the ABC module and DVD as the most helpful aspects of the programme. In the general comments, some participants stated they had changed the way they worked with residents as a result of attending the training. Other staff reported that it was helpful to share ideas with colleagues and also commented that the training gave them a more positive attitude towards people with dementia.

Table 6

Quantitative feedback from 23 care staff

<i>How useful did you find...</i>	4/4 Very much	3/4 Reasonably	2/4 Averagely	1/4 Slightly	0/4 Not at all
The workshop sessions overall?	19 (83%)	2 (9%)	2 (9%)	0	0
The individual sessions overall?	19 (83%)	2 (9%)	2 (9%)	0	0
The DVD?	22 (96%)	1 (4%)	0	0	0
The handouts?	16 (67%)	5 (22%)	1 (4%)	1 (4%)	0
Module 1: Understanding dementia?	18 (82%)	3 (14%)	0	1 (5%)	0
Module 2: Communicating with and without words?	15 (71%)	5 (24%)	1 (4%)	0	0
Module 3: Using ABC's and problem solving?	12 (57%)	6 (29%)	2 (10%)	1 (5%)	0
Module 4: Increasing pleasant events?	13 (62%)	7 (33%)	1 (4%)	0	0
Module 5: Changing the environment to change behaviour?	19 (83%)	2 (9%)	2 (9%)	0	0
Module 6: Team building?	19 (83%)	2 (9%)	2 (9%)	0	0
Module 7: Working with families?	22 (96%)	1 (4%)	0	0	1 (4%)
Module 8: 'Using more pleasant events?	16 (70%)	5 (22%)	1 (4%)	1 (4%)	0
<i>Has the STAR training....</i>					
Increased your knowledge about dementia?	13 (56%)	7 (30%)	1 (4%)	2 (9%)	0
Increased your knowledge about depression and anxiety?	14 (61%)	6 (26%)	1 (4%)	2 (9%)	0
Improved your relationships with care home residents?	13 (56%)	6 (26%)	2 (9%)	1 (4%)	1 (4%)
Improved your relationships with colleagues?	10 (44%)	5 (22%)	4 (9%)	0	4 (9%)
Do you enjoy your job more as a result of attending the STAR training?	12 (52%)	6 (26%)	3 (13%)	0	2 (9%)
Do you feel more confident about your ability to do your job after attending the training?	17 (74%)	2 (9%)	2 (9%)	0	2 (9%)
Would you recommend the STAR training to a colleague?	19 (83%)	3 (13%)	0	0	1 (4%)

Note. Number of staff participants providing a rating in each category.

Table 7

Qualitative feedback from 22 care staff: aspects of the programme found to be helpful

Theme	N	Quotations
ABC's	14	<i>'I found the ABCs very useful and I have been trying to use them with my residents when I have difficulties with personal care - I try to give residents a boost or distract them'</i> P18
The DVD clips	10	<i>'I also enjoyed the video clips as they taught me more about dementia, such as how often people forget things, and it gave me more ideas and knowledge to overcome these problems'</i> P19
Communication skills	4	<i>'The part that helped me most was communication and changing the mood of residents'</i> P7
Commented that all aspects of the programme were helpful	4	<i>'All the aspects of the training were brilliant'</i> P15
The individual sessions	2	<i>'The one to one sessions were the most helpful part'</i> P21
Pleasant events	2	<i>'The activities section was the most useful module'</i> P6
Changing the environment to change behaviour	2	<i>'Changing the environment to change behaviour was the most useful'</i> P22
Working with families	1	<i>'I found the section about dealing with resident's families very useful'</i> P7
Case example of a resident displaying a problem behaviour	1	<i>'Reading about Bill was useful for understanding the ABC's'</i> P5
Team work	1	<i>'Talking about team work was useful'</i> P20

Note. Comments were expressed by more than one staff member.

Table 8

Qualitative feedback from 17 care staff: aspects of the programme which could have been improved

Theme	N	Quotations
There were no aspects of the training which needed improvement	10	<i>'It is very interesting and needs no improvement' P12</i>
More DVD clips would have been useful	3	<i>'More videos showing the different behaviour of people with dementia' P2</i>
The training needed to be longer than two workshop sessions/include a refresher session	3	<i>'The training is very helpful. I think we should have it every year to remind us of some things we might have forgotten' P7</i>
The individual sessions could have been improved	1	<i>'The one to one sessions need a bit of improvement. It would be good to have more ideas we could implement' P17</i>
The team work section	1	<i>'The team work section could be improved' P10</i>
Increasing pleasant events	1	<i>'The aspect of the training I think needs to be improved is increasing pleasant events' P10</i>
More time for discussion	1	<i>'We needed a bit more time for everyone to have a chance to express their views' P24</i>
More discussion on problem solving	1	<i>'It would be good to think about how to plan quickly to solve problems' P16</i>
Filling in the ABC card	1	<i>'I needed a bit more time to learn how to fill in the ABC chart' P10.</i>
More information about improving personal care with residents	1	<i>'It would be good to talk more about improving personal care' P20</i>

Note. Comments were expressed by more than one staff member

Table 9

Qualitative feedback from 17 care staff: their overall experience of attending the training

Theme	N	Quotations
Training changed the way staff approached their job.	8	<i>'I found it very educational and it has changed how I behave towards residents. I now try and get them involved in activities' P3</i>
Helpfulness of sharing ideas with colleagues	5	<i>'It was good to find that other floors are having similar experiences and to feel open to express my opinion and experiences' P3</i>
The training improved care staff's knowledge about dementia	5	<i>'It was a great experience. It gave me loads of knowledge and understanding' P22</i>
Training helped staff to develop a more positive attitude towards people with dementia	3	<i>'It greatly changed my attitude and point of view about dementia sufferers' P2</i>
Overall usefulness of the training programme.	4	<i>'All the aspects of the training were brilliant' P15</i>
Training helped staff to develop a more positive, person centred attitude towards people with dementia	3	<i>'It gave me more understanding of dementia and how we should treat people with dementia the same as any other person by respecting and valuing them' P17</i>
The training helped care staff to feel more confident in their role and more generally	3	<i>'I didn't only learn about dementia but also learnt things which have helped me in my day to day living and have learnt to communicate and meet different people' P19.</i>
The training was easy for carers to understand	2	<i>'We all enjoyed the training and understand it well' P6</i>
Training helped to improve team working skills	1	<i>'I learnt about helping your colleagues every time they need a hand in the work place' P20</i>

Note. Comments were expressed by more than one staff member.

Feedback from managers

Managers were also asked to complete a feedback form at the end of the training programme (see Appendix F). They were asked to rate the usefulness of the different training modules using a likert scale (see measures section for a more detailed description) and were asked to make additional comments about aspects of the programme they found helpful, aspects they felt could be improved and the extent to which care staff could implement the new skills in practice.

Table 10

Quantitative feedback from nine managers

	4/4 Very much	3/4 Reasonably	2/4 Averagely	1/4 Slightly	0/4 Not at all
How useful did you the STAR management sessions?	4	3	2	0	0
How useful did you find the DVD?	8	0	0	1	0
Do you think the care staff you manage were able to apply the STAR concepts in their everyday work?	6	2	1	0	0
Will you carry out your management role any differently as a result of attending the training sessions?	6	1	2	0	0
Would you recommend the STAR programme to another care home?	7	1	1	0	0

Feedback forms were received from nine managers, with eight managers answering the qualitative questions. Managers rated the management sessions as 'moderately useful' overall and rated the DVD as 'very useful' (see Table 10). A list of the themes expressed in answers to the qualitative questions can be found in Table 11. There were mixed opinions about the extent to which staff could apply strategies from the STAR training in their everyday work; some managers had observed care staff applying the STAR strategies although other managers reported that staff had experienced some difficulties implementing the STAR concepts in practice.

Table 11

*Qualitative feedback by nine managers**Aspects of the training described as most helpful:*

Theme	N	Quotations
Overview of ABCs	4	<i>'Understanding how and when to use the ABC chart for residents who have dementia and challenging behaviour' P27</i>
DVD clips	2	<i>'It was good to see the staff member's approach on the video which was very abrupt and caused the resident's behaviour' P31</i>
Overview of communication skills	1	<i>'It was most useful to learn about how to communicate with people with dementia' P32</i>
Discussion with managers and facilitators	1	<i>'The opportunities for discussion in the management sessions were helpful' P33</i>

Aspects of the training which could be improved:

Relatives also needed to be given the same information as the care staff	2	<i>'More information should be given to the resident's families, not just to the staff' P28</i>
Some qualified nurses should also attend the training	1	<i>'It would be good to include a link qualified nurse in the training' P33.</i>
The management session could include more examples of residents with challenging behaviour	1	<i>'More examples to be given of residents with challenging and manipulative behaviour' P33</i>
Observation could have been incorporated more frequently into the individual sessions	1	<i>'It would be good if the trainer could spent more time observing the service users and staff' P29</i>

Ability for staff to apply the STAR strategies in their work

Care staff have been able to use the strategies from the training into their day to day work	4	<i>'Most of the staff can understand how to use ABC charts' P28</i>
Care staff find it difficult to understand the ideas and apply them in their work	4	<i>'Some of the staff have no understanding of how and when to use the ABC chart for residents' P27</i>

General comments about the experience of attending the training

Training was clear to understand	2	<i>'The trainer was able to explain herself in simple language and she presented the training in a very interesting way' P34</i>
Training improved manager's knowledge about behaviour management strategies	3	<i>'It taught me how to help staff to calm resident's with challenging behaviour' P34</i>
Training helped managers to consider how staff can increase the respect and dignity they give to people with dementia.	1	<i>'I learnt to use my knowledge and experience to manage residents with dementia with respect, dignity and to improve their quality of life' P30</i>
Wish to implement the training more widely	1	<i>'The training was very useful. I would like to introduce it into the induction programme' P33</i>

Discussion

Summary of results

This pilot study aimed to investigate the feasibility and benefits of delivering the STAR programme (Teri et al., 2005) to staff groups in UK care homes, with the aim to understand if the programme could be generalised to a new care context. The study was not intended to provide evidence of the effectiveness of the STAR programme in the UK, which will need to be demonstrated in a future randomised controlled trial (RCT). The programme was delivered, with close adherence to the manual, to two staff groups working with residents with dementia who were experiencing BPSD.

As hypothesised, the results indicate that training care staff using this approach can be beneficial for reducing depression and behavioural problems in residents with dementia. Contrary to the hypothesis, the programme was not found to improve resident-rated quality of life or anxiety. As a result of attending the training, care staff developed more hopeful attitudes towards people with dementia and rated themselves as more competent in building relationships with people with dementia and their relatives. Overall the programme was feasible to implement, although there were some logistical difficulties implementing the individual and management sessions. Finally, the programme was very well accepted by care staff and managers; they reported that they found the training very useful, that it improved their relationships with residents and colleagues and changed the way they approached their job.

Comparison with previous research

The potential for the STAR training intervention to reduce BPSD in residents with dementia compares to findings from studies evaluating other staff training interventions with the same theoretical background (Burgio et al., 2002; DeYoung et al., 2002; Landreville et al., 2005; Oh et al., 2005). Meanwhile, the evidence that depression can be reduced through staff training compares to a number of other studies (Lyne et al., 2006; McCallion et al., 1999; Proctor et al., 1999). These findings are also consistent with evidence that behavioural therapy with the use of pleasant events can be a beneficial treatment for depression for people with dementia living at home (Verkaik et al., 2005).

The results correspond closely with Teri et al's (2005) original finding in which the STAR training reduced depression, anxiety and behaviour problems in residents and was well received by staff. These results also concur with a recent study which found that the STAR programme could be successfully implemented by novice trainers across a number of different settings (Teri et al., 2009).

Teri and colleagues did not investigate quality of life in their study and it was incorporated as an exploratory hypothesis as part of this pilot trial. The lack of improvement in quality of life in this study was surprisingly because BPSD has often been found to correlate with quality of life (Samus et al., 2005). However, quality of life is a multifaceted construct with a range of contributing factors, many of which may not have been influenced by the STAR programme. The finding may also reflect the challenge of measuring quality of life in people with dementia, who may find it difficult to accurately report their internal state (Rabins & Kasper, 1997). The QOL-AD was originally validated with a group of people with mild to moderate dementia

(Logsdon et al., 2002) but it has also been found to be valid when used with people with more severe dementia (Hoe et al., 2005). However Hoe and colleagues' study was cross sectional and the scale may lack sensitivity for measuring changes over time with people with more severe dementia.

Interpretation of findings

The increase in hopeful attitudes and the increased sense of competence experienced by staff who took part in the programme are both interesting findings. The need for care staff to understand the emotions of people with dementia and build relationships with people with dementia has been frequently discussed since Kitwood's (1997) theory of person centred care. This was demonstrated in research by Lintern et al (2001) which found that the hopefulness of staff attitudes can predict staff behaviour.

The STAR training was designed to provide staff with behavioural strategies and communication skills. The application of these strategies by care staff may have directly reduced BPSD. It is also possible that a more abstract mechanism of change may have been responsible for some of these positive benefits. For example, staff may have become more empowered in their role (Spreitzer, 2006), may have developed a better understanding of the needs of people with dementia and may have improved their relationships with colleagues.

It was observed that the culture of care in both care homes was strongly task focused. This was the first opportunity many of the care staff were given to consider the psychological aspects of caring for people with dementia. Although the staff found it challenging to implement all of the skills taught in the programme, the training overall seemed to change the way staff approached their work. This shift to a more 'person-centred' approach, as originally conceptualised by Kitwood (1997), is

fundamental for reducing BPSD and improving quality of life for people with dementia (Andrews, 2006).

Limitations

There were a number of methodological limitations in this study and the results need to be interpreted with caution. Although the study did not intend to investigate effectiveness, there were a number of factors which compromised the internal validity of the study. Due to the lack of control group there is a risk the significant reduction in depression and behavioural problems for residents could have occurred due to regression to the mean. However, whilst fluctuations of depression symptoms can occur over time for people with dementia, studies have found that symptoms are unlikely to reduce in less than three months (Ballard, Patel, Solis, Lowe, & Wilcock, 1996).

Meanwhile interfering events may have occurred which influenced the symptoms of residents. It was beyond the scope of the study to record all other interventions received by residents in this study, such as changes in pharmacological medication. The internal validity was also reduced because there were no blind assessors and the same researcher delivered the training intervention and carried out the assessments. Finally, it is possible that care home staff and residents benefitted from being involved in a research study, known as the Hawthorne Effect (McCarney et al., 2007).

There were also limitations with using staff report measures to rate the symptoms of residents. McCann, Gilley, Hebert, Beckett and Evans (1997) demonstrated that staff may rate the frequency of behaviours differently to direct observers. Staff may also observe behaviour differently after participating in a training programme (McCabe, Davison, & George, 2007). Many of the staff who

answered the resident outcome measures also took part in the training programme and may have been biased to report positive changes. The ratings of depression on the RMBC were also surprisingly low in comparison to the ratings given for depression on the Cornell. This suggests that care staff may have a poor understanding of depression symptoms and may report symptoms differently in an interview with a clinician in comparison to when answering a questionnaire. Because of these problems, it was planned that the same staff member would be interviewed about each resident at baseline and follow up, however this was only possible for 81% of residents. Ideally, a rating for inter-rater reliability would have been obtained by asking two care staff to rate each resident, but this was beyond the resources of the care homes.

There were also some limitations with the staff outcome measures. There were weaknesses from measuring competency using a self report measure (SCID-S) because it measured perceived competency rather than actual competency and was vulnerable to social desirability. There was also found to be a ceiling effect on the measure (Schepers, 2010) which may have affected the variability of the findings. Finally, acceptability was only assessed using a feedback questionnaire and social desirability is likely to have been an issue.

Implications for care practice

The results of this pilot study indicate that the STAR programme is potentially a very valuable training programme for staff working in UK care homes, reflecting the strong theoretical roots and the systematic development of the programme over a number of years (Teri et al., 2005). Care homes would benefit from incorporating this programme into their existing staff training packages. Residents with dementia will gain the maximum benefit from this staff training

programme if care organisations also review their wider organisational practices and consider how programmes such as STAR can be incorporated as part of an overall shift to a more person centred model of care.

Implications for future research

This pilot study has demonstrated that the STAR programme can be feasibly implemented in UK care homes, is acceptable to staff and is beneficial for residents with dementia. The effectiveness of the programme should now be evaluated in a well designed and high quality cluster RCT. The results of this pilot study could be used to both further adapt the manual for future use in the UK and to plan design issues, which are critical in this challenging research area (Murfield et al., 2011). A future study should ideally incorporate a qualitative component to provide more detailed information about the processes of change and the acceptability of the intervention (Lewin, Glenton, & Oxman, 2009).

References

- Aalten, P., Verhey, F. R. J., Boziki, M., Bullock, R., Byrne, E. J., Camus, V., Caputo, M., et al. (2007). Neuropsychiatric syndromes in dementia. Results from the European Alzheimer Disease Consortium: part I. *Dementia and Geriatric Cognitive Disorders*, 24(6), 457-463. doi:10.1159/000110738
- Alexopoulos, G. S., Abrams, R. C., Young, R. C., & Shamoian, C. A. (1988). Cornell Scale for Depression in Dementia. *Biological Psychiatry*, 23(3), 271-284.
- Alzheimer's Society. (2007). *Home from home*. London.
- Ames, D. (1991). Epidemiological studies of depression among the elderly in residential and nursing homes. *International Journal of Geriatric Psychiatry*, 6(6), 347-354. doi:10.1002/gps.930060604
- Andrews, G. J. (2006). Managing challenging behaviour in dementia. *BMJ (Clinical Research Ed.)*, 332(7544), 741. doi:10.1136/bmj.332.7544.741
- APA (2000). *Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR Fourth Edition* (4th ed.). Virginia: American Psychiatric Publications.
- Aylward, S., Stolee, P., Keat, N., & Johncox, V. (2003). Effectiveness of continuing education in long-term care: a literature review. *The Gerontologist*, 43(2), 259-271.
- Ballard, C. G., Patel, A., Solis, M., Lowe, K., & Wilcock, G. (1996). A one-year follow-up study of depression in dementia sufferers. *The British Journal of Psychiatry: The Journal of Mental Science*, 168(3), 287-291.
- Ballard, C, Fossey, J, Chithramohan, R., Howard, R, Burns, A., Thompson, P., Tadros, G., et al. (2001). Quality of care in private sector and NHS facilities

- for people with dementia: cross sectional survey. *BMJ (Clinical Research Ed.)*, 323(7310), 426-427.
- Bandura, A. (1978). Social Learning Theory of Aggression. *Journal of Communication*, 28(3), 12-29. doi:10.1111/j.1460-2466.1978.tb01621.x
- Brooker, D. (1995). Looking at them, looking at me. A review of observational studies into the quality of institutional care for elderly people with dementia. *Journal of Mental Health*, 4(2), 145-156. doi:10.1080/09638239550037686
- Burgio, L. D., Stevens, A., Burgio, K. L., Roth, D. L., Paul, P., & Gerstle, J. (2002). Teaching and maintaining behavior management skills in the nursing home. *The Gerontologist*, 42(4), 487-496.
- Burns, A. S., Lawlor, B., & Craig, S. (1999). *Assessment Scales in Old Age Psychiatry*. London: Taylor & Francis Ltd.
- Care Quality Commission. (2010). Care Quality Commission. Text, . Retrieved April 20, 2011, from <http://www.cqc.org.uk/>
- Chenoweth, L., King, M. T., Jeon, Y.-H., Brodaty, H., Stein-Parbury, J., Norman, R., Haas, M., et al. (2009). Caring for Aged Dementia Care Resident Study (CADRES) of person-centred care, dementia-care mapping, and usual care in dementia: a cluster-randomised trial. *The Lancet Neurology*, 8(4), 317-325. doi:10.1016/S1474-4422(09)70045-6
- Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). *Developing and evaluating complex interventions: the new Medical Research Council guidance*. *BMJ*, 337(sep29 1), a1655-a1655. doi:10.1136/bmj.a1655
- Department of Health. (2009). *Living well with Dementia: A National Dementia Strategy*. London: DOH.

- Deudon, A., Maubourguet, N., Gervais, X., Leone, E., Brocker, P., Carcaillon, L., Riff, S., et al. (2009). Non-pharmacological management of behavioural symptoms in nursing homes. *International Journal of Geriatric Psychiatry*, 24(12), 1386-1395. doi:10.1002/gps.2275
- DeYoung, S., Just, G., & Harrison, R. (2002). Decreasing aggressive, agitated, or disruptive behavior: participation in a behavior management unit. *Journal of Gerontological Nursing*, 28(6), 22-31.
- Dobson, C. (2008). *Conducting research with people not having the capacity to consent to their participation*: a practical guide for researchers. Leicester: British Psychological Society.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: a flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.
- Finkel, S. I., Costa e Silva, J., Cohen, G., Miller, S., & Sartorius, N. (1996). Behavioral and psychological signs and symptoms of dementia: a consensus statement on current knowledge and implications for research and treatment. *International Psychogeriatrics / IPA*, 8 Suppl 3, 497-500.
- Finnema, E., Dröes, R.-M., Ettema, T., Ooms, M., Adèr, H., Ribbe, M., & van Tilburg, W. (2005). The effect of integrated emotion-oriented care versus usual care on elderly persons with dementia in the nursing home and on nursing assistants: a randomized clinical trial. *International Journal of Geriatric Psychiatry*, 20(4), 330-343. doi:10.1002/gps.1286
- Fisher, J., Fink, C., & Loomis, C. (1993). Frequency and Management Difficulty of Behavioral Problems Among Dementia Patients in Long-Term Care Facilities. *Clinical Gerontologist*, 13(1), 3-12. doi:10.1300/J018v13n01_02

- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). "Mini-mental state". A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12(3), 189-198.
- Fossey, Jane, Ballard, Clive, Juszczak, E., James, I., Alder, N., Jacoby, R., & Howard, Robert. (2006). Effect of enhanced psychosocial care on antipsychotic use in nursing home residents with severe dementia: cluster randomised trial. *BMJ (Clinical Research Ed.)*, 332(7544), 756-761. doi:10.1136/bmj.38782.575868.7C
- Mental Capacity Act (2005). London: Stationery Office.
- Mental Capacity Act (2007). *Mental Capacity Act 2005*: Code of Practice. London: TSO.
- Hoe, J., Katona, C., Roch, B., & Livingston, G. (2005). Use of the QOL-AD for measuring quality of life in people with severe dementia--the LASER-AD study. *Age and Ageing*, 34(2), 130-135. doi:10.1093/ageing/afi030
- Hoeffler, B., Rader, J., McKenzie, D., Lavelle, M., & Stewart, B. (1997). Reducing aggressive behavior during bathing cognitively impaired nursing home residents. *Journal of Gerontological Nursing*, 23(5), 16-23.
- Kitwood. (1997). *Dementia Reconsidered* (1st ed.). Maidenhead: Open University.
- Kuske, B., Luck, T., Hanns, S., Matschinger, H., Angermeyer, M. C., Behrens, J., & Riedel-Heller, S. G. (2009). Training in dementia care: a cluster-randomized controlled trial of a training program for nursing home staff in Germany. *International Psychogeriatrics*, 21(02), 295. doi:10.1017/S1041610208008387
- Landreville, P., Dicaire, L., Verreault, R., & Lévesque, L. (2005). A training program for managing agitation of residents in long-term care facilities:

- description and preliminary findings. *Journal of Gerontological Nursing*, 31(3), 34-42; quiz 55-56.
- Lawton, M. P. (1990). Residential environment and self-directedness among older people. *American Psychologist*, 45(5), 638-640. doi:10.1037/0003-066X.45.5.638
- Lewin, S., Glenton, C., & Oxman, A. D. (2009). Use of qualitative methods alongside randomised controlled trials of complex healthcare interventions: methodological study. *BMJ (Clinical Research Ed.)*, 339, b3496.
- Lintern, T, Woods, B, & Phair, L. (2000). Before and after training: a case study of intervention. *Journal of Dementia Care*, 8, 15-17.
- Logsdon, R. G., Gibbons, L. E., McCurry, S. M., & Teri, L. (2002). Assessing quality of life in older adults with cognitive impairment. *Psychosomatic Medicine*, 64(3), 510-519.
- Lyketsos, C G, Steinberg, M., Tschanz, J. T., Norton, M. C., Steffens, D. C., & Breitner, J. C. (2000). Mental and behavioral disturbances in dementia: findings from the Cache County Study on Memory in Aging. *The American Journal of Psychiatry*, 157(5), 708-714.
- Lyne, K. J., Moxon, S., Sinclair, I., Young, P., Kirk, C., & Ellison, S. (2006). Analysis of a care planning intervention for reducing depression in older people in residential care. *Aging & Mental Health*, 10(4), 394-403. doi:10.1080/13607860600638347
- Margallo-Lana, M., Swann, A., O'Brien, J., Fairbairn, A., Reichelt, K., Potkins, D., Mynt, P., et al. (2001). Prevalence and pharmacological management of behavioural and psychological symptoms amongst dementia sufferers living

- in care environments. *International Journal of Geriatric Psychiatry*, 16(1), 39-44.
- McCabe, M. P., Davison, T. E., & George, K. (2007). Effectiveness of staff training programs for behavioral problems among older people with dementia. *Aging & Mental Health*, 11(5), 505-519. doi:10.1080/13607860601086405
- McCallion, P., Toseland, R. W., Lacey, D., & Banks, S. (1999). Educating nursing assistants to communicate more effectively with nursing home residents with dementia. *The Gerontologist*, 39(5), 546-558.
- McCann, J. J., Gilley, D. W., Hebert, L. E., Beckett, L. A., & Evans, D. A. (1997). Concordance between direct observation and staff rating of behavior in nursing home residents with Alzheimer's disease. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 52(2), P63-72.
- McCarney, R., Warner, J., Iliffe, S., van Haselen, R., Griffin, M., & Fisher, P. (2007). The Hawthorne Effect: a randomised, controlled trial. *BMC Medical Research Methodology*, 7, 30. doi:10.1186/1471-2288-7-30
- Medical Research Council. (2008). *Developing and evaluating complex interventions: new guidance*. London: MRC.
- Murfield, J., Cooke, M., Moyle, W., Shum, D., & Harrison, S. (2011). Conducting randomized controlled trials with older people with dementia in long-term care: Challenges and lessons learnt. *International Journal of Nursing Practice*, 17(1), 52-59. doi:10.1111/j.1440-172X.2010.01906.x
- Oakley, A. (2006). Process evaluation in randomised controlled trials of complex interventions. *BMJ*, 332(7538), 413-416. doi:10.1136/bmj.332.7538.413

- Oh, H., Hur, M. H., & Eom, M. (2005). Development and analysis of the effects of caregiver training program on aggressive behavior in elders with cognitive impairment. *Taehan Kanho Hakhoe Chi*, 35(4), 745-753.
- Proctor, R., Burns, A., Powell, H. S., Tarrier, N., Faragher, B., Richardson, G., Davies, L., et al. (1999). Behavioural management in nursing and residential homes: a randomised controlled trial. *Lancet*, 354(9172), 26-29.
doi:10.1016/S0140-6736(98)08237-3
- Rabins, P V, & Kasper, J. D. (1997). Measuring quality of life in dementia: conceptual and practical issues. *Alzheimer Disease and Associated Disorders*, 11 Suppl 6, 100-104.
- Samus, Q. M., Rosenblatt, A., Steele, C., Baker, A., Harper, M., Brandt, J., Mayer, L., et al. (2005). The association of neuropsychiatric symptoms and environment with quality of life in assisted living residents with dementia. *The Gerontologist*, 45 Spec No 1(1), 19-26.
- Savva, G. M., Zaccai, J., Matthews, F. E., Davidson, J. E., McKeith, I., Brayne, C., & the Medical Research Council Cognitive Function and Ageing Study. (2009). Prevalence, correlates and course of behavioural and psychological symptoms of dementia in the population. *The British Journal of Psychiatry*, 194(3), 212-219. doi:10.1192/bjp.bp.108.049619
- Schepers, A. (2010). *Sense of Competence in Dementia Care Staff (SCIDS) Scale: development, reliability and validity*. Unpublished doctorate thesis. University College London.
- Schrijnemaekers, V., van Rossum, E., Candel, M., Frederiks, C., Derix, M., Sielhorst, H., & van den Brandt, P. (2002). Effects of emotion-oriented care on elderly people with cognitive impairment and behavioral problems.

International Journal of Geriatric Psychiatry, 17(10), 926-937.

doi:10.1002/gps.681

Seignourel, P., Kunik, M., Snow, L., Wilson, N., & Stanley, M. (2008). Anxiety in dementia: A critical review. *Clinical Psychology Review*, 28(7), 1071-1082.

doi:10.1016/j.cpr.2008.02.008

Selbaek, G., Kirkevold, Ø., & Engedal, K. (2008). The course of psychiatric and behavioral symptoms and the use of psychotropic medication in patients with dementia in Norwegian nursing homes--a 12-month follow-up study. *The American Journal of Geriatric Psychiatry: Official Journal of the American Association for Geriatric Psychiatry*, 16(7), 528-536.

doi:10.1097/JGP.0b013e318167ae76

Shankar, K. K., Walker, M., Frost, D., & Orrell, M. W. (1999). The development of a valid and reliable scale for rating anxiety in dementia (RAID). *Aging & Mental Health*, 3(1), 39-49. doi:10.1080/13607869956424

Spector, A., & Orrell, M. (2006). Quality of life (QoL) in dementia: a comparison of the perceptions of people with dementia and care staff in residential homes. *Alzheimer Disease and Associated Disorders*, 20(3), 160-165.

Spreitzer, G. M. (2006). *Empowerment*. In S.Rodelberg (Ed). *Encyclopedia of Industrial and Organisational Psychology*. Thousand Oaks, CA: Sage Publications.

Teri, L, Huda, P, Gibbons, L, Young, H, & van Leynseele, J. (2001). *Staff Training in Assisted Living Residences (a training program with video tapes and written manual)*. Seattle: University of Washington.

- Teri, L., Truax, P., Logsdon, R., Uomoto, J., Zarit, S., & Vitaliano, P. P. (1992). Assessment of behavioral problems in dementia: the revised memory and behavior problems checklist. *Psychology and Aging*, 7(4), 622-631.
- Teri, L., Huda, Piruz, Gibbons, L., Young, H., & van Leynseele, J. (2005). STAR: a dementia-specific training program for staff in assisted living residences. *The Gerontologist*, 45(5), 686-693.
- Teri, Linda, McKenzie, G. L., LaFazia, D., Farran, C. J., Beck, C., Huda, Piruz, van Leynseele, June, & Pike, K. C. (2009a). Improving dementia care in assisted living residences: addressing staff reactions to training. *Geriatric Nursing (New York, N.Y.)*, 30(3), 153-163. doi:10.1016/j.gerinurse.2008.07.002
- Teri, L., McKenzie, G. L., LaFazia, D., Farran, C. J., Beck, C., Huda, P., van Leynseele, June, & Pike, K. C. (2009b). Improving dementia care in assisted living residences: addressing staff reactions to training. *Geriatric Nursing (New York, N.Y.)*, 30(3), 153-163. doi:10.1016/j.gerinurse.2008.07.002
- Teri, L., McKenzie, G., & LaFazia, D. (2006). Psychosocial Treatment of Depression in Older Adults with Dementia. *Clinical Psychology: Science and Practice*, 12(3), 303-316. doi:10.1093/clipsy.bpi032
- Verkaik, R., van Weert, J. C. M., & Francke, A. L. (2005). The effects of psychosocial methods on depressed, aggressive and apathetic behaviors of people with dementia: a systematic review. *International Journal of Geriatric Psychiatry*, 20(4), 301-314. doi:10.1002/gps.1279
- Visser, S. M., McCabe, M. P., Hudgson, C., Buchanan, G., Davison, T. E., & George, K. (2008). Managing behavioural symptoms of dementia: effectiveness of staff education and peer support. *Aging & Mental Health*, 12(1), 47-55. doi:10.1080/13607860701366012

Williams, C. L., Hyer, K., Kelly, A., Leger-Krall, S., & Tappen, R. M. (2005).

Development of nurse competencies to improve dementia care. *Geriatric Nursing (New York, N.Y.)*, 26(2), 98-105.

doi:10.1016/j.gerinurse.2005.01.005

Zimmerman, S., Sloane, P. D., Williams, C. S., Reed, P. S., Preisser, J. S., Eckert, J.

K., Boustani, M., et al. (2005). Dementia care and quality of life in assisted living and nursing homes. *The Gerontologist*, 45 Spec No 1(1), 133-146.

Zuidema, S., Koopmans, R., & Verhey, F. (2007). Prevalence and predictors of neuropsychiatric symptoms in cognitively impaired nursing home patients.

Journal of Geriatric Psychiatry and Neurology, 20(1), 41-49.

doi:10.1177/0891988706292762

Part 3: Critical Appraisal

Introduction

This paper provides a reflection on the process of delivering the Staff Training in Assisted Living Residences (STAR) programme across two care homes. The discussion will draw on the theory of ‘Transfer of Learning’ to provide a more detailed interpretation of the findings. It will also discuss some of the barriers to implementing the STAR programme and the possible mechanisms of change. Finally, I will reflect on the process of setting up and conducting the pilot study and consider the wider implications of the findings for future research and care practice.

Transfer of learning

The factors influencing the application of skills learnt during training in everyday work can be examined through the concept of ‘Transfer of Learning’. Baldwin and Ford (1988) proposed that transfer of learning is affected by trainee characteristics, training design and the work environment. Holton, Bates and Ruona (2000) have more recently adopted the term ‘Transfer System’ to describe the factors which influence how learning is utilised in everyday work practice.

Holton and colleagues described how the transfer of learning is influenced by the trainee’s personal capacity to use what was taught, the content validity of the training and the opportunities to use the material within the work environment. In an optimum training environment, the trainee must also have the time, energy and mental space in their working lives to consider changing their practice. The trainee must also hold the belief that their work performance will be changed by implementing the new skills and that this will lead to valued outcomes for them personally. In the work environment, the trainee must receive informal and formal feedback on their performance and their supervisors must be in support of their new knowledge and expertise. The workplace as a whole must be willing to

embrace a new way of working and the trainee should receive encouragement from colleagues. Finally, the trainee must have a strong sense of self efficacy and must be able to participate meaningfully in the training.

The work environment: culture of care and management style

Whilst implementing this project, I spent two days per week for seven months working in the two care homes. During this time, I observed many aspects of care home life and held conversations with many different members of staff. I recorded my observations in a research journal. The following description is therefore based on my personal observations and discussions over this period. In common with many other care homes in the UK (Brooker, 1995), the culture of care in both care homes was strongly task focused. Staff saw their role as primarily to provide physical care and there were fewer opportunities to fulfil resident's social and psychological needs. Although both care homes did attempt to provide regular activities to residents, in reality many residents still spent a great deal of time sitting alone and not engaged in any activities.

Both care homes had a hierarchical management structure in which qualified nurses took responsibility for all the decisions made on the unit and assigned care tasks to staff on each shift. Therefore care assistants had little autonomy within their role and were rarely asked to contribute to decisions which were made about residents. From my observations and discussions, staff were given very few formal supervision sessions, were given relatively limited informal supervision and were rarely praised for the quality of their interactions with residents. A review by Beck, Ortigara, Mercer and Shue (1999) described a similar organisational culture in care homes in the United States, in which care assistants were not involved in care planning and were not rewarded for their performance. The authors concluded that

being removed from decision making was disempowering for staff and also prevented their in depth knowledge of residents being shared with others. Similarly a study by Schneider, Duggan, Cordingley, Mozley and Hart (2007) of non qualified care staff working on an acute dementia ward indicated that their daily duties often exceeded their job role. However, staff were not recognised for this role, were not offered continuous professional development and were not invited to provide an opinion about patients in ward rounds despite knowing them very well. Other authors have commented that qualified nurses working in care homes receive very little training in supervision skills, even though this is an important aspect of their role (Mashta, 2010).

Discussions with staff also revealed some frictions between different staff groups in both care homes: commonly the managers were critical of the work carried out by the care staff, but the care staff felt that decisions made by management were not in the best interests of the residents. For example, in one of the care homes, the management staff enforced very strict guidelines about the amount of time care staff should be spending with residents in the main lounge. However, this rule did not increase the amount of time staff spent with residents and left staff feeling that the managers had no understanding of the daily time pressures they faced.

Implementation of the STAR programme

Training design

The STAR programme consisted of both workshop sessions and individual sessions with care staff. Key tenants of the programme were to teach staff to understand behavioural problems using activators, behaviours and consequences (ABC's) and to then help them to change either their approach or the environment to

reduce behavioural problems. Staff were also taught communication skills and introduced to the idea that pleasant events could be implemented to reduce depression and anxiety in residents with dementia. The content validity of the training programme was high. Staff appeared to find many aspects of the programme relevant to their work, although they may have benefitted from some additional material on issues pertinent to personal care. The level of the programme seemed to be appropriate for the majority of trainees, including those with less fluent English. The DVD was consistently rated as 'very useful' and allowed care staff to see how the new approach would work in practice. The design of the programme ensured good learning transfer, with the incorporation of individual sessions to bridge the gap between the training and everyday work environment.

Pleasant events

It was observed that the 'Pleasant Events' module was the most well implemented aspect of the programme. Care staff came up with many ideas which were easily implemented, such as playing board games, playing simple games with a soft ball, taking residents for walks in the garden or giving residents a hand massage or manicure. In one unit, the care staff tried some simple craft activities with residents such as making a collage from magazine cuttings and in another unit one resident started writing letters to her family abroad. Residents seemed to benefit from helping to set the table for dinner or folding napkins and this was a helpful activity for residents who became agitated waiting for meals to be served.

The care staff consistently reported that they enjoyed implementing these activities and were often very enthusiastic about them when sharing their experiences with me. The simplicity of the intervention may have maximized the transfer of the

learning, whilst the staff may have been motivated to implement the new activities because they saw the resulting benefits for residents.

Barriers to implementing pleasant events

Some staff experienced difficulties with implementing the pleasant events because they reported that they 'did not have the time to try anything new'. I interpreted this comment as not only reflecting a lack of time due to staffing levels and practical workload, but also reflecting the way care staff felt they lacked psychological space to change their working habits. This seemed to partly occur as a result of the task focused culture of care, in which these activities were not seen as a fundamental part of their role. Because staff saw their role to provide physical care they were not aware that implementing activities could form part of their job description. This was summarised in a comment from one participant who said, 'I just didn't realise we were allowed to do that'. This idea was also reinforced by the managers who were not yet adjusted to this style of working and would rarely praise staff for implementing pleasant events. There was also some concern from care staff that if they spent time talking to residents they may be seen by their managers and colleagues to be avoiding their other duties.

In a discussion of the wider implementation of the STAR programme in the United States, Teri and colleagues (2009) described how staff commonly stated that they had little time to carry out the new strategies and felt they fell outside their job description. The researchers overcame these difficulties by reminding staff that the training aimed to make their job easier and that these aspects were a core part of their

job description. I found it helpful to draw on ideas from my Clinical Psychology training to help me to overcome these difficulties, for example by considering the wider organisational perspective and building a good rapport with staff. The time I spent in the care homes during the recruitment and data collection period also allowed me to understand the perspective of the care staff and gain an insight into their daily routine. I needed to be very mindful of this when delivering the training and needed to implement the programme flexibly to suit their needs.

ABC's

The care staff rated the 'ABC's module' as the most useful aspect of the programme and seemed to quickly grasp the concepts in the workshop sessions. However, this aspect of the programme seemed to be the most difficult to implement in practice. Although care staff understood the concepts well in theory, they found it more difficult to independently identify ABC's. The individual sessions were beneficial for helping staff to develop ABC plans for their allocated residents, but they often found it difficult to carry out these plans in between sessions. In comparison to the use of pleasant events, the ABC's were more challenging to use and staff may have required frequent supervision from their own managers in addition to the weekly individual sessions provided in the programme.

Barriers to implementing ABC's

The individual training sessions revealed that the task focused culture of care may also have prevented staff from fully reflecting on the behaviour of residents and considering how to act in their best interests. An example of this problem was seen when I was talking to one of the care staff about a gentleman who was often agitated

and distressed at lunchtime. The staff had responded to his behaviour by continually encouraging him to sit down and eat his lunch. When reflecting on this incident using the ABC framework, it was agreed that a better approach would have been to redirect him to a new activity and only offer him his food at a later stage. When questioned gently about why this option was not considered before, the carer stated that the nurse managers were always very insistent that all residents should be brought to the table at lunchtime. They were worried that if they did not achieve this task they would get into trouble. This demonstrated how the culture of care and management style may have caused the resident's perspective to be forgotten.

Individual sessions

Using the 'Transfer System' framework (Holton et al., 2000) the individual sessions can be understood as essential for providing staff with weekly supervision on the application of their new skills. Staff were consistently praised for their efforts during the individual sessions and were given the chance to express their own opinions about what could benefit residents. One of the most beneficial aspects of the individual sessions was the use of observation. This provided the chance to give staff written and verbal feedback on their communication approach. Because it was often logistically difficult to organise formal observation sessions, it was helpful to use observation as an opportunity for experiential learning. For example, when discussing ideas for using pleasant events with residents, I often suggested that they tried the activity whilst I was present. This seemed to increase the likelihood that they would then repeat the activity at a later stage. This method can be compared to the use of 'behavioural experiments' in Cognitive Behavioural Therapy, which are

planned experiential activities which aim to bring about cognitive change (Bennett-Levy et al., 2004).

Barriers to implementing individual sessions

There were difficulties with implementing the full number of individual sessions, mainly due to time pressures. When staff were not carrying out direct care tasks they were often required to fill in monitoring sheets for residents or to perform other housekeeping duties. Because staff regularly worked twelve hour shifts they were also often very tired and sometimes found it difficult to concentrate on the sessions or were distracted by other duties. Despite the barriers involved, these sessions were still considered to be an important element of the programme and were rated 'very useful' by the majority of participants. If the workshop sessions were delivered without the additional individual sessions, it is likely many of the STAR concepts would have soon been forgotten.

Trainee characteristics

It was observed that the care staff were overall highly competent within their role and some were overqualified for the position they were working. Overall, they were also able to understand the needs of individual residents and showed a great of compassion in their interactions with residents. When encouraged they were also able to think very creatively about which pleasant events might suit individual residents. The majority were also very enthusiastic about attending the training programme and were disappointed when it came to an end. These positive characteristics meant they were able to benefit from the training programme.

Although all the staff volunteered to take part in the programme and this sample may have represented a particularly enthusiastic group of care staff, this does indicate the overall potential of staff to provide a very high standard of care. Some authors have suggested that traditional care environments may limit staff from exhibiting their full competence (Lawton, 1975; Svensson, 1984, cited in Alfredson & Annerstedt, 1994). One explanation may be that a hierarchical organisational structure can reduce the autonomy of individual staff. As a result staff may be prevented from using their own initiative which could stifle some of their skills (Alfredson & Annerstedt, 1994).

Mechanisms of change

Learning new skills and increasing reflective capacity

As discussed in Part 2, there were some methodological limitations in this study due to the lack of control group. Notwithstanding these limitations, it can be hypothesised that a variety of ingredients of change may have been important in this study. Firstly, the reduction in depression and behavioural symptoms can most likely be attributed to the use of the implementation of pleasant events and the adoption of a new style of communication by care staff. Although the staff found it difficult to fully implement the ABC skills, the process of using the ABC framework seemed to allow them to understand and approach behavioural problems differently. The individual sessions also gave care staff a rare chance to reflect on their work with people with dementia which may have helped them to understand the residents' perspective. The use of a reflective space was found to be similarly very beneficial in a training programme for care staff working on an acute ward with people with dementia (Chapman & Law, 2009). Meanwhile fostering empathy has been found to be helpful for developing relationships between care staff and people with dementia (Aström, Nilsson, Norberg, Sandman, & Winblad, 1991).

Staff empowerment

In addition to teaching staff new skills and increasing their reflective capacity, the STAR programme may have also been important for building psychological empowerment in staff. Kanter (1993) described how both psychological and organisational factors can empower staff. Individuals need to be given appropriate responsibility, adequate training and support. Caspar and O'Rourke (2008) found that empowering staff through organisational factors, specifically through training and increasing staff recognition, strongly influences the delivering of individualised care. It is logical that it may be difficult for staff to enable people with dementia to make choices over their own lives when they themselves have very little power over their own working environment (Kane, 1994). Chandler (1992) has suggested that environments which nurture reciprocal professional relationships may be particularly important for empowerment. Although this study had little influence on organisational empowerment, it may have empowered care staff at an individual level. A strong alliance between the care staff and training facilitator may have helped this process, in the same way that the therapeutic alliance is predictive of outcome in individual therapy (Summers & Barber, 2003).

The process of conducting the research

Recruitment

The introduction of the Mental Capacity Act (2005) has impacted on the recruitment procedures used in this type of research. Residents were only included in the study if they had the capacity to consent to take part or if a friend or relative deemed it appropriate for them to be included in the study. This was challenging

because only a small proportion of relatives responded to the letter describing the study. The care home managers gave me permission to follow this letter up with a phone call which revealed that many of the address details were inaccurate or that relatives had been too busy to respond. In a number of cases, the person who visited the resident most frequently was a friend but they did not feel comfortable taking on the role of a consultee. Where possible, it was preferable to discuss the study with relatives or friends in person when they were visiting the home. Future researchers should be aware of these complications when applying to Research Ethics Committees and should allow a generous amount of time for the recruitment process.

Data collection

The data collection process was also more time consuming than originally anticipated. The daily care home routine restricted the time when staff were available to be interviewed. It was also time consuming to administer the Cornell Scale for Depression in Dementia (Alexopoulos, Abrams, Young, & Shamoian, 1988) and the Rating Anxiety In Dementia Scale (Shankar et al, 1999) because it involved a short interview with the resident with dementia themselves and also required care notes to be reviewed. In comparison, the Revised Memory and Behavioural Problem Checklist (Teri et al., 1992) was more time efficient to administer. The literature review in Part 1 demonstrated that the Cohen Mansfield Agitation Index (Cohen-Mansfield, Marx, & Rosenthal, 1989) was the most frequently used measure for assessing behavioural problems across other staff training studies. Using this measure in a future trial would enhance the comparability of results.

Finally, I encountered some difficulties with using the Quality of Life – Alzheimer’s Disease scale (Logsdon, Gibbons, McCurry, & Teri, 2002) with people with dementia living in care homes because some of the questions lacked relevance

to their daily life, for example the question on their ability to do chores around the house. The selection of a measure to assess quality of life will need to be carefully considered by future researchers (Ettema, Droes, Lange, Mellenbergh, & Ribbe, 2005). An observational measure, such as Dementia Care Mapping (Innes & Surr, 2001) would be an optimum assessment tool but this would be very time consuming to administer. Meanwhile the Alzheimer Disease Related Quality of Life (Rabins, Kasper, Kleinman, Black, & Patrick, 1999) scale may have more face validity and has been found to be sensitive to changes over time for care home residents (Lyketsos et al., 2003), although removes the opportunity for people with dementia to comment on their own quality of life.

Implementing the training

A great deal of organisation was required in the setting up of the workshop sessions. It was helpful to have the names of participating care staff before the staff rota was compiled. However, despite numerous conversations and written summaries, often when it came to the workshop day the lead nurse was reluctant to release staff for the training. Conversations were often forgotten so it was necessary to double check all arrangements. I also found it challenging to engage the nursing staff in the training process. I sought to always share the ABC plans but I found it very difficult to focus their attention. They were not only very busy, but seemed to find it difficult to see how a psychological perspective could help, even though they were generally quite supportive about the training I was doing.

It also proved logistically difficult to organise the management sessions, mainly because nurses tended to cancel these sessions at the last minute because they felt they were too busy. At care home B this meant that only one management session was held instead of three. The managers who did attend the one session all

stated that it had been helpful and they were glad they had made the time to come. These problems seemed to reflect a general difficulty with looking beyond the daily workload and pressures they experienced from higher level management in order to reflect on the work that they did.

Implications for care practice

This discussion has revealed that care homes need to consider initiatives to enhance organisational empowerment, for example through staff reward schemes, the provision of supervision and more collaborative working between care staff and nurse managers. Care homes would also benefit from paying attention to relationships between staff groups, ensuring all staff feel supported and valued and adopting a less blaming management style (Cantley & Wilson, 2002). A wider issue is the status given to care staff, with a need for an increased recognition and status amongst both professionals and the public (Schneider et al., 2007). Care homes also need to consider the duties which care staff are expected to perform and maximise the amount of time they can spend in contact with residents, for example by streamlining administration procedures using initiatives such as the 'Productive Ward' procedures used in the NHS (NHSIII, 2011).

The majority of care homes run induction training programmes covering topics related to practical care. Incorporating some aspects of a programme such as STAR into this induction would allow care staff to fully appreciate this aspect of their role. One potentially simple intervention would be to show the STAR DVD to new care staff. Ideally this type of training would become common practice, for example in Florida it is a federal law for all new care staff to receive dementia

training (Hyer, Molinari, Kaplan, & Jones, 2010). Meanwhile care homes should carefully consider qualities such as communication skills, compassion and attitudes towards people with dementia when recruiting new staff (Cantley & Wilson, 2002).

One of the care home managers was considering introducing a range of initiatives to support these ideas. She was hoping to allocate some of the more task focused aspects of care, such as making beds, to the housekeeping staff and some of the care staff on a rota basis, leaving the remaining care staff to solely concentrate on direct care with residents. She had also been trying to encourage units to introduce a meeting at the end of each day for staff to reflect on their work and was hoping to incorporate some ideas from the STAR training into her care home induction training.

Directions for future research

As discussed in Part 2, the STAR programme should be further evaluated in the UK using a high quality cluster Randomised Controlled Trial. The pilot study has indicated that a number of adaptations could be made to the original programme to maximize the transfer of learning. The STAR programme was designed so that nurse managers did not attend the individual sessions. This was an outcome of the feasibility study (Teri, Huda, Gibbons, Young, & van Leynseele, 2005) in which care staff felt they could be more open without the managers present. However, the pilot study revealed some problems with this approach because it was difficult for nurses to supervise the use of the STAR strategies without themselves attending the whole programme. This also inadvertently enhanced an existing split between nurses and care staff. It would be preferable for both nurses and care staff to attend the training programme together. In addition a member of the nursing team could be identified

who could supervise the use of the STAR strategies during everyday care (Cohen-Mansfield & Parpura-Gill, 2008).

Meanwhile, observation could be incorporated as a more formal aspect of the programme and strategies could be put in place to ensure attendance at individual sessions is prioritised, although the overall number of individual sessions could perhaps be reduced. The feedback from care staff, presented in Part 2, indicated that staff participants rated some of the training modules, such as ‘Communicating with Families’ and ‘Using more pleasant events’ as less useful than others. To shorten the workshop sessions, the content of the families’ module could be incorporated into the general communication module and further discussion of pleasant events could be carried out within the individual sessions. It would also be beneficial to consider initiatives to enhance organisational empowerment to run as an adjunct to the STAR training programme.

Conclusions

Overall the pilot implementation of the STAR training programme in UK care homes revealed a strong training design and appropriate content for the participating care staff. Meanwhile positive trainee characteristics maximised the transfer of learning. Although the results of the pilot study were very positive, there were some barriers which prevented the STAR training from having an optimum benefit. These included the task focused culture of care, hierarchical management style and the lack of time. It is hoped that future work will consider how training interventions can be implemented alongside more widespread organisational changes to improve the standard of care in UK care homes.

References

- Alexopoulos, G. S., Abrams, R. C., Young, R. C., & Shamoian, C. A. (1988). Cornell Scale for Depression in Dementia. *Biological Psychiatry*, 23(3), 271-284.
- Alfredson, B. B., & Annerstedt, L. (1994). Staff attitudes and job satisfaction in the care of demented elderly people: group living compared with long-term care institutions. *Journal of Advanced Nursing*, 20(5), 964-974.
doi:10.1046/j.1365-2648.1994.20050964.x
- Aström, S., Nilsson, M., Norberg, A., Sandman, P. O., & Winblad, B. (1991). Staff burnout in dementia care-relations to empathy and attitudes. *International Journal of Nursing Studies*, 28(1), 65-75.
- Baldwin, T. T., & Ford, J. K. (1988). Transfer of Training: a Review and Directions for Future Research. *Personnel Psychology*, 41(1), 63-105.
doi:10.1111/j.1744-6570.1988.tb00632.x
- Beck, C, Ortigara, A., Mercer, S., & Shue, V. (1999). Enabling and empowering certified nursing assistants for quality dementia care. *International Journal of Geriatric Psychiatry*, 14(3), 197-211; discussion 211-212.
- Bennett-Levy, J., & Oxford Cognitive Therapy Centre. (2004). *Oxford guide to behavioural experiments in cognitive therapy*. Oxford; New York: Oxford University Press.
- Brooker, D. (1995). Looking at them, looking at me. A review of observational studies into the quality of institutional care for elderly people with dementia. *Journal of Mental Health*, 4(2), 145-156. doi:10.1080/09638239550037686
- Cantley, C., & Wilson, R. (2002). *Put yourself in my place*: designing and managing care homes for people with dementia. Bristol UK: Policy Press.

- Caspar, S., & O'Rourke, N. (2008). The influence of care provider access to structural empowerment on individualized care in long-term-care facilities. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences*, 63(4), S255-S265.
- Chandler, G. E. (1992). The source and process of empowerment. *Nursing Administration Quarterly*, 16(3), 65-71.
- Chapman, A., & Law, S. (2009). Bridging the gap: an innovative dementia learning program for healthcare assistants in hospital wards using facilitator-led discussions. *International Psychogeriatrics / IPA*, 21 Suppl 1, S58-63. doi:10.1017/S1041610209008680
- Cohen-Mansfield, J, Marx, M. S., & Rosenthal, A. S. (1989). A description of agitation in a nursing home. *Journal of Gerontology*, 44(3), M77-84.
- Cohen-Mansfield, Jiska, & Parpura-Gill, A. (2008). Practice style in the nursing home: dimensions for assessment and quality improvement. *International Journal of Geriatric Psychiatry*, 23(4), 376-386. doi:10.1002/gps.1888
- Ettema, T. P., Droes, R.-M., Lange, J. de, Mellenbergh, G. J., & Ribbe, M. W. (2005). A review of quality of life instruments used in dementia. *Quality of Life Research*, 14(3), 675-686. doi:10.1007/s11136-004-1258-0
- Mental Capacity Act (2005). London: The Stationery Office.
- Holton, E. F., Bates, R. A., & Ruona, W. E. A. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11(4), 333-60.
- Hyer, K., Molinari, V., Kaplan, M., & Jones, S. (2010). Credentialing dementia training: the Florida experience. *International Psychogeriatrics*, 22(06), 864-873. doi:10.1017/S1041610210000426

- Innes, A., & Surr, C. (2001). Measuring the well-being of people with dementia living in formal care settings: the use of Dementia Care Mapping. *Aging & Mental Health*, 5(3), 258-268.
- Kane, R. A. (1994). Ethics and the frontline care worker: mapping the subject. *Generations (San Francisco, Calif.)*, 18(3), 71-74.
- Kanter, R. M. (1993). *Men and Women of the Corporation* (Revised edition.). New York: Basic Books.
- Lawton, M. P. (1975). Competence, environmental press and the adaptation of older people. Windley, P.G., Byerts, T.O & Ernst, F.G. (Eds). *Theory Development in Environment and Aging*. Washington DC: Gerontological Society.
- Logsdon, R. G., Gibbons, L. E., McCurry, S. M., & Teri, L. (2002). Assessing quality of life in older adults with cognitive impairment. *Psychosomatic Medicine*, 64(3), 510-519.
- Lyketsos, C. G., Gonzales-Salvador, T., Chin, J. J., Baker, A., Black, B., & Rabins, P. (2003). A follow-up study of change in quality of life among persons with dementia residing in a long-term care facility. *International Journal of Geriatric Psychiatry*, 18(4), 275-281. doi:10.1002/gps.796
- Mashta, O. (2010). Learning from each to improve dementia care. *Nursing Standard (Royal College of Nursing (Great Britain): 1987)*, 25(3), 18-19.
- NHS Institute for Innovation and Improvement. (2011). Rapid Impact Assessment of the Productive Ward: Releasing Time to Care. NHSIII: Coventry.
- Rabins, P. V., Kasper, J. D., Kleinman, L., Black, B. S., & Patrick, D. L. (1999). Concepts and methods in the development of the ADRQL: An instrument for assessing health-related quality of life in persons with Alzheimer's disease. *Journal of Mental Health & Aging*, 5, 33-48.

- Schneider, J., Duggan, S., Cordingley, L., Mozley, C. G., & Hart, C. (2007). Costs of occupational therapy in residential homes and its impact on service use. *Aging & Mental Health, 11*(1), 108-114. doi:10.1080/13607860600963349
- Summers, R. F., & Barber, J. P. (2003). Therapeutic alliance as a measurable psychotherapy skill. *Academic Psychiatry: The Journal of the American Association of Directors of Psychiatric Residency Training and the Association for Academic Psychiatry, 27*(3), 160-165. doi:10.1176/appi.ap.27.3.160
- Teri, L., Truax, P., Logsdon, R., Uomoto, J., Zarit, S., & Vitaliano, P. P. (1992). Assessment of behavioral problems in dementia: the revised memory and behavior problems checklist. *Psychology and Aging, 7*(4), 622-631.
- Teri, L., Huda, P., Gibbons, L., Young, H., & van Leynseele, J. (2005). STAR: a dementia-specific training program for staff in assisted living residences. *The Gerontologist, 45*(5), 686-693.
- Teri, L., McKenzie, G. L., LaFazia, D., Farran, C. J., Beck, C., Huda, P., van Leynseele, J., et al. (2009). Improving dementia care in assisted living residences: addressing staff reactions to training. *Geriatric Nursing (New York, N.Y.), 30*(3), 153-163. doi:10.1016/j.gerinurse.2008.07.002

Appendices

Appendix A

Quality review criteria

The Jadad Scale (also known as the Oxford Quality Scoring System)

Each question is to be answered with either a yes or a no. Each yes scores 1 point, each no zero points. It should take no longer than ten minutes to score any individual paper.

1. Was the study described as randomised?
2. Was the study described as double blind?
3. Was there a description of withdrawals and dropouts? (an article should describe the number of withdrawals and drop-outs, in each of the study groups, and the underlying reasons.

Additional points were given if:

- The method of randomisation was described in the paper, and that method was appropriate.
- The method of blinding was described, and it was appropriate.

Points would however be deducted if:

- The method of randomisation was described, but was inappropriate.
- The method of blinding was described, but was inappropriate.

York Centre for Systematic Reviews Criteria

Questions generated from guidance from the York Centre for Systematic Reviews:

1. Was there adequate description of participants?
2. Was there adequate description of an intervention and who received it?
3. Is measurement likely to be reliable and valid?
4. Are the measures used the most relevant ones for answering the research question?
5. What was the drop-out rate and has this introduced bias?
6. Is the length of time long enough to identify changes in the outcome of interest?
7. In studies where two groups are compared are the groups similar? Were they treated similarly? And if not were there attempts to control for those differences (matching or statistical control)?
- 8 Was outcome assessment blind to exposure status?

For the purposes of this review, if a study met all of the criteria it was seen as good. If it met more than half it was rated as adequate and if it met less than half it was rated as poor.

Appendix B

Invitation letter to care homes

RESEARCH DEPARTMENT OF CLINICAL,
EDUCATIONAL AND HEALTH PSYCHOLOGY



Care Home Manager
Address

Dear Care Home Manager,

Re: Staff Training using STAR (Staff Training in Assisted Living Residences): a pilot study in UK residential care homes

I am writing to inform you about a research study which is being conducted at University College London. This research will involve piloting a staff training programme which has been designed in the United States. The STAR programme has been designed to help care staff learn new ways of helping people with dementia who experience depression, anxiety or agitation. We will be selecting two suitable care homes in which to deliver this training programme and we would like to give you the opportunity to take part in this study.

What will the research be investigating?

The STAR staff programme has been found to be effective for reducing distressed behaviour and decreasing depression and anxiety for people with dementia living in care homes in the United States. We will deliver the programme across two care homes. We will assess whether training care staff using the STAR programme results in a reduction in the symptoms of depression, anxiety or agitation and an increase in quality of life for people with dementia living in the care home. We will also be investigating whether the STAR programme impacts on the approach which care staff use when working with people with dementia and their sense of competence when working with people with dementia.

What are the benefits of taking part in this research project?

Staff who participate in the the training programme will be given the chance to develop their knowledge and skills and will hopefully find participating in the programme an interesting and enjoyable experience. We hope that it will also improve the quality of life of residents living in your care home. This research is also valuable for developing staff training for dementia care in the UK. In addition, to acknowledge the time commitment involved in attending training sessions and answering questionnaires, each member of staff who participates in the training programme will receive a £10 gift voucher to thank them for taking part in the study.

What will taking part in the research involve?

It is anticipated that 10-12 members of care staff from each care home will take part in the training programme. In order to study the effect of the staff training on the mood and behaviour of residents, approximately 15 residents with dementia who also experience depression, anxiety or

agitation will also be asked to participate in the study. They will be asked some simple questions about their quality of life, but mainly their care staff will be asked to answer some questionnaires about their mood and behaviour. If the person with dementia does not have the capacity to consent to take part in this research, the procedures of the Mental Capacity Act (2005) will be followed in deciding whether they should participate.

What will the STAR programme involve?

The STAR programme will run for 6-8 weeks. It will involve:

- ❖ Two x four hour group training sessions. These sessions will introduce care staff to new skills to manage difficulties experienced by people with dementia. They will also include training on communication skills and how to introduce pleasant events into the lives of people with dementia.
- ❖ Four x individual meetings with a trainer where care staff can practice applying the ideas discussed during the training in their day to day work. During these sessions they will be matched with a person who they care for who experiences behaviour or mood problems.
- ❖ Three one hour x management training sessions with the manager to discuss the implementation of the STAR training programme in the care home. Managers will be given an overview of the topics presented in the training sessions and will have the opportunity to discuss how to work with care staff to improve the caregiving environment.

This research is being carried out as part of my doctoral thesis in Clinical Psychology. It has been approved by the North West London Research Ethics Committee. My research supervisors are Dr Aimee Spector and Professor Martin Orrell. Dr Jennifer Wenborn will be supporting me in the delivery of the workshop programme.

If you think that the care home that you manage might be suitable to take part in this research and you would be interested in learning more about what the study would involve for you, please contact me by telephone or email. We can then arrange a time for us to meet to discuss the study further.

I look forward to hearing from you,

Yours faithfully

Miss Judith Goyder
Trainee Clinical Psychologist

Tel: 07810 112147
Email: judegoyder@gmail.com

Appendix C

Ethics

Overview of ethics procedures

The issue of obtaining consent in people with dementia is complex because dementia may interfere with an individual's capacity to provide consent, especially in the more advanced stages of dementia. The procedures for assessing capacity to consent adhered to the Mental Capacity Act (2005). It was assumed that the person with dementia had capacity to consent unless there was evidence to suggest otherwise. Consent from residents was viewed as a process rather than an event and the person was reminded during each contact with the researcher that they had the right to withdraw at any point.

Residents were introduced to the researcher by a member of staff who was familiar to them. All attempts were made to explain the research in a way which was as accessible as possible for residents with dementia. The research was described to them using simple terminology and they were read a copy of the participant information sheet. After discussing the study in detail with the researcher, they were asked if they would like to participate. The researcher then judged assessed the quality of that decision. If potential participants had difficulties understanding what the research involved and difficulties explaining the risks and benefits, the researcher attempted to explain the research to them in a more accessible format. If, despite additional help to enable their capacity, they were not able to understand what the research involved, the researcher proceeded to carry out an assessment of their capacity to provide informed consent for the research study.

Procedure for assessing capacity

The researcher obtained proof that the potential participant lacked capacity to consent to the research at the time the decision was being made. First she assessed whether the person had a general understanding of the research project from the information presented to them. She then assessed whether the potential participant could retain information about the study for long enough to use the information to make a decision about participating. The resident also needed to be able to consider the benefits or risks of taking part in the research and to use these to make a decision which was communicated to the researcher. If they were not able to carry out one of these four steps they were deemed to lack the capacity to consent to take part.

Procedure for appraising the participation of individuals who lack the capacity to consent

If a potential participant was not deemed to have capacity to consent to take part in the study, the researcher used the additional safeguards provided by the Mental Capacity Act to inform her decision making about whether to include them in the study. She sought assent from the potential participant, either verbally or in writing. She then identified a personal consultee, such as a friend or relative, to advise her on their participation. The consultee was asked to carefully consider the wishes of the person with dementia and any opinions they may hold about participating in research. If it was not possible to identify a personal consultee, a nominated consultee was consulted who was asked to consider the potential participant's best interests. Using this information, the researcher appraised the benefits, burdens and risks of taking part in the study for each prospective participant.

Letter of approval from the Research Ethics Committee

North West London REC 1

REC Offices
South House, Royal Free Hospital
Pond Street, London
NW3 2QG
Telephone: 020 3311 7282
Facsimile: 020 3311 7280

Miss Judith Goyder
Department of Clinical, Educational
and Health Psychology, UCL
Gower Street, London
WC1E 6BT

05 May 2010

Dear Miss Goyder

Study Title: Staff Training using STAR (Staff Training in Assisted Living Residences): a pilot study in UK residential care homes
REC reference number: 10/H0722/32
Protocol number: Version 1

The Research Ethics Committee reviewed the above application at the meeting held on 26 April 2010. Thank you for attending to discuss the study.

Ethical opinion

The members of the Committee present gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

Mental Capacity Act 2005

I confirm that the committee has approved this research project for the purposes of the Mental Capacity Act 2005. The committee is satisfied that the requirements of section 31 of the Act will be met in relation to research carried out as part of this project on, or in relation to, a person who lacks capacity to consent to taking part in the project.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

For NHS research sites only, management permission for research ("R&D approval") should be obtained from the relevant care organisation(s) in accordance with NHS research governance arrangements. Guidance on applying for NHS permission for research is

available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>. Where the only involvement of the NHS organisation is as a Participant Identification Centre, management permission for research is not required but the R&D office should be notified of the study. Guidance should be sought from the R&D office where necessary.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

Approved documents

The documents reviewed and approved at the meeting were:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Covering Letter	+ list of supporting documents	
REC application		19 March 2010
Protocol	Version 1	01 February 2010
Investigator CV	C.I.s CV - Judith Goyder	
Covering Letter	Document 5.1	07 March 2010
Investigator CV	Supervisor's CV - Aimee Spector	
Evidence of insurance or indemnity	Zurich Municipal for UCL	31 July 2010
Letter from Sponsor	Dave Wilson, Database & Information Officer, Joint UCL/UCLH Biomedical Research Unit	18 March 2010
Referees or other scientific critique report	Reviewer - Chris Barker	09 February 2010
Participant Information Sheet: Resident Version	Document 3.1; Version 1	03 March 2010
Participant Information Sheet: Personal Consultee	Document 4.3; Version 1	05 March 2010
Participant Information Sheet: Staff Version	Document 3.3; Version 1	03 March 2010
Participant Information Sheet: Staff Version (Managers)	Document 3.5; Version 1	03 March 2010
Participant Information Sheet: Nominated Consultee	Document 4.7; Version 1	05 March 2010
Participant Consent Form: Resident Version	Document	03 March 2010

	3.2; Version 1	
Participant Consent Form: Staff Version	Document 3.4; Version 1	03 March 2010
Participant Consent Form: Staff Version (Managers)	Document 3.6; Version 1	03 March 2010
Participant Consent Form: Invitation to act as personal consultee form	Document 4.4; Version 1	05 March 2010
Participant Consent Form: Participant Assent Form	Document 4.1; Version 1	07 March 2010
Participant Consent Form: Nominated Consultee	Document 4.8; Version 1	05 March 2010
Participant Consent Form: Personal Consultee Declaration Form	Document 4.5; Version 1	05 March 2010
Letter of invitation to participant	Personal Consultee - Document 4.2; Version 1	05 March 2010
Participant Consent Form: Nominated Consultee Declaration Form	Document 4.9; Version 1	05 March 2010
Letter of invitation to participant	Nominated Consultee -	05 March 2010
Questionnaire: Resident Questionnaire Pack	Document 1.3; Version 1	05 March 2010
Questionnaire: Staff Questionnaire Pack	Document 1.4; Version 1	05 March 2010
Questionnaire: Feedback Form (Staff)	Document 1.5; Version 1	05 March 2010
Questionnaire: Feedback Form (Managers)	Document 1.6; Version 1	05 March 2010

Membership of the Committee

The members of the Ethics Committee who were present at the meeting are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

Now that you have completed the application process please visit the National Research Ethics Service website > After Review

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nres.npsa.nhs.uk.

10/H0722/32	Please quote this number on all correspondence
-------------	------------------------------------------------

With the Committee's best wishes for the success of this project

Yours sincerely

Ms Stephanie Ellis
Chair

Email: louise.moran2@imperial.nhs.uk

Enclosures: List of names and professions of members who were present at the meeting and those who submitted written comments

"After ethical review – guidance for researchers"

Copy to: Mr David Wilson

Appendix D

Resident information sheets and consent forms

Resident Information Sheet

Resident Consent Form

Participant assent form

Staff information sheets and consent forms

Staff Information Sheet

Staff Consent Form

Manager Information Sheet

Manager Consent Form

Introduction

You are invited to participate in a research project. You should only participate if you want to. Before you decide if you want to take part you should understand why the research is being done and what it would involve for you. We will go through the information sheet with you and answer any questions you have.

What is the purpose of this study?

People who suffer from memory problems may sometimes feel low in mood, worried or agitated as a result of their memory problems. This research looks at whether staff working in care homes could learn new ways of helping people with some of these experiences.

Why have I been asked to take part?

Your care home has chosen to take part in this study. You have been invited to take part because you live in the care home and suffer from some memory problems.

What will happen to me if I decide to take part?

The staff working in your care home will be given a training course. If you decide to take part, we will first ask some questions to find out more about your memory problems. We will then ask you some questions about your mood and about your quality of life. We will also ask someone who has been caring for you to answer some questions about your mood

and behaviour. We will ask these questions now and in two months time after the staff in your care home have finished their training.

What are the benefits of taking part in this research?

We hope that joining in with the study will help you by improving the care that you receive. It may also help other people who suffer from memory problems in the future.

What will happen to information about me?

All information about you will be kept private. Your name will be removed from all documents that leave the care home.

What will happen to the results?

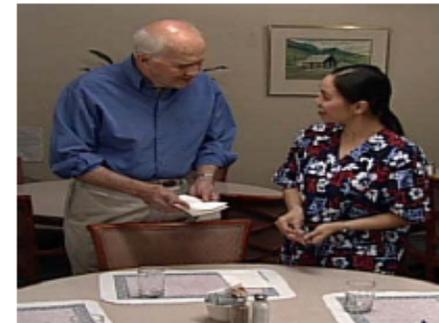
This training programme is also being run in a second care home and the results will be written up in a report. These results may also be published in a research journal. We will return to your care home after the study is finished to present the findings to you.

It is up to you to decide whether you would like to take part or not. Your care will not be affected if you choose not to take part. If you decide to take part, you are still free to change your mind and withdraw your answers without giving a reason at any point.

This research has been approved by the North West London Research Ethics Committee.



Staff Training using STAR: a pilot study in UK residential care homes



Contact details

Judith Goyder
Trainee Clinical Psychologist
Research Department of Clinical, Educational & Health
Psychology, University College London, London, WC1E 6HJ

Tel: 07810 112147
Email: judegoyder@gmail.com

Document 3.1. Participant Information Sheet: resident version V1 03/03/10
REC 10/H0722/32

Participant Information Sheet Resident Version



PARTICIPANT ASSENT FORM

Study title: Staff Training using STAR: a pilot study in UK residential care homes

Lead researcher: Judith Goyder

REC: 10/H0722/32

We are carrying out a research study to find out if staff working in care homes can find new ways of helping people who feel low, worried or agitated as a result of their memory problems. You are invited to participate in this research study.

The staff working in your care home will be given a training course. If you decide to take part, we will first ask you some questions to find out more about your memory problems. We will then ask you some questions about your mood and about your quality of life.

We will also ask someone who has been caring for you to answer some questions about your mood and behaviour. We will ask these questions now and in two months time after the staff in your care home have finished their training. All information about you will be kept private. Your name will be removed from all documents that leave the care home.

Please sign the form to show you are happy to take part.

The research study has been explained to me. I am happy to take part in this research.

_____ Name of participant	_____ Date	_____ Signature
_____ Name of person witnessing verbal assent	_____ Date	_____ Signature
_____ Name of researcher	_____ Date	_____ Signature

PLEASE KEEP ONE COPY FOR YOURSELF, ONE COPY WILL BE PUT IN YOUR CARE RECORDS AND ONE COPY WILL BE GIVEN TO THE RESEARCHER.

You are invited to participate in a research project. Before you decide if you want to take part it is important for you to understand why the research is being done and what it would involve for you. We will go through the information sheet with you and answer any questions you have. Please take some time to read this information and discuss it with others if you wish. Please ask us if there is anything that is not clear.

What is the purpose of this study?

Many people who suffer from dementia may experience depression, anxiety and agitation. These problems can be very stressful for both the person with dementia and those caring for them. The STAR training programme has been designed to help care staff deal with some of these problems. This research will look at whether this training is useful for reducing some of these problems. The care home in which you work has chosen to take part in this study.

What will happen to me if I decide to take part?

If you decide to take part you will need to attend six training sessions over a two month period. You will also be asked to answer some questionnaires to see if the training is beneficial to both you and the people with dementia who you care for.

Training sessions

- ❖ Two x four hour group training sessions. These will teach you new skills to manage difficulties experienced by people with dementia. They will also cover communication skills and how to introduce pleasant events into the lives of people with dementia.
- ❖ Four x individual meetings with a trainer lasting 30 minutes each where you can practice applying these ideas into your day to day work. During these sessions you will be matched with a person who you care for who suffers from behaviour or mood problems.

Questionnaires

- ❖ We would like you to help us to answer four questionnaires about the recent mood and behaviour of one person with dementia you have been caring for. In order to do this we would like to interview you about your recent observations of the person with dementia. This may take up to 45 minutes. We will interview before the training starts and again two months later.
- ❖ You will be asked to answer one questionnaire about your approaches to working with people with dementia and one questionnaire about how competent you feel working with people with dementia (these will take 20 minutes) both before the training starts and after the two month training programme has finished.
- ❖ After completing the training you will be asked to answer a feedback form which will take 10-15 minutes.

What are the benefits of taking part in this research?

We hope that you will find the training programme an interesting and enjoyable experience. By taking part in this study you will hopefully benefit from the training you receive by improving your knowledge and skills. You will also be potentially improving the quality of life of residents in your care home. This research is also valuable for developing staff training in this area.

Are there any disadvantages of taking part?

Taking part in this research will involve committing to attending training sessions during your working hours and to spending some time answering the questionnaires. Although this will represent a time commitment for you, your managers will support you to fit this around your work commitments.

What will happen to information about me?

Any information you give will remain strictly confidential. This means your name and place of work will not be mentioned anywhere and people reading the final report will not be able to identify you. I will not use your name but a participant number to identify you on any documents which leave the care home. All data will be collected and stored in line with the Data Protection Act 1998.

What will happen to the results?

This training programme is also being run in a second care home and the results will be written up in a report as part of a doctoral thesis. This report may also be published in a research journal. We will return to your care home after the study is finished to present the findings to you.

It is up to you to decide whether you would like to take part or not. Your employment will not be affected if you choose not to take part. If you decide to take part, you are still free to change your mind and withdraw your answers without giving a reason at any point. Please sign the consent form you have been given if you want to take part.

As a thank you for taking part in the study you will also receive a £10 gift voucher. If you do not want to take part in the training programme but would be willing to take part in two interviews about a person with dementia you have been caring for this would be very valuable. You will need to sign a consent form and you will receive a £5 voucher to thank you for your time.

This research has been approved by the North West London Research Ethics Committee REC.

Contact details

Judith Goyder
Trainee Clinical Psychologist
Research Department of Clinical, Educational & Health Psychology,
University College London, London, WC1E 6HJ

Tel: 07810 112147
Email: judegoyder@gmail.com

Document 3.3. Participant Information Sheet: Staff version V1 03.03.10
REC 10/H0722/32



Staff Training using STAR: a pilot study in UK residential care homes



Participant Information Sheet Staff Version

You are invited to participate in a research project. Before you decide if you want to take part it is important for you to understand why the research is being done and what it would involve for you. We will go through the information sheet with you and answer any questions you have. Please take some time to read this information and discuss it with others if you wish. Please ask us if there is anything that is not clear.

What is the purpose of this study?

Many people who suffer from dementia may experience depression, anxiety and agitation. These problems can be very stressful for both the person with dementia and those caring for them. The STAR training programme has been designed to help care staff deal with some of these problems. This research will look at whether this training is useful for reducing some of these problems. The care home you manage has chosen to take part in this study.

What will happen to me if I decide to take part?

If you decide to take part you will need to attend three training sessions to discuss the implementation of the STAR training programme in the care home you manage. In these sessions, you will be given an overview of the topics presented in the training sessions and you can discuss how you can work with care staff to improve the caregiving environment. You will also be asked to answer a feedback form after the training programme has finished (which will take approximately 10 – 15 minutes).

What are the benefits of taking part in this research?

We hope that you will find the training programme an interesting and enjoyable experience. By taking part in this study you will hopefully benefit from the training you receive by improving your knowledge and skills. You will also be potentially improving the quality of care for residents living your care home. This research is also valuable for developing staff training in this area.

Document 3.3. Participant information sheet: manager version V1 03.03.10
REC 10/H0722/32

Are there any disadvantages of taking part?

Taking part in this research will involve committing to attending three training sessions and answering the feedback questionnaire afterwards. You will also be expected to use try using the strategies presented during the training programme in your day to day work as a manager.

What will happen to information about me?

Any information you give will remain strictly confidential. This means your name and place of work will not be mentioned anywhere and people reading the final report will not be able to identify you. I will not use your name but a participant number to identify you on any documents which leave the care home. All data will be collected and stored in line with the Data Protection Act 1998.

What will happen to the results?

This training programme is also being run in a second care home and the results will be written up in a report as part of a doctoral thesis. This report may also be published in a research journal. We will return to your care home after the study is finished to present the findings to you.

It is up to you to decide whether you would like to take part or not. Your employment will not be affected if you choose not to take part. If you decide to take part, you are still free to change your mind and withdraw your answers without giving a reason at any point. Please sign the consent form you have been given if you want to take part.

This research has been approved by the North West London Research Ethics Committee.



**Staff Training using STAR: a pilot study
in UK residential care homes**



**Participant Information Sheet
Manager Version**

Contact details

Judith Goyder
Trainee Clinical Psychologist
Research Department of Clinical, Educational & Health Psychology,
University College London, London, WC1E 6HJ

Tel: 07810 112147
Email: judegoyder@gmail.com

Document 3.3. Participant information sheet: manager version V1 03.03.10
REC 10/H0722/32



PARTICIPANT CONSENT FORM: MANAGER VERSION

Study title: Staff Training using STAR: a pilot study in UK residential care homes

Lead researcher: Judith Goyder
REC: North West London Research Ethics Committee

- Please
initial*
1. I have read and understood the 'Participant Information Sheet: Manager Version' dated 03/03/2010 (version 1). I have had the opportunity to consider the information, ask questions and have had my questions answered satisfactorily.
 2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my employment rights being affected.
 3. I understand that data collected during the study may be looked at by responsible individuals from University College London or from regulating authorities where it is relevant to me taking part in this research.

Name of participant	Date	Signature
Name of researcher	Date	Signature

PLEASE KEEP ONE COPY FOR YOURSELF AND GIVE ONE COPY TO THE RESEARCHER.

Information for personal consultees

Invitation letter to personal consultees from care home manager

Personal consultee information sheet

Personal consultee invitation response form

Personal consultee declaration form

Information for nominated consultees

Invitation letter to nominated consultees from care home manager

Nominated consultee invitation response form

Nominated consultee declaration form

Invitation to personal consultees

Care home headed paper
Address and telephone number

Prospective consultee name and address

Dear

I am pleased to let you know that the xxxx care home is collaborating with University College London on the 'Staff training using STAR: a pilot study in UK residential care homes' research project. For this project, care staff will be given a training programme to teach them strategies to deal with some of the emotional and behavioural problems which people with dementia can experience. As part of this project, the mood and behaviour of residents with dementia will be assessed.

An important aspect of the research project is that both staff and resident participants have the choice about whether to participate or to refuse to take part. However some of the residents may not have the capacity to consent if the nature of their dementia has affected their ability to make decisions.

You have been approached because you are a partner, friend or relative of The researcher would like to discuss with you about whether they may wish to participate in the research.

I attach some information about the project, the names of the researcher and the ways you can help. Please have a look at the information sheet and return the 'Personal consultee invitation response form' in the stamped addressed envelope provided. If you have any queries do not hesitate to contact me to discuss this further. Alternatively please contact the researcher directly using the contact details on the back of the information leaflet.

Yours Sincerely,

Name
Care Home Manager

Why have I been approached?

You are being asked to act as a personal consultee. A personal consultee is a partner, friend or relative of a prospective participant who has an interest in their welfare and provides the researcher with advice. You have been approached because your partner, friend or relative does not have the capacity to consent to participate in this research. To help us decide if they should join the study we would like to ask your opinion about whether or not they would want to be involved. Please consider what their wishes may have been. Please let us know about any advanced decisions they have made about participating in research.

What do I have to do?

Please read this information sheet carefully. If you are able to act as a consultee, please return the invitation form using the stamped addressed envelope provided. Please provide your current telephone number and indicate when you would be available to discuss the study with the researcher. Alternatively you can contact the researcher directly on the phone number below. If you do not feel in a position to act as a consultee please return the invitation form to let us know.

When you have spoken to the researcher and have considered the involvement of your friend or relative, please sign three copies of the 'Declaration of consultee form'. Please keep one copy for yourself and return two copies to the researcher. If you have read through the information sheet carefully and feel confident that your friend or relative would have wished to be involved, you can also return the declaration of consultation form directly to us without speaking to the researcher.

Doc 4.3. Personal consultee information sheet, V1, 05/03/10
REC 10/H0722/32

The following information is the same as would be provided for your partner, friend or relative:

What is the purpose of this study?

People who suffer from memory problems may sometimes feel depressed, anxious or agitated. This research looks at whether staff working in care homes could learn new ways of helping people with some of these problems.

Why has my partner, friend or relative been asked to take part?

The care home in which they live has chosen to take part in this study. They have been invited to take part because they live in the care home and suffer from memory problems. If you decide they would not wish to take part it will not influence the standard of care they receive.

What will happen to them if they take part?

The staff working in their care home will be given a training course. If you advise us that your partner, friend or relative should take part, we will ask one of the staff who has been caring for them to answer some questions about their recent mood and behaviour. We will also ask them some questions to find out more about their memory problems and about how they feel about different areas of their life. We will return to ask the same questions again in two months time after the staff training programme has finished.

What are the benefits of taking part in this research?

We hope that taking part in the study will help your partner, friend or relative by improving the care that they receive. It may also help other people who suffer from memory problems in the future.

What will happen to information about my partner, friend or relative?

All information about them will be kept private. All documents that leave the care home will have their name removed.

What will happen to the results?

This training programme is also being run in a second care home and the results will be written up in a report for a doctoral thesis. This report may also be published in a research journal. We will return to the care home after the study is finished to present the findings. Please let us know if you would be interested in learning about the findings.

This research has been approved by the North West London REC.

Contact details

Judith Goyder
Trainee Clinical Psychologist
Research Department of Clinical, Educational & Health Psychology,
University College London, London, WC1E 6HJ

Tel: 07810 112147
Email: judegoyder@gmail.com



Staff Training using STAR: a pilot study



Personal Consultee Information Sheet



INVITATION TO ACT AS A PERSONAL CONSULTEE FORM

Study title: Staff Training using STAR: a pilot study in UK residential care homes

Participant code:

Lead researcher: Judith Goyder

REC:10/H0722/32

*Please sign by
your chosen
response*

- | | | | |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------|
| 1. | I have read the 'Information for personal consultees' dated 05.03.10 (version 1) and I would like the researcher to contact me on (daytime telephone number) at the following times(days/times you are happy to be contacted). | _____
Signature | _____
Date |
| 2. | I have read the enclosed information sheet and I feel confident that my partner, friend or relative would wish to participate in this study. I do not need to speak to the researcher to obtain more information.

I enclose the 'declaration of consultation' form. | _____
Signature | _____
Date |
| 3. | I have read the enclosed information sheet and I do not think that my partner, friend or relative would wish to participate in this study. I do not need to speak to the researcher to obtain more information. | _____
Signature | _____
Date |
| 4. | I do not feel able to act as a personal consultee for my partner, friend or relative. | _____
Signature | _____
Date |

THANK YOU FOR COMPLETING THIS FORM.

PLEASE RETURN THIS FORM IN ONE OF THE STAMPED ADDRESSED ENVELOPE PROVIDED

Invitation to nominated consultees

Care home headed paper
Address and telephone number

Consultee name and address

Dear

I am pleased to let you know that the xxxx care home is collaborating with University College London on the 'Staff training using STAR: a pilot study in UK residential care homes' research project. For this project, care staff will be given a training programme to teach them strategies to deal with some of the emotional and behavioural problems which people with dementia can experience. As part of this project, the mood and behaviour of residents with dementia will be assessed.

An important aspect of the research project is that both staff and resident participants have the choice about whether to participate or to refuse to take part. However some of the residents may not have the capacity to consent if the nature of their dementia has affected their ability to make decisions.

You have been approached because you are a health or social care professional who has worked in a professional capacity with and has some knowledge of the difficulties affecting them at the moment. The researcher would like to discuss with you about whether they should be included in this research.

I attach some information about the project, the names of the researcher and the ways you can help. Please have a look at the information sheet and return the 'response to invitation' form in the stamped addressed envelope provided. If you have any queries do not hesitate to contact me to discuss this further. Alternatively please contact the researcher directly using the contact details on the back of the information leaflet.

Yours Sincerely,

Name
Care Home Manager

Why have I been approached?

You are being asked to act as a nominated consultee. You have been approached because you have worked with someone in a professional capacity who does not have the capacity to consent to taking part in a research study. To help us decide if they should join the study we would like to ask your opinion about whether or not they should be involved. Please consider what their wishes may have been and whether it is in their best interests for them to participate in this research study. Please let us know about any advanced decisions they have made about participating in research.

What do I have to do?

Please read this information sheet carefully. If you are able to act as a consultee, please return the invitation form using the stamped addressed envelope provided. Please provide your current telephone number and indicate when you would be available to discuss the study with the researcher. Alternatively you can contact the researcher directly on the phone number below. If you do not feel in a position to act as a consultee please return the invitation form to let us know.

When you have spoken to the researcher and have considered the involvement of the prospective participant, please sign three copies of the 'Declaration of consultee form'. Please keep one copy for yourself and return two copies to the researcher. If you have read through the information sheet carefully and feel confident that the prospective participant would have wished to be involved or that it is in their best interest to be involved, you can also return the declaration of consultation form directly to us without speaking to the researcher.

Doc 4.7: Nominated consultee information sheet, V1, 05/03/10
REC 10/H0722/32

The following information is the same as would be provided to the prospective participant.

What is the purpose of this study?

People who suffer from memory problems may sometimes feel depressed, anxious or agitated. This research looks at whether staff working in care homes could learn new ways of helping people with some of these problems.

Why has my partner, friend or relative been asked to take part?

The care home in which they live has chosen to take part in this study. They have been invited to take part because they live in the care home and suffer from memory problems. If you decide they would not wish to take part it will not influence the standard of care they receive.

What will happen to them if they take part?

The staff working in their care home will be given a training course. If you advise us that your partner, friend or relative should take part, we will ask one of the staff who has been caring for them to answer some questions about their recent mood and behaviour. We will also ask them some questions to find out more about their memory problems and about how they feel about different areas of their life. We will return to ask the same questions again when the staff in their care home have finished their training.

What are the benefits of taking part in this research?

We hope that joining in with the study will help the prospective participant by improving the care that they receive. It may also help other people who suffer from memory problems in the future.

What will happen to information about them?

All information about them will be kept private. All documents that leave the care home will have their name removed.

What will happen to the results?

This training programme is also being run in a second care home and the results will be written up in a report for a doctoral thesis. This report may also be published in a research journal. We will return to the care home after the study is finished to present the findings. Please let us know if you would be interested in learning about the findings.

This research has been approved by the North West London REC.

Contact details

Judith Goyder
Trainee Clinical Psychologist
Research Department of Clinical, Educational & Health Psychology,
University College London, London, WC1E 6HJ

Tel: 07810 112147
Email: judegoyder@gmail.com



Staff Training using STAR: a pilot study



Nominated Consultee Information Sheet



NOMINATED CONSULTEE INVITATION RESPONSE

Study title: Staff Training using STAR: a pilot study in UK residential care homes

Participant code:

Lead researcher: Judith Goyder

REC: 10/H0722/32

*Please sign by
your chosen
response*

1. I have read I have read the 'Information for nominated consultees' dated 05.03.10 (version 1). I am happy to be consulted about the involvement of the prospective participant.

I would like the researcher to contact me on
(daytime telephone number) at the following times
.....(days/times you are happy to be contacted) to discuss
the involvement of the prospective participant.

Signature Date

2. I have read the enclosed information sheet. I am happy to be consulted about the involvement of the prospective participant.

I think the prospective participant would want to be involved in
this study. I do not need to speak to the researcher to obtain more
information.

Signature Date

I enclose the 'declaration of consultation' form.

3. I have read the enclosed information sheet and I do not think the prospective participant would wish to participate in this study. I do not need to speak to the researcher to obtain more information.

Signature Date

4. I do not feel able to act in the role of a nominated consultee for the prospective participant.

Signature Date

THANK YOU FOR COMPLETING THIS FORM.

PLEASE RETURN THIS FORM IN ONE OF THE STAMPED ADDRESSED ENVELOPE PROVIDED

Appendix E

STAR programme modules

Table E1

Details of STAR programme modules

Week 1: Workshop 1 (4 hours, 10 minutes)		
Module	Brief description	Time mins
1. Understanding dementia and realistic expectations	<i>The brain and dementia, difficulties associated with dementia, stages of dementia, anxiety and depression in dementia, strengths which care staff bring to the job.</i>	60
2. Communicating with and without words.	<i>Non verbal communication, practical communication skills, listening with respect, comforting and redirecting residents with dementia.</i>	40
3. Using the ABCs	<i>Identifying problems using ABCs, understanding the approach of care staff can be a common activator.</i>	30
4. Problem solving: Get Active	<i>Developing plans to solve problems by changing activators and consequences.</i>	30
5. Increasing Pleasant Events	<i>Applying pleasant events as a treatment for anxiety and depression.</i>	40
6. Implementing STAR and preparation for individual training sessions	<i>Review of ABCs, making a plan with the ABCs, working in small group to develop ABC plans for allocated residents.</i>	30
Week 2 & 3: Individual sessions 1 & 2		60
Week 4: Workshop 2 (4 hours)		
7. Review of STAR concepts and discussion of individual training sessions	<i>Review of key concepts, strengths review, examples of ABCs, discussion about telling the truth with people with dementia.</i>	
8. Get Active with the environment	<i>Understanding the influence of the environment on behaviour, changing the environment, case discussion.</i>	30
9. Team building	<i>Discussing how to utilize the resources of the the whole team and learning from each other</i>	30
10. Families	<i>Communicating with families, learning from families.</i>	30
11. More pleasant events	<i>Review of pleasant events and discussion of how they are being implemented.</i>	30
12. Continuing to implement STAR and preparation for individual training sessions	<i>Summary of sessions, working in small group to develop ABC plans for allocated residents.</i>	30
Week 5 & 6: Individual sessions 3 & 4		60

Staff Feedback Form

Please rate how useful you found each module from the workshop sessions. You may need to refresh your memory by reviewing the handouts from the workshops.

	Not useful 0	1	Averagely useful 2	3	Very useful 4
1. Workshop 1:					
a) Understanding dementia	<input type="checkbox"/>				
b) Communicating with and without words	<input type="checkbox"/>				
c) Using ABC's & problem solving	<input type="checkbox"/>				
d) Increasing pleasant events	<input type="checkbox"/>				
2. Workshop 2:					
e) Changing the environment to change behaviour	<input type="checkbox"/>				
f) Team building	<input type="checkbox"/>				
g) Working with families	<input type="checkbox"/>				
h) Using more pleasant events	<input type="checkbox"/>				

Think about your overall experience of completing the STAR training:

	Not useful 0	1	Averagely useful 2	3	Very useful 4
3. How useful did you find the workshop sessions overall?	<input type="checkbox"/>				
4. How useful did you find the individual sessions overall?	<input type="checkbox"/>				
5. How useful did you find the DVD clips you were shown in the workshop sessions?	<input type="checkbox"/>				
6. How useful did you find the handouts?	<input type="checkbox"/>				
	Not at all 0	1	Averagely 2	3	Very much 4
7. Has the STAR training increased your knowledge about dementia?	<input type="checkbox"/>				
8. Has the STAR training increased your knowledge about depression and anxiety?	<input type="checkbox"/>				
9. Has the STAR training improved your relationships with care home residents?	<input type="checkbox"/>				

10. Has the STAR training improved your relationships with your colleagues?

11. Do you enjoy your job any more as a result of attending the training?

12. Do you feel more confident about your ability to do your job as a result of attending the training?

Definitely No 0 1 2 3 4
Maybe
Definitely Yes

13. Would you recommend the STAR training to a colleague?

14. What part of the training did you find most helpful?

15. What aspect of the training do you think needs to be improved?

Please add any other comments about your experience of attending the STAR training.

Thank you very much for completing this form. Please hand your form back in the confidential envelope provided.

Manager Feedback Form

Please rate how useful you found the STAR management sessions.

	Not useful		Average		Very useful
	0	1	2	3	4
1. Management session 1	<input type="checkbox"/>				
2. Management session 2	<input type="checkbox"/>				
3. Management session 3	<input type="checkbox"/>				

Think about your overall experience of completing the STAR training:

	Not useful		Average		Very useful
	0	1	2	3	4
4. How useful did you find the DVD clip?	<input type="checkbox"/>				
5. How useful did you find the handouts?	<input type="checkbox"/>				

	Definitely No		Maybe		Definitely Yes
	0	1	2	3	4
6. Will you carry out your management role any differently as a result of attending the management training sessions?	<input type="checkbox"/>				
7. Do you think the care staff you manage were able to apply the strategies they learnt during the STAR programme in their day to day work?	<input type="checkbox"/>				
8. Would you recommend the STAR training programme to another care home?	<input type="checkbox"/>				

9. What part of the training did you find most helpful?

10. What aspect of the training do you think needs to be improved?

11. Did the care staff you supervise experience any difficulties with applying the STAR strategies in their day to day work? Please comment on these difficulties.

Please add any other comments about your experience of attending the STAR training.

Thank you very much for taking the time to complete this form. Please return the form in the confidential envelope provided.