

**Evaluation of the Staff Training 'The Ladder to the Moon,  
Culture Change Studio Engagement Programme': Two  
quasi-experimental case studies**

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**Abstract:**

**Background:** Care Homes provide supportive care for older people. The UK National Dementia Strategy aims to educate care staff to retain and increase satisfaction in the workforce and thereby improve the quality of care provided. Ladder to the Moon Culture Change Studio Engagement Programme (CCSEP) is a staff training approach based on the Positive Psychology framework that uses theatre and film-based activities.

**Aim:** To evaluate the effectiveness of CCSEP on the range of interactions and level of positive engagement between staff and residents, staff outcome measures such as sense of competence, job satisfaction and well-being in two care settings for older people (one nursing and one residential home).

**Methods:** A pre-and-post design prior to and at the completion of the staff training intervention. Outcome measures: Sense of Competence in Dementia Care Staff; Approaches to Dementia Questionnaire; Job Satisfaction Index; Brief Learning Transfer System Inventory; Scale of Positive and Negative Experience. Quality of Interaction Schedule (QUIS) was used to analyse changes in staff-resident interaction.

**Results:** Fifty staff in two care homes completed the questionnaires. In Home A (nursing care) there was no significant change in any of the measures. In Home B (residential care) the QUIS showed an increase in positive interactions post intervention ( $p= 0.0001$ ); a small significant change on the Building-relationship subscale of Sense of Competence ( $p= 0.010$ ); a small significant change on staff sense of hopefulness towards people with dementia ( $p= 0.015$ ). The Brief Learning Transfer System Inventory showed significant change with a higher mean pre-intervention ( $p= 0.0001$ ).

**Conclusion:** Changes in the organisation and the environment are likely to have an impact on staff measures, particularly when transferring new learning into practice. CCSEP may help improving quality of interactions between staff and residents. Evaluation results suggest that CCSEP might be more feasible in care homes with managers whose leadership support nurses and staff to work together.

**Keywords:** dementia, care homes, staff training, positive psychology, film activities

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## Implications for Practice

### What does this research add to existing knowledge in gerontology?

- Staff training interventions are needed to translate evidence-based interventions into widespread practice in care homes.
- Nurses are enthusiastic to develop person-centred care skills through innovative training.

### What are the implications of this new knowledge for nursing care with older people?

- This study found that this staff training approach encourages nurses to be involved in activities that apply theatre and film elements when providing care.
- Managers need to be supportive of the Positive Psychology approach combined with theatre and film-based training to facilitate culture of care change.

### How could the findings be used to influence policy or practice or research or education?

- When implementing this creative staff training such as CCSEP principles in care homes, organisations require a coaching supervision plan to sustain the culture of change.
- CCSEP has the potential to be successful if the manager has good communication skills and attitude to support the implementation of different activities, such as setting up a 'film studio' within the care home

## Introduction

The UK National Dementia Strategy (2009) and the National Service Framework for Older People (DoH, 2001) called for increased training for care home staff. Such training will only have a lasting influence if it works in parallel with the organisation's philosophy, care practice and resources (Bowe & Loveday, 2000). Staff training needs to promote appropriate attitudes to develop quality of relationships with residents. Kitwood (1997) emphasises a person-centred care approach, whilst Nolan et al., (2008) recommend a relationship-centred approach to give weight to the emotional and psychological needs of people. For example, staff sense of competence or job satisfaction have an impact on the quality of care provided (Schepers et al., 2012). Hence, staff stress leads to a more task-orientated culture of care and a struggle to spend quality time with residents.

A number of studies have suggested that residents benefit when staff are trained to deliver evidence-based psychosocial interventions. For example, the Staff-training in Assisted Living Residences (STAR) programme (Goyder et al., 2012) decreased depression and

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3 behavioural problems. The activity-based intervention of Cognitive Stimulation Therapy  
4 (Aguirre et al., 2013) improved cognition and quality of life. Psychomotor Dance Therapy  
5 programmes (Guzmán-García et al., 2011) decreased behavioural and psychological  
6 symptoms of dementia, and theatre-based activities (van Dijk et al., 2012) improved mood  
7 and decreased problematic behaviours. However, research is limited in understanding the  
8 effect of such interventions on staff. Such research is particularly important when care home  
9 staff work long hours, are poorly paid and face the difficulty of forming meaningful  
10 relationships with residents as their dementia and comorbid illnesses advance (Middleton et  
11 al., 1999; Luff et al., 2011).  
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18 Some interventions involve training staff to utilise theatrical techniques within their care  
19 practice. One such intervention is the Ladder to the Moon Culture Change Studio  
20 Engagement Programme (CCSEP). This programme, based on the Positive Psychology  
21 principles, uses theatre and film-based activities to train staff to: i) develop communication  
22 and interaction skills with residents, and ii) improve team work. This study aimed to evaluate  
23 the effectiveness of implementing CCSEP in two care homes with particular focus on the  
24 impact of CCSEP on staff sense of competence, job satisfaction and well-being. This paper  
25 reports the quantitative data collection, analysis and findings. The qualitative results are  
26 reported elsewhere.  
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### 33 **Method**

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35 A pre-post design was used. The CCSEP comprised three training days, held over  
36 approximately 20 weeks. Three cohorts of staff took part in each care home. There were four  
37 data collection points, two pre-and two post- the CCSEP training. Staff inclusion criteria  
38 included: i) working regularly at the home; ii) able to read and speak English to complete the  
39 measures; iii) have access to the internet either in the care home or at their own home to  
40 complete the measures online. Demographic information collected from staff included:  
41 gender, age, ethnicity; time working in the care home/care sector. All staff provided informed  
42 consent. Residents were assessed for their capacity to consent to be observed during the  
43 staff-resident observation periods. If residents lacked the capacity to provide informed  
44 consent, a Personal Consultee or a Nominated Consultee was identified to provide an  
45 opinion about their participation (Department of Health, 2008). Ethical approval was obtained  
46 from the London – Camden & Islington Research Ethics Committee [Reference Number:  
47 L12/LO/0961].  
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### 55 **Settings**

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3 **Care Home A:** A nursing care home for older adults over 65 years with a designated unit for  
4 people living with dementia. Owned by a large national care home group. The home has 81  
5 beds with 73 staff members and a staff: resident ratio of 1:6. The care home has had seven  
6 managers over the past seven years.  
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10 **Care Home B:** A residential care home for older people without major nursing needs,  
11 including a 'high dependency unit' for people with mobility difficulties. Owned by a medium  
12 sized care home group. The home has 47 beds, with 81 staff members and a staff: resident  
13 ratio of 1:7. The Manager had worked at the home for the past 15 years.  
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## 17 **Measures**

### 18 **Quality of Interaction Schedule (QUIS)**

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21 The QUIS (Dean & Proudfoot, 1993) was used to obtain a structured observation of the  
22 quality of interaction between care staff and residents over a two hour period prior to lunch.  
23 Interactions were observed by a trained researcher, and coded as either Positive Social (PS);  
24 Positive Care (PC); Neutral (N); Negative Protective (NP) or Negative Restrictive (NR).  
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30 **The following staff outcome measures were collected online via Survey Monkey® or**  
31 **via paper copy.**  
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### 34 **Sense of Competence in Dementia Care Staff (SCIDS)**

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36 The SCIDS (Schepers et al., 2012) was used to assess care staff sense of competence. It  
37 contains 17 items across four subscales: 'Building Relationships'; 'Professionalism'; 'Care  
38 Challenges' and 'Maintaining Personhood. Each item is rated on a four-point scale from 1 =  
39 'Not at all' to 4 = 'Very much'. Higher scores represent a higher sense of competence.  
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### 44 **Approaches to Dementia Questionnaire (ADQ)**

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46 The ADQ (Lintern & Woods, 2000) was used to assess staff approaches towards people  
47 with dementia. It contains 19 statements about people with dementia, which are rated using  
48 a five-point scale from 'Strongly Agree' to 'Strongly Disagree'. A total attitude score can be  
49 calculated as well as subscale scores for 'Hopefulness' and 'Person-centred' Approaches.  
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### 55 **Job Satisfaction Index (JSI)**

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57 The JSI (Firth-Cozens & Hardy, 1992) was used to measure staff job satisfaction. Staff rated  
58 18 items which cover various aspects of their job (e.g. responsibility, supervision, pay), using  
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3 a seven-point scale ranging from: 1= 'Extremely Dissatisfied' to 7 = 'Extremely Satisfied'.  
4 Higher scores indicate higher job satisfaction.  
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### 10 11 ***Brief Learning Transfer System Inventory (BLTSI)***

12 The BLTSI (Spector et al., 2010) is a short-form version of the Learning Transfer System  
13 Inventory. It was used to identify factors that affect how staff transfer the training into  
14 performing their job. Respondents rate each item on a five-point scale: 1= 'Strongly Agree' to  
15 5 'Strongly Disagree'. Higher scores represent a better expectation of transferring learning  
16 into performance.  
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### 20 21 ***Scale of Positive and Negative Experience (SPANE)***

22 The SPANE (Diener et al., 2009) was used to measure staff well-being. It is a self-report  
23 measure containing six positive feelings (e.g. Pleasant) and six negative feelings (e.g. Sad).  
24 Staff rated each feeling over the past 4 weeks on a scale of: 1 = 'Very Rarely or Never' to 5  
25 = 'Very Often or Always'. The overall score as well as separate positive and negative feeling  
26 scores can be calculated.  
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### 33 34 ***Happiness Visual Analogue Scale (VAS)***

35 The Happiness VAS (non-standardised) was a newly developed scale used as a self-report  
36 measure that asked respondents to rate how happy they have been in the past four weeks  
37 using a visual analogue scale of 0 (Extremely unhappy) to 100 (Extremely happy).  
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### 41 42 ***Care home measures***

43 Information was also collected on staff sickness, turnover; and the number of: untoward  
44 incidents, complaints and compliments. There was no system in place to record compliments;  
45 hence, the number of 'Thank you' cards received from relatives and friends was recorded.  
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### 48 49 ***Sheffield Care Environment Assessment Matrix (SCEAM)***

50 The SCEAM (Parker et al., 2004) assesses the design, layout and usage of the care  
51 environment. There are ten domains relating to features important to residents and one  
52 concerning staff provision. Domains are scored as present (1) or absent (0), total scores are  
53 reported as percentages, with a higher score indicating higher performance in that domain. It  
54 is completed through researcher observation of the environment and an interview with the  
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3 care home manager. The SCEAM scores were not included in the pre and post analysis, but  
4 used to provide an environmental context.  
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### 10 11 12 **Intervention**

13 The Culture Change Studio Engagement Programme (CCSEP) involves a coach and one  
14 actor assisting. The process is as follows:  
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18 An initial call to the manager and senior team members to identify goals for the home. A film  
19 theme is chosen and a cohort of 12 to 15 staff participate in the programme. On Day 1,  
20 Positive Psychology (Seligman, 2011), the PERMA concept [Positive emotion; Engagement;  
21 Relationships; Meaning and Accomplishment], 'Making Someone's Day' and 'Savouring'  
22 [enjoying the moment using objects to reminisce] are introduced using small and large group  
23 discussions and practical activities. A film topic is (e.g. Sound of Music; South Pacific) is  
24 discussed with staff to generate ideas for activities with residents and relatives.  
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28 On Day 2, the coach recaps learning from Day 1 and allows staff to practice communication  
29 skills, followed by the 'Big Shoot' with up to two hours duration: Residents and staff adopt  
30 main characters of the chosen film and cinema studio crew roles (e.g. make-up artist,  
31 clapper-board operator) and family members are also invited. There is singing and dancing  
32 along to music, and 'Oscar' award statues are given to residents as incentive. The CCSEP  
33 team video records the interaction and arranges the consent for filming process with the  
34 home, and produces the DVD. The coach will then debrief with the staff group to set  
35 personal goals. On Day 3 the CCSEP coach facilitates discussion with the staff group, which  
36 includes watching the DVD previously recorded and a review of Day 2; reflecting on learning,  
37 progress on goals, and planning changes to take forward into practice. At a final meeting,  
38 the coach reflects with the manager on the culture of care changes.  
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### 47 **Data Analysis**

48 Survey Monkey® data were imported into Statistical Package for the Social Sciences (SPSS  
49 version 21) and hard -copy data were collected and entered manually for quantitative  
50 analysis. QUIS observations were analysed applying  $X^2$  tests using Graphpad, a statistical  
51 package available online (<http://graphpad.com/quickcalcs/contingency1/>). A series of paired  
52 t-tests were carried out to evaluate the changes pre- and post-CCSEP.  
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### 58 **Results**

### *Environmental assessment: The SCEAM*

Home A had an 'Independent Unit' layout located in a 'Mature suburb' built in 2005. Home B had a 'Group Living' layout located in a 'Village' built between 1850-1917. Home A scored higher than Home B for the following domains: *Community; Safety and Health; Support for Physical Frailty; Choice & Control*, and *Staff Provision*. Home B scored higher than Home A for: *Privacy; Personalisation; Support for Cognitive frailty; Normalness and Authenticity, Comfort of the environment; and Awareness of the outside world* was the same in both homes. See Table 1 for SCEAM scores for each home.

*'Insert Table 1 here'*

### **Home A**

A total of 53 staff were invited to take part; 39 consented, of whom 19 completed questionnaires (7 online/12 paper copies). Of the 19 participants, 53% undertook the CCSEP training. See Table 2 for staff participants' demographic information.

*'Insert Table 2 here'*

### *Quality of Interaction Schedule (QUIS)*

There was a decrease in positive interactions but this did not reach statistical significance.

### *Staff Outcome Measures*

There was no statistically significant change on Sense of Competence (SCIDS) between pre and post CCSEP, ( $t(11) = -.386, p=0.707$ ). Similarly, there were no significant statistical changes on the other subscales. There was no significant change on the overall score of the Approaches to Dementia Questionnaire (ADQ) ( $t(10) = .909, p=0.385$ ) and no significant changes on the 'Hope' and 'Person-centred care' ADQ subscales. There was no significant change on Job Satisfaction Inventory scores ( $t(7) = 2.250, p=0.059$ ). The Brief Learning Transfer Scale Inventory (BLTSI) did not demonstrate change ( $t(10) = -2.028, p = 0.070$ ); the Scale of Positive and Negative Experience (SPANE) did not change significantly after the training intervention ( $t(10) = -0.747, p= 0.472$ ). Happiness scores on VAS did not demonstrate significant change ( $t(9) = -1.353, p= 0.209$ ).

### *Care home measures*



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3 Home A declined to provide the number of complaints at the later data collection points. See  
4 Table 3 for care home measures results.  
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### 11 12 13 14 **Home B**

15 A total of 52 staff were invited to take part, 31 consented and completed questionnaires (30  
16 online / 1 paper copy). Of the 31 staff participants, 71% undertook CCSEP training.  
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#### 19 *Quality of Interaction Schedule (QUIS)*

20 A  $X^2$  with Yates correction indicated a significant difference in the association between pre  
21 and post positive interactions (1, n= 300) = 43.28, p= 0.0001 based on observations of 39  
22 staff members interacting with residents. See Figure 1 for observed interactions.  
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27 -Insert Figure 1 here-  
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#### 30 **Staff outcome measures**

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33 There was no statistically significant change on the Sense of Competence (SCIDS) total  
34 score between pre and post CCSEP, (t (25) = -1.627, p=0.116). There was a small  
35 significant statistical change on the 'Building-relationships' subscale of the SCIDS from pre  
36 (M=10.14, SD= 2.75) to post CCSEP (M=11.46, SD=2.06), t (27) (-2.770, p=0.010). There  
37 was no significant statistical change on the other subscales. There was no significant  
38 statistical change on the Approaches to Dementia Questionnaire (ADQ) scores (t (27) = .946,  
39 p=0.353). The 'Person-centred' subscale did not show significant change (t (27) = 1.899, p =  
40 0.068). There was a small significant change on the 'Hope' subscale from pre (M= 29.46,  
41 SD= 4.44) to post CCSEP (M= 31.42, SD= 4.12), (t (27) = -2.596, p= 0.015). There was no  
42 significant change on the Job Satisfaction Inventory (JSI) scores (t (8) = -1.5122, p=0.169).  
43 There was a negative significant change on Brief Learning Transfer Scale Inventory (BLTSI)  
44 scores from pre (M= 60.89, SD= 7.70) to post CCSEP training (M= 43.14, SD= 10.42) (t (27)  
45 = 9.070, p=0.000). There was no significant change on the Scale of Positive and Negative  
46 Experience (SPANE) total score of positive experience (t (27) (0.945, p=0.353) or negative  
47 experience (t (26) (-.636, p= 0.531). There was no significant change on the Happiness  
48 Visual Analogue Scale (VAS) scores t (27) 0.271, p= 0.788. See Table 4 and 5 for care  
49 home measures results.  
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*'Insert Table 4 and Table 5 here'*

## Discussion

This is the first research study to evaluate the feasibility of Ladder to the Moon Culture Change Studio Engagement Programme. The aim was to investigate whether this training would improve staff outcomes and increase positive interactions with residents. As the settings were different (as highlighted by the SCEAM assessment) it was decided to analyse the data from each care home separately as direct comparison was not considered to be realistic. No significant differences were found for staff in Home A, suggesting no change. In Home B, there was no difference between the Happiness and Job Satisfaction scores, but changes on the 'Building Relationships' subscale of the Sense of Competence in Dementia Care, the 'Hope' subscale of the Approaches to Dementia Questionnaire post training, and the Brief Learning Transfer System Inventory showed a decrease suggesting reduced readiness for transfer of learning.

The CCSEP principles, such as 'Make Someone's Day', could be used to improve staff-resident interaction, as seen on the positive effect of Building-relationships results. Staff are supported to practise ways of communicating as key moments from the film story are improvised to create an enjoyable shared experience with residents. There are a number of potential reasons why there was no significant statistical change on the staff outcome measures in Home A post CCSEP staff training. Perhaps the most significant was the high-turnover of seven managers in the past five years. Although the coaching and research teams were aware of this before starting the study the impact of this on the organisational culture and staff morale continued to hinder the reliable collection of data, particularly at later stages when the latest 'new' manager had left within a year of starting. In line with the Positive Psychology approach (Seligman et al., 2005), this study shows how staff training supported the understanding of human experience of people with dementia. Further reflection on improving relationships and increase the level of happiness, in this case 'hope' within their caring skills

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3 As the study progressed in Home A, the lack of managerial action to support organising staff  
4 to attend the CCSEP, and to encourage staff to participate in the study became clear. Staff  
5 turnover and sickness increased, which compromised data collection, resulting in missing  
6 data. Arguably, the lack of managerial support to the coaching team, such as staff unable to  
7 attend the training or to develop meaningful conversations with residents, level of staff  
8 stress, had an impact on the learning transference of CCSEP into practice. Additionally,  
9 outcome measures highlighted the low staff morale with continuing low levels of happiness  
10 and job satisfaction. The research team became aware that the care home had not achieved  
11 certification from another dementia training project undertaken the year before, which could  
12 have contributed to the low staff motivation to engage in yet another training programme  
13 aimed at changing the culture of care.  
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21 In contrast, it was evident that the leadership of the manager in Home B contributed to better  
22 acceptance and organisation of the rota to enable staff to attend the CCSEP. Additionally,  
23 internet access at the care home, and a manager who supported the research team,  
24 facilitated the effective organisation of staff completing questionnaires online. At Home B,  
25 there were a number of significant statistical changes observed on the outcome measures.  
26 Staff were more positive about making residents lives more meaningful. However, the BLTSI  
27 showed a significant drop after the training. This suggests that staff lacked confidence about  
28 implementing their CCSEP learning into practice without coaching supervision.  
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35 Home B had overlapping staff training aiming to increase activities between residents and  
36 staff, running in parallel with CCSEP. During the study period, the home was awarded an  
37 accreditation to provide optimal end of life care. The sense of achievement was perhaps, a  
38 motivator for the Manager and staff to keep developing skills and take advantage of the  
39 CCSEP. Despite positive findings in relation to Building-relationships and Hope in this  
40 setting, it was found that the Happiness VAS, SPANE and Job Satisfaction did not change  
41 significantly. This could be understood as the staff were already positive and happy with their  
42 caring job at baseline, and CCSEP might not have had further impact on these factors.  
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### 50 **Limitations**

51 One of the main limitations of this research study were the problems inherent within the care  
52 homes, which are known to compromise methodological rigor in studies (Kuske, et al. 2009).  
53 Staff shortages, absence, turnover and reluctance to participate resulted in missing data,  
54 with only a total of 50 staff (out of 106 approached, of whom 82 consented) completing  
55 questionnaires. Staff reluctance may have been exacerbated by conducting the research in  
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3 non-NHS care homes, where there is no financial recompense available (Wenborn et al.  
4 2013). All of the difficulties above compromised the statistical power of the analysis, and  
5 some measures (adverse events, staff turnover and sickness) not even analysed statistically  
6 due to concerns about the accuracy of the data provided. The research team encountered  
7 several data collection challenges. Particularly in Home A, staff were reluctant to take part in  
8 the study, lack of management support against a background of staff shortages and  
9 turnover.

### 16 17 ***Implications for future research and practice***

18 In retrospect, this study suggests that despite the expertise of the CCSEP trainers, staff  
19 might have felt apprehensive about the training style. Featherstone et al., (2009) noted that  
20 staff training is usually drawn with 'detective work' (e.g. what is going wrong in here) rather  
21 than applying the 'Columbo' style (e.g. putting together available information or clues). The  
22 Columbo style allows understanding the needs for residents and staff; this might facilitate the  
23 culture of change in care homes. Moniz-Cook et al., (1998) suggests that it is unlikely that  
24 effects are maintained over time without the use of follow-up support. A recommendation to  
25 improve Positive Psychology with theatre and film-based staff training may be implementing  
26 a follow-up supervision method once the training has been completed.

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33 Results suggest that it can be feasible to implement CCSEP in care homes, subject to the  
34 manager's support and organisational skills. CCSEP has the potential to be successful if the  
35 manager has good communication skills and is inspired to support the implementation of  
36 different activities, such as setting up a 'film studio' within the care home. These elements  
37 may support the feasibility of staff training like CCSEP and could be seen as predictors of  
38 care culture change. As illustrated in Home A, a care setting willing to introduce CCSEP staff  
39 training might encounter difficulties if there is regular manager turnover and staff shortage  
40 organisational patterns. Donoghue & Castle (2009) found that there is an association with  
41 staff turnover and the manager's leadership style to induce culture change and activities. This  
42 study has demonstrated some of the methodological challenges involved in studying the  
43 care home workforce. The time needed to do engage with the manager therefore needs to  
44 be incorporated into the study protocol and timetable.

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53 One of the strengths of this evaluation lies in its application of standardised outcome  
54 measures for social interaction, self-efficacy, learning transference, approaches to dementia  
55 care. There are staff training interventions analysing the impact of staff training on residents  
56 (Whitaker et al., 2014) yet lacking research assessment on staff. Nevertheless, this study's  
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3 results are in line with Goyder et al., (2012) where 'Hopeful' approaches towards people with  
4 dementia increased, as well as the 'Building-relationships' subscale indicating that  
5 relationships with residents and staff increased.  
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### 8 9 **Conclusion**

10 The CCSEP is a staff training intervention, based on the Positive Psychology framework,  
11 which aims to change the culture of care in care homes. The results of this study provide  
12 little empirical evidence about the efficacy of this staff training programme although the small  
13 sample size is acknowledged. Some significant improvement in staff attitudes to people with  
14 dementia, and staff sense of competence were found in one of two homes. It is likely that the  
15 organisational problems affecting the other care home limited the efficacy of the intervention  
16 there. The results therefore suggest that when a supportive management structure is in  
17 place, CCSEP may be more effective in increasing and improving staff-resident interaction.  
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### 23 24 **Conflict of Interest**

25 None  
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### 28 29 **Description of authors' roles**

30 X,Y,Z designed the study. x collected, analysed data, and drafted the manuscript. y  
31 supported data collection. Z,A supervised the project and provided expert advice. All authors  
32 agreed the final manuscript.  
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**Table 1. SCEAM Environmental Building use scores (% of total score)**

<b>Domain</b>	<b>Home A</b>	<b>Home B</b>
Privacy	79	81
Personalisation	78	83
Community	85	84
Safety and Health	88	84
Support for Physical frailty	72	71
Awareness of outside world	73	73
Choice & Control	84	71
Support for Cognitive frailty	46	52
Comfort of the environment	70	79
Normalness & Authenticity	73	75
Provision for Staff	86	71



Table 2. Demographic characteristics of staff participants

Staff	Home A (n=19)	Home B (n=31)
<b>Age group in years (%)</b>		
(18-30 years old)	26%	19%
(31-40 years old)	21%	13%
(41-50 years old)	37%	29%
(51-60 years old)	16%	32%
(61+ years old)		2%
<b>Gender</b>	14 F/ 5 M	30 F/ 1M
<b>Ethnicity (n, %) Black (Caribbean/African)</b>	5%	-
<b>Asian (Indian/other)</b>	11% / 21%	-
<b>White (British/European)</b>	63%	100%
<b>Job occupation (n)</b>		
<b>Care staff</b>	8	17
<b>Nurses</b>	1	-
<b>Management staff</b>	2	5
<b>Housekeeping</b>	5	5
<b>Kitchen staff</b>	1	4
<b>Activity Co-ordinator</b>	1	-
<b>Trainer Staff</b>	1	
<b>Time Length working in Care Home</b>		
(less than a year)	-	16%
(1-5 years)	53%	45%
(6-10 years)	47%	16%
(10+ years)	-	23%
<b>Time Working in Care Sector</b>		
(less than a year)	-	7%
(1-5 years)	53%	42%
(6-10 years)	32%	16%
(10+ years)	16%	35%
<b>Staff Training</b>		
<b>NVQ (%)<sup>a</sup></b>	37%	61.29%
<b>Care Home Mandatory Training (%)</b>	100%	100%
<b>Care Training (%)<sup>b</sup></b>	5.26%	6.45%

<b>Dementia Awareness (%)</b>	47.36%	22.58%
<b>Interventions (%)<sup>c</sup></b>	73.68%	9.67%
<b>Higher Education (%)<sup>d</sup></b>	5.26%	9.67%
<b>Miscellaneous Qualification (%)<sup>e</sup></b>	26.31%	-

<sup>a</sup> NVQ Level 1,2, 3,4 – A UK work-related National Vocational Qualification in Health and Social Care

<sup>b</sup> End of Life Care

<sup>c</sup> Butterfly Project; Yesterday, Today and Tomorrow; Being a Star (Home A)  
EDEN-Alternative (Home B)

<sup>d</sup> Nursing; Psychology Degree; Open University Health & Social Care Degree

<sup>e</sup> Parkinson's Training; Certificate in Teaching in the Lifelong Learning Sector (CTTLS Level 4)

For Peer Review

Table 3. Care Home Measures

Settings	Turnover			Sickness			Falls			Compliments			Complaints		
	Pre	During	Follow-up	Pre	During	Follow-up	Pre	Post	Follow-up	Pre	During	Follow-up	Pre	During	Follow-up
Home A	3	17	21	34	40	31	90	115	72	30	0	22	30	8	Not available
Home B	10	0	5	27	4	5	65	54	48	4	360	270	0	0	0

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For Peer Review

Table 4. Staff outcomes in Home A (n=19)

Measures	BASELINE		POST TRAINING		CHANGE		
	Mean	SD	Mean	SD	Mean	SD	P Value
<b>SCIDS-Total</b>	50.08	10.91	50.75	9.06	-0.66	5.99	0.707
<b>SCIDS-Professionalism</b>	16.00	2.73	15.91	2.93	0.83	2.93	0.923
<b>SCIDS-Building relationships</b>	11.66	2.67	12.0	2.55	-0.33	0.65	0.104
<b>SCIDS-Care challenges</b>	10.75	3.64	11.00	2.69	-0.25	2.66	0.751
<b>SCIDS-Sustaining personhood</b>	11.66	2.90	11.83	2.12	-0.16	1.99	0.777
<b>ADQ-Total</b>	65.63	13.47	63.00	7.69	2.63	9.61	0.385
<b>ADQ-Hope</b>	27.27	5.17	28.54	6.39	-1.27	4.62	0.383
<b>ADQ-Person Centred</b>	39.08	10.08	34.50	3.17	4.58	9.25	0.114
<b>JSI</b>	79.37	12.04	75.62	13.08	3.75	4.71	0.059
<b>BLTSI</b>	55.00	6.04	59.54	6.93	-4.54	7.43	0.070
<b>SPANE-Positive</b>	19.81	4.42	20.54	4.78	-0.72	3.22	0.472
<b>SPANE-Negative</b>	17.72	4.88	16.00	7.49	1.72	5.96	0.360
<b>VAS</b>	54.00	24.12	61.00	20.24	-7.00	16.36	0.209

Table 5. Staff outcomes in Home B (n=31)

Measures	BASELINE		POST TRAINING		CHANGE		
	Mean	SD	Mean	SD	Mean	SD	pValue
<b>SCIDS-Total</b>	48.84	12.46	52.65	7.90	-3.80	11.92	0.116
<b>SCIDS-Professionalism</b>	15.89	4.09	16.25	2.63	-0.35	3.92	0.634
<b>SCIDS-Building relationships</b>	10.14	2.75	11.46	2.06	-1.32	2.52	0.010 *
<b>SCIDS-Care challenges</b>	11.03	3.67	12.00	2.65	-0.96	3.31	0.152
<b>SCIDS-Sustaining personhood</b>	11.89	3.14	12.82	2.09	-0.92	3.34	0.153
<b>ADQ-Total</b>	74.92	7.36	72.64	15.15	2.28	12.78	0.353
<b>ADQ-Hope</b>	29.46	4.44	31.42	4.12	-1.96	4.00	0.015 *
<b>ADQ-Person Centred</b>	45.46	4.94	41.21	12.46	4.25	11.84	0.068
<b>JSI</b>	75.44	27.34	83.66	23.84	- 8.22	16.31	0.169
<b>BLTSI</b>	61.53	8.74	43.42	10.78	18.10	11.24	0.0001*
<b>SPANE-Positive</b>	24.92	3.95	24.21	3.79	0.71	3.99	
<b>SPANE-Negative</b>	11.40	3.27	11.88	3.48	- 0.48	3.93	0.531
<b>VAS</b>	85.17	13.84	84.28	15.49	0.89	17.42	0.788

(\*) statistically significant

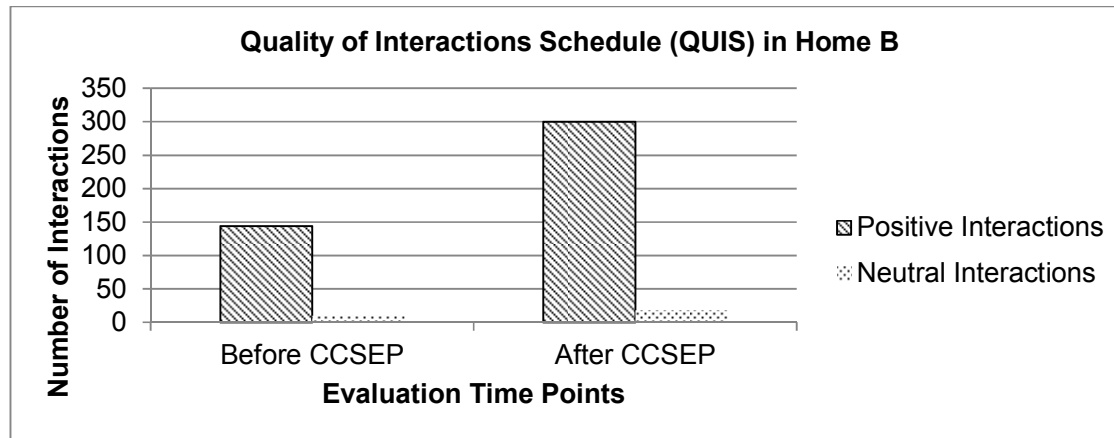


Figure 1. Chi-square was used to measure change in the type of interactions before and after the training. There was an major increase in positive interactions after the CCSEP and this reached statistical significance ( $p=0.0001$ )