

Care staff and the creative arts: Exploring the context of involving care personnel in arts interventions

Emma Broome¹

Professor Tom Dening¹

Professor Justine Schneider²

Professor Dawn Brooker³

¹Division of Psychiatry and Applied Psychology, University of Nottingham, Institute of Mental Health, Jubilee Campus, Triumph Road Nottingham, NG7 2TU

²School of Sociology and Social Policy, University of Nottingham, Institute of Mental Health, Jubilee Campus, Triumph Road Nottingham, NG7 2TU

³Association for Dementia Studies, Institute of Health and Society, St Johns Campus, University of Worcester, Worcester, WR2 6AJ

Correspondence:

Emma Broome

E-mail: emma.broome@nottingham.ac.uk

Telephone: 0115 748 4098 ext 84219

Institute of Mental Health, Jubilee Campus, Triumph Road Nottingham, NG7 2TU

Abstract:**Background:**

Arts-based interventions play an important role in the care of people with dementia. Yet, creative arts are seldom implemented as a tool to enhance the care and wellbeing of people with dementia.

Methods:

We examined the involvement of care staff in creative arts activities in residential care. Aspects of involvement which appear to influence outcomes in people with dementia were identified and analysed. A broad systematic literature search of MedLine, EMBASE, PsychInfo, CINAHL, ASSIA, ACOPUS and Web of Science led to the identification of 14 papers. The studies identified through the search process were examined in terms of intervention, context, mechanism and outcome and the relationships between these aspects.

Results:

Training sessions were identified as an opportunity to educate care personnel on useful techniques which are relevant to daily care practice. Evidence from the literature suggests that creative arts programmes play a significant role in the way staff and residents interact and as a result influence the care practice of staff. Under certain conditions creative arts programmes, that involve and engage staff, facilitate enhanced interactions and improve care strategies, which leads to the recognition and validation of personhood in residents with dementia.

Conclusions:

These findings provide a basis for illustrating which elements of care staff involvement in creative arts programmes could be implemented in residential care contexts in order to have the upmost benefit.

Word Count: 223

Keywords: Dementia, Alzheimer's Disease, Psychosocial Interventions, Residential facilities

Running title: Care staff and the creative arts: a review

Introduction

The World Alzheimer's Report 2015 (Prince et al. 2015) estimates that 46.8 million people are living with dementia worldwide; this number is set to rise to approximately 74.7 million by the year 2030. The impact of dementia is great; it is estimated that the global economic cost of dementia exceeds US \$800 billion (Prince et al., 2015). In the United Kingdom (UK), the social care cost of dementia is calculated at £10.3 billion, 39.2% of the total estimated economic impact (Alzheimer's Society, 2014); this comprises of funding by both local authorities, people with dementia and their families. There are over 30,000 homes in England registered with the Care Quality Commission (2015), as such, provide the majority of institutional care for older people. Of the 850,000 people living with dementia in the UK, 280,000 people with dementia are living in care homes (Alzheimer's Society, 2016).

Dementia has become a national government priority in the UK, yet a cure is still elusive. Initiatives such as the "National Dementia Strategy" (UK Department of Health, 2009) aim at improving dementia services across the United Kingdom. Person-centred care has become a cornerstone of government policy and is recognised as best practice in health and social care provision (NICE, 2006).

The undertaking of person-centred care is to maintain identity and worth, in the face of cognitive impairment, through a partnership of positive interactions and communication strategies (Kitwood, 1997). Integrating the arts within the care provision for older adults could be a means of achieving a person-centred focus by responding to a person's abilities, stimulating new interests and developing skills. UK Department of Health standards (2003) require that care homes provide opportunities for residents to engage in meaningful activities in terms of their capabilities and preferences. Increasingly, arts-based interventions have

been suggested to play an important role in the care of people with dementia. Participation in creative activities is considered to promote motivation, purpose and hope which contribute to successful ageing (Fischer & Sprecht, 2009). Ullán et al. (2011) discovered that people with dementia were capable of participating in an artistic educational programme; proving to be a positive experience and contributing to a person's sense of wellbeing. A review conducted by Young et al. (2015) evidenced a range of cognitive benefits including attention, memory, communication and engagement. Creative therapy sessions within day treatment and inpatient NHS organisations resulted in positive observational outcomes including engagement, communication and enjoyment (Rylatt, 2012). Despite the demonstrated efficacy of these results, little time is available for or dedicated to providing social and emotional support to residents (Schneider et al., 1997). Furthermore, it is often the case that the provision of stimulating activities is an unmet need of residents with dementia in care homes (Hancock et al., 2006).

Study Aims

The aim of this review is to explore the involvement of care staff in creative arts interventions in residential care. Through the examination of previous research, aspects which influence outcomes in people with dementia are identified and compared; correlations are drawn from the results and used to ascertain which features of practice could be further explored in therapeutic interventions in populations with dementia.

The study questions included:

- In what context are care personnel involved with creative arts programmes in residential care?
- What outcomes are influenced by care staff involvement in creative arts programmes?

- What are the mechanisms which influence outcomes when care personnel are involved in creative arts programmes?

Methods

Search Strategy

A broad literature search of the following databases was conducted: Medline, PsychInfo, Embase, CINAHL, ASSIA, Scopus and Web of Science. As this is an emerging field, only papers from 2000 were considered for inclusion. Table 1 illustrates how the search combinations were employed. The search terms were developed iteratively to focus the review question.

Insert Table 1 about here

Selection and appraisal of documents

Titles and abstracts of the studies identified through the electronic literature search were screened by the first author for relevance to the review questions. This process was reviewed in interdisciplinary research meetings with the other authors. The inclusion criteria were broad in order to include a large number of studies. Studies were included if they (i) pertained to persons with dementia (ii) were conducted within the context of a health care setting such as a residential care home/or nursing home and (iii) made reference to the interaction of professional care staff with the creative arts intervention. A broad description of creative arts interventions was utilised, which included art therapy, music, drama, dance, poetry and visual art. No restrictions were placed on the form of creative arts intervention, as

the aim of the review was to explore the context of care staff involvement with creative arts programmes, rather than their efficacy.

Once the inspection of the titles and abstracts was complete, the full text was obtained. These remaining papers were assessed using a selection tool adapted from a realist review protocol conducted by Jagosh et al. (2011). The questions were modified in accordance with the aim and review questions developed in this review.

1. Does the full text paper still indicate creative arts programme research?
2. Does the full text paper indicate that creative arts programmes take/took place?
3. Does the full text paper describe the research setting? (For example, by indicating residential care, nursing home, care home)
5. Does the full text paper describe creative arts programme outcomes?
6. Does the full text paper describe the processes or contexts?

Results

The initial database literature search identified 3198 papers. The titles were screened using the selection tools specified above. Subsequently, 3021 records were excluded as they were deemed to be not relevant based on the identification questions, for example not relating to a creative arts programme, populations with dementia or residential care context. 148 potentially relevant articles abstracts were screened using the selection tool. This was followed by the full text retrieval of 102 papers. 14 papers met the eligibility criteria. Nine of these papers were conducted in Europe, four in North America and two in Australia.

Data Extraction

Once the full text was obtained, the data was recorded in a bespoke data extraction form. Data synthesis was approached by identifying and extracting information relating to the intervention, context, mechanisms and outcomes related to research questions. The process of data extraction was iterative; as the literature review progressed the full text was screened several times in an attempt to identify the workings of a particular programme (Wong et al., 2013). Characteristics recorded were: authors, publication date, research design, method of assessment, intervention and summary of reported outcome, however this list is by no means exhaustive.

Intervention Characteristics

There were variations in the type of creative arts interventions as well as methods of implementation in dementia residential care facilities. Table 2 evidences a summary of the articles. A number of papers (n = 6) explored music as a creative arts intervention. Four studies examined the effect of music therapy implemented by a certified music therapist (Tuckett et al., 2015; Matthews et al., 2008; Hung Hsu et al., 2015; Pavlicevic et al., 2015). Götel et al. (2009) employed an experimental design to investigate the impact of pre-recorded background music and caregiver singing on emotional expression during morning care routines. Three studies evaluated forms of dance therapy; however there was no standardised method of implementation. Two studies concentrated on forms of dance therapy and their effect on people with dementia in care (Duignan et al., 2009; Guzmán-García et al., 2012). In comparison to using a specified form of dance therapy, one paper introduced social dancing in the form of a large dance event hosted once per month attended by residents and care staff (Palo-Bengtasson & Ekman, 2002). Two literature based service evaluations explored the role of shared reading on outcomes in people with dementia (Billington et al., 2013; Gregory, 2011). Only one study specifically focussed on the use of drama. Kontos et al. (2010)

utilised a drama-based educational intervention with the aim of improving person-centred care in dementia practitioners in North America. Other research conducted in the U.S evaluated the creative expression programme, TimeSlips (Fritsch et al., 2009; George & Houser, 2014).

INSERT TABLE 2 ABOUT HERE

Only seven articles included in this review reported demographic information for the care staff who participated in the arts activity. Table 2 documents the demographic information provided by the authors including gender, age, length of employment and job title. It emerged that most of the care personnel involved in the programmes were qualified nurses or personal care assistants (Fritsch et al. 2009; Götell et al., 2009; Kontos et al., 2010; Tuckett et al., 2015); only one article reported that designated activity staff had participated in the creative sessions (Fritsch et al., 2009). The length of employment for most participants ranged from less than one to nineteen years; however the impact of length of service or previous work experience was not critically evaluated in any of these articles. Two studies reported that staff had received dementia specific training (Fritsch et al., 2009; Guzmán-Garcia et al. 2012); however no details were provided of the content of this training.

INSERT TABLE 3 ABOUT HERE

Context

Six of the selected studies reported training for care staff. Two studies utilising TimeSlips as a form of creative arts intervention opted to train care staff in the creative intervention itself with a view that staff would facilitate the sessions themselves (Fritsch et al., 2009; George and Houser, 2009). Fritsch et al. (2009) invited care staff to participate in a one day workshop facilitated by a certified TimeSlips trainer. In contrast, George and Houser

(2014) introduced TimeSlips via a one hour training session for care staff; staff then became involved with the process of facilitating the programme alongside the principal investigator for two sessions per week over a period of six weeks.

Some researchers investigated the impact of training care staff in certain aspects of creative practice. For example, Hung Hsu et al. (2015) opted to show post-therapy video presentations to care staff with the aim of imparting knowledge of methods and techniques of music therapy for staff to apply in their own practice. Similarly, Mathews et al. (2008) conducted an in-service training workshop to teach care staff how to employ music therapy techniques.

The specific aim of Kontos et al. (2010) was to utilise drama as an educational modality with a view to influencing the direct care of staff. Care personnel were introduced to a 12 week arts-informed educational programme, including critical reflection, role-play and dramatized vignettes. Similarly, the 'Try to Remember' poetry intervention (Billington et al., 2013) included a complementary skills training workshop facilitated by a poet.

Active Participation

Other creative arts interventions included encouraging staff to assist in the facilitation of respective creative arts programmes within their workplace. In a study conducted by Götel et al. (2009), staff participated in an experimental music project to compare the impact of music on emotional expression in morning care routines. Care staff continued with their usual practice but the morning care routine was supplemented with background music, or by carers singing to the resident. Likewise, care personnel who assisted in the facilitation of the Danzon psychomotor intervention commented that the dance was easy to learn and was an

opportunity to interact with residents outside of their professional caring role (Guzmán-García et al., 2012).

Several studies report outcomes when staff attend creative arts sessions in what could be assumed to be a purely supportive or practical role (Billington et al., 2013; Duignan et al., 2009; Palo-Bengtsson & Ekman, 2002). In their results, Guzmán-García et al. (2012) categorised the benefits for spectator-residents and those who observed but could not actively participate. Similarly, Billington et al. (2013) reported benefits for those not actively involved in discussions in the “Get into Reading” programme; active listening was perceived to alleviate emotional symptoms.

Environmental Factors

Environmental factors affected the facilitation of the creative arts programme and the way in which care staff could participate. There was a consensus among researchers that the creative arts programme should take into account the daily routine of the environment (Billington et al., 2013; Hung Hsu et al., 2015; Kontos et al., 2010; Tuckett et al., 2015).

The nature of the setting was commonly found to influence levels of engagement and to create logistical challenges. Pavlicevic et al. (2015) identified how social geography can impact the efficacy of music therapy and that therapists should be aware of these limitations and the potential risks for residents. Other limitations included staff shortages, limited financial and practical resources, and overemphasis on task-oriented care (Gregory, 2011; Guzmán-García et al., 2012; Hung Hsu et al., 2015; Tuckett et al., 2015).

Despite the limitations highlighted by the researchers, the majority of the literature suggested that creative art programmes were well received by care personnel. Guzmán-García et al. (2012) reported that staff wished the management would continue to provide the dance psychomotor intervention; particularly as they believed it to be more cost effective than hiring external entertainment. One study highlighted how staff reported wishing to continue the programme outside of their working hours (Duignan et al., 2009). Moreover, staff reported that working together creatively to overcome practical logistics fostered a sense of camaraderie (George and Houser, 2009).

Outcomes

Clinical outcomes for residents

Nine studies demonstrated, through a mixture of quantitative and qualitative methods the impact of the creative art intervention on the symptoms of dementia. Three papers, utilising behavioural scales, indicated that their respective creative arts programmes had a positive impact on the symptoms associated with dementia (Billington et al., 2013; Hung Hsu et al., 2015; Duignan et al., 2009). In turn, qualitative studies, including interviews and focus groups with care staff, predominantly reported positively altered behaviours in residents with dementia, including diminished aggressiveness (Götel et al., 2009; George and Houser, 2009; Guzmán-García et al., 2012). These findings were supported in exploratory research to explore the meaning, value and effectiveness of music therapy (McDermott et al., 2014; Tuckett et al., 2015).

Communication

Five studies discussed elements relating to communication of residents with dementia who participated in a creative arts programme. This was reported by researchers in two ways; namely by demonstrating an increase in communication in persons with dementia and the way in which staff gained an improved understanding of communication through their participation.

Care staff perceived that there was increase in verbalisations and self-expression in residents who had participated in the creative arts programme, particularly in those with limited verbal capacity (George and House, 2014; Hung Hsu et al., 2015). Duignan et al. (2009) described how residents who previously were unable to express themselves verbally used Wu Tao as an opportunity for expression. This was documented through the interaction between residents and staff, notably increased communication and the development of what was perceived to be a therapeutic bond. Similarly, staff described how their participation in the video presentation sessions improved their interaction techniques with residents which had enhanced their communication and subsequent relationship with their residents (Hung Hsu et al., 2015). This was highlighted in the 'Try to Remember' evaluation where staff placed value on the one-to-one communication which enabled them to interact with their residents (Gregory, 2011).

Using qualitative content analysis, Götel et al. (2009) revealed that compared to a control setting (no music) communication improved; the person with dementia was perceived to be more responsive to the caregiver and positive emotions were more predominant. Overall, music was perceived to increase the mutuality of communication.

Engagement

Four studies explored issues pertaining to the engagement of people with dementia during creative arts programmes. Two studies utilising self-developed time sampling observation techniques discovered higher levels of engagement and alertness; both studies reported high levels of interrater reliability. Together these factors were considered to improve increase staff resident interactions, social interactions and social engagement and improve meaningful engagement (Fritsch et al., 2009; Mathews et al., 2008). Video observations support these results documenting positive reactions to dance interventions and an increase in responsiveness in people with dementia towards caregivers during experimental music conditions (Palo-Bengtsson and Ekman, 2002; Götel et al., 2009).

Care Practice

Staff-resident interaction

Creative arts programmes appear to play a significant role in the way that staff and residents interact and as a result influence the care practice of staff. A few studies emphasised that staff found it important to decipher the needs of the residents and that this could be achieved through interaction (Kontos et al., 2010; Hung Hsu et al., 2015). Some research suggested that the opportunity to participate in meaningful interaction, as opposed to regular caring routines, was a factor in improved staff-resident interactions (Billington et al., 2013; Duignan et al., 2009; George and Houser, 2009; Gregory, 2011). The meaningfulness of an interaction was theorised to play a role in the positive attitude between staff and residents (Duignan et al., 2009) and developing a deeper understanding of residents (George and Houser, 2009).

Challenging existing perceptions

A predominant theme in the literature was how creative arts interventions encourage carers to examine their existing perceptions of people with dementia and to recognise them as individual people beyond the limitations of the disease. Fritsch et al. (2009) used a self-constructed inventory to measure attitudes towards persons with dementia to show how care staff who participated in TimeSlips came to hold more positive views and were less likely to devalue persons with dementia. They suggested that improving staff attitudes towards people in care positively influences the care that residents receive. Moreover, their quantitative data supported this supposition, with significant increases on scales of social interaction, caring touch, verbalisation and eye contact. Thus, the researchers inferred that the TimeSlips programme had the capacity to enhance the quality of life of people with dementia in residential care (Fritsch et al., 2009).

It was also suggested that creative arts programmes allow staff to focus on their residents' strengths and competencies as opposed to the losses associated with dementia (George and Houser, 2009; Götel et al., 2009).

Enriched Knowledge

Studies reported that arts programmes increase the interest of care staff in the personal histories of their residents. Qualitative data analysed by Gregory (2011) suggested that reminiscence-based poetry provided care staff with more information, beyond basic care information, about their residents' lives. Likewise, Hung Hsu et al. (2015) discovered that staff appreciated gaining insight into the cognitive functioning and causation of symptoms in their residents. Focus group data from Pavlicevic et al. (2015) described how music therapists perceive music therapy as a way of enabling staff to see beyond the diagnosis of dementia; particularly when care personnel engage in shared musical participation. Like the

aforementioned studies, Pavlicevic et al. (2015) perceived that music, as a creative medium, encourages care staff to think about residents on a deeper level, beyond the caring role which leads to a change in the relationship dynamic.

Enjoyment

There was a sense that enjoyment played a role in the impact of the intervention. Several papers reflected that staff and residents enjoyed the creative arts programme, which was thought to contribute to the wellbeing of those who live and work within the setting. Pavlicevic et al. (2015) described this as the ‘ripple effect’; for example, music therapy has an impact on a “macro-level”, influencing the wider context of the care home. This theory is consistent with other papers in this review which propose, through qualitative data, that the larger community benefits from creative arts programmes. Benefits cited include an improved atmosphere (George and Houser, 2009), a sense of joy and excitement (Guzmán-García et al., 2012), and the opportunity for staff to understand the benefits of the creative arts (Palo-Bengtsson and Ekman, 2002).

Influence on care strategies

The evidence suggests that care personnel who are involved in creative arts programmes are encouraged to utilise aspects of what works and take it back to use in their daily practice. Both Guzmán-García et al. (2012) and Hung Hsu et al. (2015) found that care staff adopted specific care strategies from the creative arts programme and applied them outside of the creative session. Observations conducted using Dementia Care Mapping (Brooker and Surr, 2006) demonstrated an increase in personal enhancing interactions; however these were not statistically significant (Hung Hsu et al., 2015).

Mechanisms which influence outcomes

Creative arts programmes could be considered to allow care personnel the opportunity to interact with residents in a context outside of their practical daily care tasks, which usually focus on physical caring needs. In this sense, creative arts programmes could be deemed to facilitate positive interactions between residents and staff. This was evidenced in several studies, through enhanced communication (Götel et al., 2009; Gregory, 2011), building of trust through dance (Guzmán-García et al., 2012; Palo-Bengtsson and Ekman, 2009) and meaningful relationship-based activity (Billington et al., 2013; George and Houser, 2009). From this review, it could be suggested that involving staff in creative arts programmes potentially improves person-centred care. Mechanisms such as gaining deeper knowledge of the resident, improved communication strategies and the ability to focus on the remaining competencies of the residents were all perceived to be facilitated through the creative arts programme.

Discussion

The aim of this literature review was to explore in what context care staff are involved in creative arts activities in residential care; outcomes that are affected by staff involvement; and the mechanisms which influence outcomes. To assess these factors, the studies identified through the search process were examined in terms of intervention, context, mechanism and outcome and the relationships between these aspects.

Context

According to Hatton (2014), the emphasis on physical task-based care, including the routines of the care home, contribute to the spatial challenge of conducting arts projects in care homes; likewise similar challenges were identified in this review. Despite some authors

identifying practical limitations such as staff shortages and limited financial resources, there was limited discussion on solutions. The practicalities surrounding the implementation of an arts interventions in residential care is seldom documented, but certainly worthy of future consideration. Care staff could be deemed to play an important role in overcoming logistical challenges, as they possess intimate knowledge of the space, routines and needs of their residents.

Incorporating training sessions into the creative arts programme was one context identified in this review to involve care personnel. Through the literature search, it was apparent that the type of training offered to staff varied. This included information about context and implementation strategies of the creative arts programme (Fritsch et al., 2009, George and Houser, 2009) and knowledge and techniques about music therapy (Hung Hsu et al., 2015; Mathews et al., 2008). Results from these studies demonstrate that following training, care personnel can facilitate creative arts programmes independently. Moreover, with understanding and encouragement, care personnel can incorporate elements of music therapy into their daily practice; this can be used to minimise neuropsychiatric symptoms and improve engagement (Hung Hsu et al. 2015; Mathews et al., 2008). It is noteworthy that this aspect was most effective when care personnel were encouraged to maintain the impact of the music therapy themselves between sessions, either through diary entries or by facilitating group rhythm sessions. It could be beneficial to identify other useful methods of encouraging care staff to maintain the impact between sessions.

Several researchers make the suggestion that musical education should be incorporated into the training of care staff (Götel et al., 2009; Pavlicevic et al., 2015). This is in accordance with the National Dementia Strategy that recommends that care staff have the skills, accomplished through training and professional development, to provide the best

quality of care in their workplace (Department of Health, 2009). Similarly, the results of this review demonstrate that training sessions can act as an opportunity to educate care personnel on other useful techniques which are relevant to their daily care practice. Examples from this review include listening skills, non-verbal communication and person centred care (Gregory, 2011; Kontos et al., 2010). However, further investigation is needed to demonstrate the wider effects of providing care staff with skills to support creative programmes and their impact on quality of care.

Outcomes

This review of the literature demonstrates positive outcomes in persons with dementia who participate in creative arts programmes in residential care; these include improved communication, engagement and wellbeing by improving the quality of care of which residents receive. Positive outcomes, such as improved communication and higher levels of engagement, were depicted when care personnel facilitated or attended creative arts sessions. Extended effects were revealed in literature and dance interventions and supported by anecdotal evidence that the creative arts programme influenced the atmosphere in the setting in a positive way (Billington et al., 2013; Duignan et al., 2009; Palo-Bengtsson and Ekman, 2002).

Several of the studies identified reported that the creative arts sessions had an effect on the clinical symptoms of dementia (Billington et al., 2013; Duignan et al., 2009; George and Houser, 2009; Götel et al., 2009; Guzmán-García et al., 2012; Hung Hsu et al., 2015; McDermott et al., 2014; Tuckett et al., 2015). Many people living with dementia in long term care will experience the behavioural and psychological symptoms of dementia (Margallo-Lana et al., 2001) which can negatively impact the quality of life for both caregivers and residents (Shin et al., 2005). It could be inferred that creative arts sessions,

through symptom reduction which consequently improves quality of life, contributes to upholding the wellbeing of residents and those who care for them.

In terms of staff wellbeing, there is some evidence that participating in creative arts sessions had a positive effect. In particular, interactions facilitated through creative interventions, were identified as a way to discover more about the residents' needs and personal histories beyond the scope of general physical care. For example, creative interventions provided a means for a deeper personal connection between staff and residents (Götel et al., 2009), improved understanding of communicating with residents with dementia (Duignan et al., 2009; George and Houser, 2009; Götel et al., 2009; Gregory, 2011; Hung Hsu et al., 2015), and an increase in understanding of residents' needs and cognitive abilities (Hung Hsu et al., 2015; George and Houser, 2014). All of these aspects could be assumed to improve the caregiving relationship. In the case of Duignan et al., (2009) staff self-identified the dance sessions as positively influencing their well-being, describing the session as enjoyable and relaxing. One study which measured the job satisfaction and burnout among care personnel reported no significant difference between the creative intervention and a control group (Fritsch et al., 2009). However, the authors did report that the creative arts activity fostered meaningful engagement between the caregivers and their patients (Fritsch et al., 2014), which we could cautiously assume impacts the wellbeing of those in the care setting.

Mechanisms

Knowledge of an individual's life history and empathy are essential elements of maintaining the identity of someone living with dementia (Kitwood, 1997). Studies in this review reported that staff who participated in the creative arts programme had a deeper

understanding of those in their care by discovering details of residents' personal histories. Ultimately, this knowledge resulted in staff holding more positive views about their residents, leading to them being treated with greater empathy. These elements correspond with Brooker's (2015) VIPS framework, in which part of the process of embedding person centred care is "treating people as individuals, appreciating that all people with dementia have a unique history, identity, personality and physical, psychological, social and economic resources, and that these will affect their response to cognitive impairment" (p12).

Likewise, studies which prepared staff for deciphering the needs of the residents had positive outcomes in terms of wellbeing, improved care practice and a reduction in the behavioural problems often associated with dementia (Hung Hsu et al., 2015; Götell et al., 2009). Within the framework of person-centred care, this corresponds with the potential of the creative arts to provide staff with a deeper understanding of residents, including regard of their abilities and limitations prompting staff to become more empathetic and sensitive to the residents' needs in what could be construed as validation.

Limitations of this review

Most of the studies within this review were employed within experimental literature; therefore, the results are not generalizable to most care homes which have to pay for artists or creative programmes on an ongoing basis. However, the fact that staff can learn how to facilitate sessions and encouraged to maintain impact is one of future investigation. A further limitation of this review is the way in which to draw comparisons between differing approaches. The studies collated differed in terms of intervention, data collection and analysis. In addition, many of the studies included small sample sizes, making it difficult to generalise improvements across wider contexts. Although previous literature has explored

the efficacy of arts interventions, the novelty of this review is its focus on aspects of care staff involvement in creative arts interventions.

Conclusions and future recommendations

This analysis demonstrates that there are benefits for both staff and residents when care personnel become actively involved in creative arts programmes. Under certain conditions, creative arts programmes in residential care that involve and engage staff bring about enhanced interactions and improve staff care strategies, which leads to the recognition and validation of personhood in residents with dementia.

The majority of studies demonstrated some positive implications for care practice when care personnel are involved in creative arts programmes, regardless of the level of participation. It could be reasoned that there are additional benefits when incorporating a level of staff training, for example it could contribute to creating a sustainable long term and low cost approach to maintaining creative arts programmes in residential care. Moreover, several researchers make the recommendation that care staff should be trained with regard to particular modes of creative arts for example music (Hung Hsu et al., 2015; Pavlicevic et al., 2015).

The findings from this study add to the body of knowledge regarding the creative arts in residential dementia care by distinguishing which mechanisms of creative arts interventions are effective in improving outcomes when care personnel are involved in creative arts activities. There are a number of directions for future research. The creative arts have been identified a means of improving person-centred care; consequently, research should attempt to identify the impact of staff involvement in creative arts programmes on the

quality of care for people with dementia receive in residential care. Furthermore, we could consider the effect of the creative arts programme on professional caregivers, including the wider context of the care home, which would have broader implications for the people in their care. There is a flourishing of creative arts in dementia, and much innovation is happening in care homes. The potential to improve the quality of life of people with dementia is great; evidence needs to be brought to the field so that development proceeds in the most promising areas.

Conflict of Interest

None.

This work was supported by funding from Alzheimer's Society (grant number Ref: 225 (AS-DTC-2014-031)) and was carried out as part of a collaborative project of the University of Nottingham and the University of Worcester

Description of author's roles

EB, TD, JS formulated the research questions. EB conducted the literature searches, reviewed the papers, drafted the manuscript. TD, JS, DB revised the manuscript.

References

Alzheimer's Research Trust. Dementia 2010: the economic burden of dementia and associated research funding in the United Kingdom report. University of Oxford, Alzheimer's Research Trust, 2010.

Alzheimer's Society. Dementia 2014 Infographic. [online] Available at:
<http://www.alzheimers.org.uk/infographic> [accessed 10th September 2015]

Alzheimer's Society. Fix Dementia Care: NHS and care homes. [online] Available at:
https://www.alzheimers.org.uk/download/downloads/id/3026/fix_dementia_care_nhs_and_care_homes_report.pdf [accessed May 28th 2017]

Billington, J., Carroll, J., Davis, P., Healey, C., Kinderman, P. (2013). A literature-based intervention for older people living with dementia. *Perspectives in Public Health*. 133, 165-173. doi: 10.1177/1757913912470052

Brooker, D., and Surr, C. (2006) Dementia-care mapping (DCM): initial validation of DCM in 8 UK field trials. *International Journal Geriatric Psychiatry*. 21, 1018-25.

Brooker, D. and Latham, I. (2015). Person-centred dementia care. Second Edition. London: Jessica Kingsley.

Care Quality Commission. Care Homes. At: <http://www.cqc.org.uk/content/care-homes>
Accessed 16/1/15

Cohen-Mansfield, J. (1986). Agitated behaviors in the elderly II. Preliminary results in the cognitively deteriorated. *Journal of the American Geriatrics Society*. 34: 711-721.

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, 2308-2314.

Department of Health. (2003) Care Homes for Older people: National Minimum Standards. (3rd edition). London. TSO. [Accessed 18th September 2015]

Department of Health: Living Well with Dementia: a National Dementia Strategy. London: Department of Health; 2009

Duigan, D., Hedley, L., Milverton, R. (2009). Exploring dance as a therapy for symptoms and social interaction in a dementia care unit. *Nursing Times*. 105 (30), 19-22.

Fischer, B. J., Sprecht, D. K. (1999) Successful aging and creativity in later life. *Journal of Aging Studies*. 13 (4), 457-472.

Fritsch, T., Kwak, J., Grant, S., Lang, J., Montgomery, R. R., Basting, A. D. (2009). Impact of TimeSlips, a creative expression intervention program, on nursing home residents with dementia and their caregivers. *The Gerontologist*. 49 (1). 117-127. doi:

10.1093/geront/gnp008

George, D. R., Houser, W. S. (2014). "I'm a Storyteller!": Exploring the Benefits of TimeSlips Creative Expression Program at a Nursing Home. *American Journal of Alzheimer's Disease & Other Dementias*. 29 (8), 678-684. doi: 10.1177/1533317514539725

Götell, E., Brown, S., Ekman, S. L. (2009). The influence of caregiver singing and background music on vocally expressed emotions and moods in dementia care. *International Journal of Nursing Studies*. 46, 422-430. doi: 10.1016/j.ijnurstu.2007.11.001

Gregory, H. (2011). Using poetry to improve the quality of life and care for people with dementia: A qualitative analysis of the Try to Remember programme. *Arts & Health*. 3 (2). 160-172.

Guzmán-García, A., Mukaetova-Ladinksa, E., James, I. (2012). Introducing a Latin ballroom dance class to people with dementia living in care homes, benefits and concerns: A pilot study. *Dementia*. 12 (5), 523-535. doi: 10.1177/1471301211429753

Hancock, G. A., Woods, B., Challis, D., Orrell, M. (2006). The needs of older people with dementia in residential care. *International Journal of Geriatric Psychiatry*, 21, 43-49. doi: 10.1002/gps.1421

Hatton, N. (2014). Re-imagine the care home: a spatially responsive approach to arts practice with older people in residential care. *Research in Drama Education*. 19 (4).

Hung Hsu, M., H., Flowerdew, R., Parker, M., Fachner, J., Odell-Miller, H. (2015). Individual music therapy for managing neuropsychiatric symptoms for people with dementia

and their carers: a cluster randomised controlled feasibility study. *Bmc Geriatrics*, 15. doi: 10.1186/s12877-015-0082-4

Jagosh, J., Pluye, P., Macaulay, A. C., Salsberg, J., Henderson, J., Sirett, E., Bush, P. L., Seller, R., Wong, G., Greenhalgh, T., Cargo, M., Herbert, C. P., Seifer, S. D., Green, L. W. (2011). Assessing the outcomes of participatory research: protocol for identifying, selecting, appraising and synthesizing the literature for realist review. *Implementation Science*. 6 (24). doi: 10.1186/1748-5908-6-24

Kitwood, T. (1997). *Dementia Reconsidered: The Person Comes First*. Buckingham: Open University Press.

Kontos, P. C., Mitchell, G. J., Mistry, B., Ballon, B. (2010). Special Issue: using drama to improve person-centred dementia care. *International Journal of Older People Nursing*. 5 (2). 159-168. doi: 10.1111/j.1748-3743.2010.00221.x

Margallo-Lana, M., Swann, A., O'Brian, J., Fairbairn, A., Reichelt, K., Potkins, D., Mynt, P., Ballard, C. (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.

Mathews, M. R., Clair, A. A., Kosloski, K. (2001). Brief in-service training in music therapy for activity aides. *Activities, Adaption & Aging*. 24 (4). 41-49. doi: 10.1300/J016v24n04_04

McDermott, O., Orrell, M., Ridder, H. M. (2014). The importance of music for people with dementia: the perspectives of people with dementia, family carers, staff and music therapists. *Aging & Mental Health*. 18 (6). 706-716. doi: 10.1080/13607863.2013.875124

National Institute for Health and Clinical Excellence (2006) Dementia: supporting people with dementia and their carers in health and social care. Clinical Guideline 42. London: NICE.

Palo-Bengtsson, L., Ekman, S. (2002). Emotional response to social dancing and walks in persons with dementia. *American Journal of Alzheimer's Disease and Other Dementias*. 17 (3). 149-153. doi: 10.1177/153331750201700308

Pavlicevic, M., Tsiris, G., Wood, S., Powell, H., Graham, J., Sanderson, R., Millman, R., Gibson, J. (2015). The 'ripple effect': towards researching improvisational music therapy in dementia care homes. *Dementia*. 14 (5). 659-679. doi: 10.1177/1471301213514419

Prince, M., Wimo, A., Guerchet, M., Ali, G. C., Wu, Y.T., Prina, M. (2015) *World Alzheimer Report: 2015 The global impact of dementia: an analysis of prevalence, incidence, cost and trends*. London: Alzheimer's Disease International.

Rylatt, P. (2012). The benefits of creative therapy for people with dementia. *Nursing Standard*, 26 (33), 42-47. doi: 10.7748/ns2012.04.26.33.42.c9050

Shin, I.S., Carter, M., Masterman, D., Fairbanks, L., Cummings, J.L. (2005).

Neuropsychiatric symptoms and quality of life in Alzheimer disease. American Journal of Geriatric Psychiatry. 13. 469–74. doi: doi.org/10.1176/appi.ajgp.13.6.469

Schneider, J. (1997). (ed.) *Quality of Care: Testing Some Measures in Homes for Elderly People.* Report of a study funded through Northern and Yorkshire NHS Executive under the Department of Health Initiative. Discussion paper 1245. Personal Services Research Unit. University of Kent at Canterbury, Canterbury.

Tuckett, A. G., Hodgkinson, B., Rouillon, L., Balil-Lozoya, T., Parker, D. (2015). What carers and family said about music therapy on behaviours of older people with dementia in residential aged care. *International Journal of Older People Nursing.* 10, 146-157. doi: 10.1111/opn.12071

Ullán, A. M., Belver, M.H., Badia, M., Moreno, C., Garrido, E., Gómez-Isla, J., ... Tejedor, L. (2011). Contributions of an artistic educational program for older people with early dementia: An exploratory study. *Dementia.* 12 (4), 1-22. doi: 10.1177/1471301211430650

Wong, G., Greenhalgh, T., Westhorp, G., Buckingham, J., Pawson, R. (2013). RAMESES publication standards: realist syntheses. *BMC Medicine.* 11 (21). doi: 10.1186/1741-7015-11-21

Young, R., Camic, P., Tischler, V. (2015). The impact of community-based arts and health interventions on cognition in people with dementia: a systematic literature review. *Aging and Mental Health,* Feb 16:1-15. doi: 10.1080/13607863.1015.1011080

Table 1: Example of search in Embase

Search no.	Search Term	Results
1	Dementia or Alzheimer's Disease or vascular dementia or dementia care	204692
2	Art or art therapy or art* or arts interventions or creativity or music therapy or creative arts or drama or dance or dancing or art programmes or imagination or visual art or participatory art or meaningful activity	72086
3	Long term care or care home or nursing home or residential care or long term care facility	147009
4	1 and 2 and 3	143

Table 2: Staff Demographics

STUDY	GENDER	AGE (YEARS)	LENGTH OF EMPLOYMENT	JOB TITLE
FRITSCH ET AL. 2009	F: N = 90% M: N = 10%	Not reported	< 1 year: 17% >3 years: 65% > 10 years: 15%	Nursing assistants: 67% Activity staff: 17%
GREGORY 2011	F: N = 5 M: N = 1	Not reported	Not reported	Not reported
GÖTELL ET AL. 2009	F: N = 22	Range: 20 – 39	Range: 2-19 years	Licensed practical nurses or mental health nurses
GUZMÁN-GARCIA ET AL. 2012	F: N = 7 M: N = 2	Not reported	Range: 1-18 years	Not reported
HUNG HSU ET AL. 2015	F: N = 78% M: N = 22%	Range: 21 - 60	Range: 3 months – 7 years	Not reported
KONTOS ET AL. 2010	F: N = 22 M: N = 2	≤ 39: N = 4 40-49: N = 9 ≥ 50: N = 9 Not reported: N = 2	≤ 1 year: N = 3 1.5-3 years: N = 5 ≥4 years: N= 16	Full/part time registered nurses Personal support workers Allied health practitioners
TUCKETT ET AL. 2015	F: N = 21 M: N = 2	Not reported	Not reported	Personal care assistants: N = 10 Diversional therapists: N = 5 Nursing staff: N = 3 Not reported: N = 3

F = Female, **M** = Male,

Table 3: Study Characteristics

STUDY	NUMBER OF PARTICIPANTS	CLINICAL SETTING	INTERVENTION	DURATION	OUTCOMES
BILLINGTON ET AL. 2013 U.K	61 people with dementia 20 care personnel	3 residential care homes 1 day centre 2 hospital groups	Literature: Get into Reading	1 hour shared-reading session over a 6 month period.	NPI: symptom scores lower during reading group than at baseline Semi-structured interview themes: i) components of reading group intervention ii) enjoyment, authenticity, meaningfulness and renewed sense of personal identity iii) enhancement of listening, memory and attention
DUIGNAN ET AL. 2009 AUSTRALIA	6 people with dementia N/R care personnel	1 low-care facility	Dance: Wu Tao dance therapy	Weekly sessions occurred for 4 weeks.	CMAI: overall reduction of 6.16 in pre and post scores Questionnaire themes: i) lifted spirits of residents and staff ii) created therapeutic bond between the groups
FRITSCH ET AL. 2009 U.S	192 care personnel	20 not-for-profit nursing homes that had dementia special care units	TimeSlips: A creative storytelling technique	One, one hour session every week for 10 weeks.	Time-sampling observation: those in TimeSlips facilities were more engaged and alert, more frequent staff-resident interactions, social interactions and social engagement

GEORGE & HOUSER 2014 U.S	10 people with dementia 6 care personnel	2 discrete dementia care units	TimeSlips: A creative storytelling technique	Sessions were facilitated twice per week for 6 weeks.	Semi-structured interview themes: i) benefits for residents e.g. improved quality of life ii) benefits for staff members e.g. learning new practices iii) benefits for the nursing home community e.g. improved atmosphere
GÖTELL ET AL. 2009 SWEDEN	9 people with dementia 5 care personnel	Special care dementia unit	Music: experimental music conditions of background music and caregiver singing	27 observations (9 x 3 morning caring situations)	Qualitative content analysis: Background music improved mutuality of communication between care personnel and patient. Positive emotions were enhances, reduction in aggressiveness.
GREGORY 2011 U.K	21 people with dementia 11 care personnel	1 residential care home 1 day centre	Literature: Try to Remember poetry intervention	4 - 6 week durations	Semi-structured interview themes: i) exploring and preserving memories ii) communicating with service users iii) humanizing dementia sufferers iv) co-authorship of poems v) continuity vi) broader care context
GUZMÁN-GARCIA ET AL. 2012 U.K	13 people with dementia 9 care personnel	2 private care homes	Dance: Danzón Latin ballroom	Sessions lasted 35 minutes and were conducted twice per week for 6 weeks.	Interviews with participants, care staff and facilitators. Development of two conceptual models. Enhance positive emotional states and levels of satisfaction for people with dementia and care staff.

HUNG HSU ET AL. 2015 U.K	17 people with dementia 10 care personnel	2 residential care homes	Music: Individualised one-on-one music therapy	Once per week for a period of 5 months. Sessions were 30 minutes long.	NPI: reduction in dementia symptoms in music therapy group (13.42, 95% CI: [4.78 to 22.08; $p = 0.006$]) Dementia Care Mapping: higher levels of wellbeing in music therapy programme (-0.74, 95% [CI: -1.15 to -0.33; $p = 0.0003$]) Semi-structured interview themes: i) effect on residents ii) effect on carers and their daily practice iii) attitudes towards future training opportunities
KONTOS ET AL. 2010 CANADA	24 care personnel	2 nursing homes	Drama: arts-informed educational	2 sessions per week for 2 hours over a 12 week period	Focus group/interview themes: i) Practice outcomes included awareness that body movements convey meaning ii) seeking biographical information from family iii) increased time efficient iv) support residents' independence v) promote person-centred care practice.
MATHEWS ET AL. 2008 U.S	16 people with dementia	1 special care unit for dementia	Music: music therapy	N/R	Time sampling observation: Increase resident engagement with instruments.

MCDERMOTT ET AL. 2014 U.K	16 people with dementia 15 family carers 15 care personnel 12 music therapists	2 care homes	Music: music therapy	N/A	Qualitative thematic analysis themes: i) Here and Now ii) Who you are iii) Connectedness iv) Effects of music on mood v) Effects of music on care home environment vi) Evaluation and communication of music therapy clinical work
PALO-BENGTSSON & EKMAN 2002 SWEDEN	6 people with dementia N/R care personnel	1 dementia special care unit in a nursing home	Dance events: a local band playing popular dance music. Organised walks: small groups of people with dementia and their caregivers.	Dance event: 45 minute event once per month Organised walks: daily	Video observation themes: i) the engaged body ii) the caregivers' understanding, encouragement, and response to patients during the activity iii) mutual tenderness and communion iv) environmental conditions
PAVLICEVIC ET AL. 2015 U.K	6 music therapy practitioners N/R care personnel	Residential dementia care homes (number unspecified)	Music: music-centred improvisational music therapy	N/A	Practice-based research: Music therapy has a ripple effect: i) person to person musicking ii) musicking beyond session time iii) within the care home and beyond
TUCKETT ET AL. 2015 AUSTRALIA	23 care personnel 7 family members	2 residential care home	Music: group music therapy	Twice per week for a period of 45-60 minutes.	Semi-structured focus group themes: i) temporality ii) effect and policy

*CMAI = Cohen-Mansfield Agitation Inventory NPI = Neuropsychiatric Inventory N/R = Not recorded