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Care Home Residents' Experiences of Participating in Chair Yoga

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ABSTRACT

This study qualitatively explored care home residents' experiences of participating in chair yoga through post-intervention focus groups with 10 residents and individual interviews with three care home staff members. Older adults from two UK care homes took part in an eight-week program involving twiceweekly 30-45-minute sessions of Lakshmi Voelker Chair YogaTM. Through reflexive thematic analysis, two overarching themes were developed; experiences of chair yoga and its perceived effects. Within these themes, participants described a range of benefits - five of which were shared by residents and staff - including enjoyment, social connection, stimulation, relaxation, and the importance of teacher qualities. Staff additionally emphasized the value of yoga teachers communicating clearly with residents, having an understanding of dementia, and offering one-to-ones residents with advanced dementia. Barriers included logistical challenges such as the location of sessions within the care home, resident motivation, and limited staff availability. This paper offers insight into the experiences of participating in chair yoga, adding to a limited evidence base in this topic area.

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KEYWORDS

chair yoga; care homes; older adults; dementia; mind-body intervention; qualitative research

An estimated 400,000 older adults (over the age of 65 years) live in UK care homes (LaingBuisson, 2018). Within this population, activity levels are low (Benjamin et al., 2014) and decline with age, with only 41% of those aged 75 and over (Sport England, 2023) meeting the UK guidelines of 150 minutes of moderately intense activity a week (Department of Health and Social Care, 2019). Reduced mental wellbeing is also a prominent issue for care homes, affecting an estimated 60% of residents (Royal College of Psychiatrists, 2018). Additionally, dementia and memory problems are prevalent in 70% of UK care home residents, and residents with dementia commonly experience social isolation, and reduced wellbeing and quality of life (Age, 2018). In the UK, the term care home refers to a residential setting providing 24-hour personal care

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Activity in older adult populations may help address physical deterioration and reduced quality of life (Rejc et al., 2017). Care home managers and activity coordinators seek to address these issues by engaging residents in varied activities, including chair-based exercise (e.g., Verhoef et al., 2016). Increased physical activity is associated with improved postural stability and muscle strength (Cameron et al., 2018) and enhanced quality of life (Neville et al., 2014). Additionally, physical activity may help manage mental and physical symptoms associated with dementia (Lee et al., 2016).

Alongside evidence of individual health benefits, recent studies have explored the feasibility and acceptability of delivering structured physical movement programs within care home environments. Hurley et al. (2020) examined the efficacy of the person-centered, whole-systems Active Residents in Care Homes (ARCH) program, finding short-term increases in positive behaviors, such as resident interactions with others, and improved engagement with movement. Similarly, Forster et al. (2021) reported that the 3-month "MoveMore" program, designed to encourage movement among residents, was safe and achievable, resulting in a reduction in sedentary time compared to usual care.

Research suggests that older adults are more likely to participate in physical activity programs with a positive wellbeing focus or community element, rather than those with a negative connotation such as "falls prevention" (Yardley et al., 2007). Adherence is also higher for group-based activities compared to individual exercise (McCaffrey et al., 2017). Given their emphasis on holistic wellbeing, mind-body approaches may offer a particularly effective means of supporting engagement in physical movement among older adults living in care settings.

There has been growing interest in mind-body integrated activities, such as yoga, tai chi and mindfulness-based movement, that combine movement with breath awareness, focus and relaxation (Wang et al., 2017). These approaches have shown promise for supporting cognitive and emotional wellbeing in older adults with mild cognitive impairment and dementia. Evidence from a systematic review by Farhang et al. (2019) indicated that tai chi may improve cognitive function in older adults with mild cognitive impairment and may help reduce the risk of progressing to dementia after one year, with additional support for mindfulness-based stress reduction techniques. A meta-analysis by Wang et al. (2022) further reported a small positive effect of tai chi on cognitive function in older adults with dementia and suggested that other mind-body interventions, such as yoga and aromatherapy, may also offer emotional wellbeing benefits.

Yoga, originating in India, is an increasingly popular form of exercise (Khalsa, 2007) involving physical movements, breathing techniques and awareness-based

practices (Evans et al., 2009). Chair-based yoga is an accessible and safe activity; practices can be adapted to enable older adults or those with reduced physical and/ or mental capacity to participate (Galantino et al., 2012; McCaffrey et al., 2014; Park et al., 2014). Research suggests chair yoga for older adults may improve psychological health and self-efficacy (Bonura & Tenenbaum, 2014), reduce stress more than comparable chair aerobics or walking (Bonura & Pargman, 2009), help maintain physical fitness (Furtado et al., 2016), and improve quality of life in dementia populations (Park & Cohen, 2019). In addition, group-based delivery of chair yoga may offer important social benefits, helping to address social isolation and loneliness common in care home residents (Tobis et al., 2018; Victor, 2012).

However, research into the feasibility and acceptability of mind-body interventions specifically within care home settings is limited. Kovach et al. (2018) piloted a 4-week mindfulness program for residents with moderate to severe dementia, finding good attendance rates but challenges with participant understanding and engagement with the session content.

The current study builds on emerging evidence to explore how chair-based yoga is experienced by older adults, including those with dementia, residing in care homes, as well as by care staff involved in supporting residents to engage with the program. Prior research has tended to prioritize clinical or physiological outcomes, often overlooking the lived experiences of participants and the practical realities of delivering such interventions in care settings.

This qualitative study formed part of a larger mixed-methods research project examining the implementation and impact of chair yoga in UK care homes. While the quantitative findings on wellbeing outcomes are reported elsewhere (Frampton et al., 2024), this paper focuses on the qualitative component, which explores the experiences and perceptions of residents and care staff. By centering the voices of both residents and staff, the current study examines how a chairbased yoga program is perceived and what factors shape its delivery and acceptability. In doing so, this study contributes to a growing literature base on adapting activity interventions to meet the needs of care home residents in ways that are meaningful and feasible.

Methods

This study received ethical approval from the Health, Science, Engineering and Technology Ethics Committee for the University of Hertfordshire (protocol number LMS/SF/UH/03849) and is reported in accordance with the COREQ guidelines for qualitative research (Tong et al., 2007).

Participants and recruitment

Two care homes were purposely selected, based on their location (based in Hertfordshire) and size (at least 20 resident rooms), and agreed to take part in

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Table 1. Care	Home Participan	t Demographics	(Focus Grou	p Sample	Only).
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Characteristic	Group 1 n = 5	Group 2 n = 5	Groups 1 and 2 $n = 10$
characteristic			
Participant identifiers	G1P1, G1P2, G1P3,	G2P1, G2P2, G2P3,	G1P1 - G1P5,
	G1P4, G1P5	G2P4, G2P5	G2P1 – G2P5
Gender	4 F/1 M	4 F/1 M	8 F/2 M
Age, mean (range)	89.8 (84–97)	93.0 (86–101)	91.4 (84–101)
Dementia diagnosis, n (%)	3 (60)	1 (20)	4 (40)
ACE III	1/4 (20/80)	2/3 (40/60)	3/7 (30/70)
mild/moderate cognitive impairment, n (%)			
Activity levels in a typical week less than	4 (80)	3 (60)	7 (70)
government guidelines, n (%)			
Practiced yoga before, n (%)	2 (40)	2 (40)	4 (40)

Participants are identified by group (G1 = care home 1, G2 = care home 2) and participant number (e.g., P1). F = female; M = male; n = number of participants. Cognitive impairment was classified as mild or moderate using ACE III cutoffs (So et al., 2018). This table reports demographics for focus group participants only. Full demographic data for all yoga participants (N = 26) are presented in (citation withheld for peer review).

the study delivering the eight-week yoga program to residents. A total of 26 residents participated in the yoga sessions, and of these, 10 consented to take part in post-program focus groups. These residents formed the qualitative sample reported in this paper, alongside three staff members.

Care home staff helped the researcher identify and approach eligible participants: permanent residents with capacity to provide written informed consent or with a Lasting Power of Attorney for Health and Welfare in place who could advise and provide written consent regarding the resident's wishes to participate in the study in the case of lack of capacity. The researcher approached participants face-to-face, provided information sheets about the study, and answered their questions. Residents were excluded if they were bed bound, incapacitated due to illness, or did not have capacity and had no Lasting Power of Attorney in place. Demographic data collected included age, gender, previous experience of yoga, self-reported total minutes spent exercising in a typical week, dementia diagnosis, and cognitive capacity level (measured using version A of the Addenbrooke's Cognitive Evaluation III (ACE III; Mathuranath et al., 2000)). Demographics for the 10 residents who participated in the focus groups are shown in Table 1. Full demographic data for all 26 residents who participated in the yoga sessions are reported in the related quantitative paper (Frampton et al., 2024).

Three staff members across the two care homes, all employed as activity coordinators and who had provided support for residents during the yoga sessions, were approached face-to-face by the researcher (KF) and provided written informed consent to take part in an interview. Inclusion criteria were that the staff worked for the care home on a permanent or agency contract and had regular contact with the resident participants.

Chair yoga programme

The group yoga program attended by participants prior to the qualitative interviews is reported in detail elsewhere (Frampton et al., 2024).

Participants attended twice-weekly, 30- to 45-minute sessions of Lakshmi Voelker Chair Yoga[™] (Voelker & Oppedijk, 2023) for eight weeks, with one group running in each of the two participating care homes. The yoga practices, including physical movements, breathing, and relaxation practices, were all performed seated on chairs, with the same yoga sequence repeated across the 16 sessions.

Supportive props were used in some cases (e.g., cushions behind backs to assist spinal alignment and yoga blocks under feet to elevate the floor) to enhance comfort and act as a safety precaution to ensure stability and reduce strain. Sessions took place in a room separate from nonparticipating residents. Detailed information about enrollment, attendance rates, and reasons for nonparticipation during the program are also reported in Frampton et al. (2024), which presents the quantitative findings from the wider study.

Two yoga teachers, LO and MC, delivered all sessions across the two participating care homes. LO is a certified yoga therapist and Lakshmi Voelker Chair Yoga[™] teacher trainer, with extensive experience delivering therapeutic yoga and mindfulness sessions to older adults and individuals living with long-term and complex health conditions, including Parkinson's disease, osteoporosis, cancer, and dementia. MC is a senior yoga teacher trained in Lakshmi Voelker Chair Yoga[™] and mindfulness, with experience teaching in care home settings and working with older adults. Movements were adapted to individual ability levels, and teachers used verbal instructions and physical demonstrations to support safe participation. Precautions such as maintaining an upright spine were regularly mentioned to accommodate participants with spinal or mobility issues. Care staff were present during all sessions to support resident safety, provide practical assistance (e.g., fetching props), and offer reassurance as familiar figures.

Procedure

Following completion of the eight-week Lakshmi Voelker Chair Yoga[™] program, residents were invited to take part in focus groups to discuss their experiences of the yoga sessions. Participants were not compensated for their involvement. The yoga sessions formed part of the care home's regular activity schedule, and participation in the research was entirely voluntary. Focus groups were deemed a suitable qualitative approach for this population, with the process of recalling an experience being facilitated by other participants' comments eliciting a broad range of views and a rich dialogue (Krueger & Casey, 2009). Staff took part in individual interviews so as not to influence the residents' responses in the focus groups and to fit around the staff's individual schedules outside the chair yoga sessions. Staff were included to provide complementary perspectives on residents' engagement and to reflect on the practicalities of delivering chair yoga in care home settings.

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Both the focus groups and interviews were conducted using a semistructured interview schedule, with questions informed by previous qualitative yoga research (Evans et al., 2011; Fischer-White, 2015; Mak et al. 2017) and earlier pilot work conducted in five Hertfordshire care homes in 2018. Separate topic guides were developed for residents and staff, 12 items per schedule (see supplementary table S1). The residents' questions addressed current activity levels, perceived mental and/or physical effects of the chair yoga (if any), and their views on taking part in the sessions. Staff interview questions centered on their perceptions of the residents' experience of the chair yoga and their views on session delivery. Although the guide was not formally pilot tested for this study, the questions closely mirrored those used in the earlier pilot and were reviewed by the research team. Minor adjustments were made during data collection where needed (e.g. simplified phrasing) to support understanding, particularly among residents living with dementia.

Focus groups with residents were conducted immediately following the final yoga session [by KF, an MSc psychology graduate with training in qualitative research methods]. KF was not involved in delivering the yoga program or employed by the care homes. KF joined one of the final yoga sessions to observe delivery, but did not participate or assist in the intervention The challenge of working with this population was highlighted by only 15 of the original 26 consented participants being present in the final session (seven in one care home and eight in the other). Of these 15 participants, 10 attended the focus groups, as two participants fell asleep before the focus group began, and three declined to answer any questions. Therefore, data was collected and analyzed from 10 participants (five from each care home), with one focus group held at each home.

The duration of the focus group discussions was short (9–16 minutes) to maximize participant engagement and so as not to overburden participants with questions. Body language, such as nodding or raised hands, was noted by the interviewer on the interview schedule alongside verbal input; participants were addressed by name to encourage their input; and sufficient time was given for their responses. Additionally, the interviewer joined in the final yoga session with residents, to develop rapport prior to the focus group session. Staff interviews were conducted (by KF) within one week of the final yoga session and lasted between 13 and 21 minutes.

Data collection and analysis

Interviews and focus groups were audio recorded and transcribed verbatim, with pauses and interruptions noted in line with the Jefferson system of transcription notation (Jefferson, 2004). Head nods and shakes and raised hands were also noted in manuscript on the interview schedule. Transcripts were anonymized by group (e.g., G1 = care home 1) and participant/staff

number (e.g., P1, Staff 1). The second author, KF, analyzed the data using reflexive thematic analysis (TA; Clarke & Braun, 2021). Transcripts were semantically coded by KF and RH independently, with both researchers staying close to the words of participants. Initial memoing and analytic notes were recorded directly within the Microsoft Word transcripts. Given the limited research in the topic area to fit to the data (regarding experiences of participating in chair yoga in care homes), a bottom-up, inductive line-by-line approach was used for coding. These descriptive codes summarized the content of extracts that pertained to the research questions and anything else noted across and within transcripts (so as not to constrain analysis to only the research questions). Reflexive TA was used to identify patterns of meaning between interviews with care home residents and staff (who were passive observers to the sessions), exploring similarities and differences in experience.

Coding and theme development were subsequently managed using a combination of Microsoft Excel and manual organization, allowing for flexible tracking of codes and grouping of related content across transcripts. KF and RH met to discuss their initial codes and identify any gaps or differences. KF grouped initial codes into broader clusters that related to a common theme, resulting in 14 preliminary overarching themes. Frequency of occurrence for codes was noted (reported in supplementary table S2) to help understand differences in experiences of the yoga; however, frequency was not used to determine the relevance or importance of the coded data extracts. Relevance and sufficiency was judged based on the interpretive significance of extracts in relation to the research questions, as well as their capacity to capture patterned meaning across participants. Once preliminary themes had been developed, they were reviewed with reference to the research questions as a sense-check to ensure analysis remained focused. The iterative analytic process resulted in several revisions to the overarching themes and the development of categories and sub-categories within the themes (see supplementary figure S1). Revisions were discussed with all the authors regarding accuracy and representativeness of the data, with some categories and subcategories being relabeled to better correspond to the codes. For example, the initial code of "social aspect" was later revised to a broad category of "connection," which encapsulated three sub-categories, including "pro-social behavior," which was finally labeled as "pro-social behavior through peer support."

In line with the principles of reflexive thematic analysis (Clarke & Braun, 2021), we acknowledge the active role of the researchers in shaping data collection and interpretation. KF, who conducted all data collection and led the initial analysis, brought a personal interest in older adult wellbeing from her prior work with Mind's "Wellbeing for Later Life" scheme and her training as a chair yoga teacher. She had no previous experience working with care home residents or people living with dementia. RH, a postdoctoral researcher experienced in qualitative methods and health and care research,

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independently coded the transcripts and contributed to early theme development. The wider research team brought disciplinary and experiential diversity. LA and LO, with expertise in movement-based health interventions and yoga therapy respectively, provided input during later analytic stages. This diversity of perspectives supported reflexive engagement and informed our interpretation of the data.

Results

Demographic data for the 10 residents that took part in the focus groups is summarized in Table 1. Participants were aged 84 to 101 years, predominantly female (80%), with 40% having a diagnosis of dementia. Most participants had not practiced yoga before and 70% of participants took part in self-reported physical activity for a typical week lower than government guidelines.

Overview of the findings

Two overarching themes were developed through reflexive thematic analysis of the residents' focus groups and staff interview data: "experiences of Lakshmi Voelker Chair Yoga[™]" and "perceived effects of Lakshmi Voelker Chair Yoga[™]." These two themes served as broad conceptual groupings within which seven interpretative categories and associated sub-categories were constructed through an inductive, iterative process. While these overarching themes provide an organizing framework for the findings, analytic focus was placed on identifying shared and distinct patterns of meaning across resident and staff accounts. Five categories were shared by residents and staff, including enjoyment of the sessions, connection, important teacher qualities, stimulation, and relaxation. Two additional categories, impact of dementia on participation and potential barriers to delivery, were developed from staff interviews. A summary of the thematic structure, including categories, subcategories, and illustrative quotes, is presented in Supplementary Table S2.

Theme 1 – experiences of Lakshmi Voelker chair Yoga™

Enjoyment

Yes, it was enjoyable ... I think it has brought me closer to the group (G1P3)

Participants in both focus groups were unanimous in their enjoyment of the chair yoga sessions, particularly noting how relaxing the sessions were and that they enjoyed the group connection.

Some residents appeared eager to participate, with staff noting that a few were "waiting for me to pick them up" (G1, Staff 2) and one resident even arriving a day early for the session.:

... some of them couldn't wait for the next session. So they were remembering, they were looking forward to the next one (G1, Staff 1)

Furthermore, both participants and staff expressed a desire for the sessions to continue:

It would be good to have a refresher course every so often (G1P1)

We are going to try and get some of the people who went every single week and who enjoyed it . . . on the Monday afternoon [session] so that they can keep going with it (G1, Staff 2)

Likewise, staff were unanimous in their enjoyment of the sessions they attended, describing the sessions as "lovely" (G1, Staff 1), and relaxing for themselves too. Staff also noted the positive emotional impact of the sessions, through support shown from the residents for each other:

You could see the joy. They were smiling at each other; they were praising each other! ... my heart just grew bigger because ... the reactions to support each other was so lovely. (G1, Staff 1)

Regarding continuation of the chair yoga sessions, most residents and staff suggested that session duration and physical intensity remain the same, but frequency be decreased from twice weekly to once fortnightly or even once a month:

It would be good to have a refresher course ... every so often (G1P1)

Additionally, although staff agreed on the need to combat the state of inactivity within care homes, they noted that the cost of providing the sessions would be a factor in continuation of the yoga sessions.

Specific elements of the sessions that residents and staff enjoyed included hand movements, which required concentration and coordination, such as tapping fingers, and dance elements, where participants moved on the chair to upbeat music. It was also noted that there was a sense of fun during the sessions, which was clear during the focus groups, with residents laughing and joking throughout: " ... when the teacher said 'okay, it's time for the music bit,' you could see the anticipation that they knew it was coming" (G1, Staff 1).

Connection

Yes [I did enjoy practising in a group], and we have been very supportive of each other (G1P1)

I do like group exercise ... I think you put something of yourself into the next person (G1P5)

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Residents highlighted the social benefits of the group-based sessions, with several describing a sense of connection and mutual support during and after the yoga sessions. This contrasted with the sense of social isolation suggested by some participants before the eight-week chair yoga program. Attending the sessions also seemed to provide some residents with a sense of purpose, through the opportunity to help others with the physical movements during the session. As one staff member noted:

 \dots [if] somebody sitting next to them wasn't quite getting it right they would put their arm out and turn a hand over [to help] or say 'no not that way,' and it was definitely helping and they were definitely aware of each other. (G1, Staff 1)

Staff also noted a reduction in residents' unsociable communication and an increased focus during the yoga sessions that they had not observed for other group activities within the care home:

They do group activities but not to that calmness I would say (G1, Staff 1)

Care home staff also noted that residents with more advanced dementia tended to be socially withdrawn, but that was not perceived to be the case during the chair yoga sessions. While the residents enjoyed the yoga sessions once there, many also noted a reluctance to attend, and often had to be encouraged by staff. Staff also described the mismatch between residents' expectations of the sessions, which was negative in some instances, and the enjoyment experienced when taking part. One resident suggested this reluctance was due to inactivity being the "norm" for them, with a lack of motivation to join in being a key factor. Some residents also noted the term "yoga" could be off-putting as they had a preconceived idea of yoga being more physically active than the sessions they took part in:

I expected it to be slightly more vigorous, because of what I have done in the past [played a lot of football] (G1P4)

I thought it was more standing up (G2P3)

Staff played a key role in supporting residents to attend the sessions, not only physically but by providing verbal encouragement for those who had reservations about what the sessions would involve:

 \ldots a lot weren't sure of what it was really all about, so there was A LOT of encouragement \ldots (G1, Staff 1)

Encouragement typically involved gentle prompting, explaining the nature of the sessions, and reassuring residents who were unsure. However, staff emphasized that participation was always voluntary and that residents could decline. One staff member reflected on this balance: But I kept saying to the teacher you know they have a dementia and they do have a choice . . . and their dementia can dip and you know even from day to day and some of them didn't want to join in. (G2, Staff 3)

This approach aligned with person-centered care practices within the homes, ensuring that encouragement did not compromise resident autonomy.

To enhance engagement in the sessions among the wider resident community, one staff member suggested holding future sessions in the lounges where residents commonly gathered rather than in a separate room. Resident autonomy was important to staff, and there was a feeling that residents might be more likely to participate if there was a choice for them to dip in and out of a session. Additional suggestions for enhancing engagement were providing taster sessions and delivering them in multiple locations within the care homes so residents didn't have to move beyond their usual living areas to attend.

Impact of dementia on participation in chair yoga

Staff noted that reluctance to attend was associated with a range of factors, including a desire not to join in with others, symptoms such as lethargy and confusion related to dementia, and sometimes not being able to remember having attended previous chair yoga sessions. Residents' ability and motivation to participate in a session also varied from week to week, with fluctuations in cognitive ability and level of awareness:

They [the residents with late-stage dementia] have days of complete confusion and they couldn't go along [to class], . . . their minds weren't there (G1, Staff 2)

 \dots that's the thing with dementia you can have this knowledge and understanding one day [but not on another day] \dots (G1, Staff 1)

Staff suggested modifications to the way in which sessions are delivered that may enable residents with different abilities to take part in the same class:

I think maybe some of the instructions needed to be simplified ... mainly for the high dementia ... because I noticed one of the ladies kept saying "am I stupid?!" because she couldn't quite get the instructions ... (G1, Staff 1)

Important teacher qualities

Oh yes. There's no point otherwise is there ... she is clear. (G1P3)

What I do like is the teacher joining in ... being part of it. (G1P1)

Residents emphasized the importance of clear, accessible communication from the yoga teacher, which helped them feel confident and able to follow the instructions. Clarity was valued not only in terms of verbal instruction but also in the teacher's presence and approachability, which helped residents feel confident and engaged. Residents emphasized the friendliness of the teacher, her participation in the sessions, and an overall sense of the teacher being part of the group.

Staff echoed these views, highlighting the benefit of clear, simple instructions and a calm, caring teaching style. Staff noted the impact of verbal clarity: "... just delivering easy instructions for [the residents] to follow" (G2, Staff 3). Beyond clarity, staff noted that the teacher being attuned to individual needs, greeting each resident by name, maintaining a consistent yoga routine, and thanking residents at the end of each session were important to foster trust and emotional connection.

Staff also noted that importance of the teacher understanding dementia was key to inclusive delivery. This included an awareness of how routine repetition and consistency supported the confidence of residents:

And then obviously once they've, I mean you wouldn't want to do the same [routine] for a year, but once they've all got the hang of that you could all add a couple of little things in. (G1, Staff 1)

These qualities were seen as important for fostering a supportive, personcentered environment that enabled all residents to engage meaningfully in the sessions.

Potential barriers to delivery of chair yoga

A separate, more spacious, and calm location for the sessions was viewed as essential by two of the staff members (G1, Staff 1: G2, Staff 2). The lounges were considered communal areas that were continually accessed by staff and residents, and the constant busyness involving medication rounds, resident assistance needs, and visitors provided distraction to the natural flow of the classes; therefore, an appropriate location needs consideration when starting up chair yoga classes in a care home:

 \dots the lounges aren't controlled because it's somebody's home so there are people wandering in and out (G1, Staff 1)

The option of one-to-one rather than group sessions could provide a more suitable accessible format to enable some residents who would otherwise find it challenging to participate in yoga:

... for example when the teacher says "palms down" and they can't see they might think it means put them [palms] on the floor (G1, Staff 1)

Staff also suggested the importance of music when working with residents with dementia, to enhance the calming practice environment:

I think with dementia, absolutely you need music. I think it would need to be background music, not singing (G1, Staff 1)

Theme 2 – perception of effects of Lakshmi Voelker chair yoga™

Stimulation

All staff and most resident participants noted positive physical effects from the yoga sessions (see supplementary table S2), including being more active outside of the sessions, a sense of reduced tension and pain, and perceived greater flexibility and coordination:

It helps me relax and gets rid of some of my aches (G2P3)

 \ldots she was actually walking down to yoga as well \ldots she never used to walk that far \ldots (G1, Staff 1)

Several participants noted that the chair yoga sessions engaged them mentally. They mentioned the practices got them thinking more than usual, perhaps even with more mindful awareness and alertness, and a clearer mind: "I think I'm more aware of my surroundings ... and people" (G1P3).

Staff also noted the impact of yoga on the participants' mental wellbeing, commenting that the participants seemed more alert toward the end of the eight weeks. The participation of residents with dementia in the yoga sessions took a variety of forms within and across sessions, challenging staff perceptions of residents' abilities and engagement:

One particular day we had a lady [with dementia] who didn't really do any of the yoga, she was listening, you knew she was feeling the positive energy but when [the teacher] did the song [a repetitive vocalisation of four sounds] ... she started saying it, and we all just looked at each other in amazement because it was definitely a recognition of those sounds and it was instant (G1, Staff 1)

Staff further commented that elements of the series requiring concentration and coordination, such as the hand movements, seemed to positively engage the residents' minds. They noted the opportunity for this level of engagement is often lacking for residents within a care home setting, as they are usually in a relationship of dependency. They also noted improvements in some participants' moods during the chair yoga sessions:

 \dots when they are in the yoga their spirits are quite lifted and they are actually in very good moods (G1, Staff 2)

Relaxation

Finally, staff perceived the yoga as relaxing for residents, and perhaps less intense than other chair-based exercise sessions:

... the residents were more relaxed after the yoga than the chair exercise. When they do chair-based exercise they may be a little bit more hyper after. (G2, Staff 3)

This aspect of relaxation was confirmed by participants, who stated feeling very relaxed during the chair yoga, sometimes to the point of feeling as if they could fall asleep: "Very relaxing. ... you have to watch you don't doze off" (G2P1).

Discussion

This qualitative study explored care home residents' experiences of chair yoga through focus groups with the residents who took part in the 8-week program and one-to-one interviews with care home staff. The findings of this study are broadly consistent with previous research indicating that mind-body activities such as chair yoga can offer mental, social, and physical benefits to older adults (Bonura & Tenenbaum, 2014; Frampton et al., 2024; Furtado et al., 2016; Misiak et al., 2024). However, much of this prior research has often taken place outside of residential care settings. Our study adds to this literature by exploring the experiences of an adapted chair yoga program delivered within two UK care homes, incorporating the perspectives of both residents and staff. This context specific insight highlights practical considerations for delivery such as accessibility for people living with dementia, staffing challenges, and the role of group dynamics in fostering engagement and social connection.

One key consideration identified in the study was the extent to which cognitive impairment, particularly dementia, influenced residents' ability to engage with the sessions, and how this could be addressed in a care home setting. In line with the findings of Bowes et al. (2022), staff in our study tended to focus on the residents' dementia symptoms limiting their ability to participate in the yoga sessions. In fact, one member of staff described their surprise at a resident with advanced dementia repeating vocalization of sounds. The provision of adapted, chair-based yoga sessions delivered in a care home setting enabled engagement of residents with dementia, challenging negative perceptions of capacity and ability (Hadley et al., 2024). There was some limited consideration around how sessions could be made more accessible to residents with advanced dementia, such as offering one-to-one yoga sessions. Offering adaptations and flexibility to the way in which physical activities are delivered is important to ensure people with different types of and at different stages of their dementia journey can participate in activities (Hadley et al., 2024). However, one-to-one sessions may fail to address the social isolation that is particularly common in dementia populations (Age, 2018) and the peer support that group-based classes foster. The inclusion of additional co-teachers could enable tailored support within the group setting, allowing residents to benefit from both individual attention and shared experience. Employing strategies to support people living with dementia to be physically active, rather than imposing physical activity on residents with dementia, can be more effective (Van Alphen et al., 2016). Such research lends

support to suggestions in this study that the sessions should be located away from places where the resident spends most of their time, such as the communal space, to ensure that residents' choice to participate is respected.

The barriers to engagement highlighted by care home staff, such as cognitive impairment, fluctuating alertness and the need for staff encouragement, are consistent with those reported in other care home-based movement programs (Benjamin et al., 2014; Kovach et al., 2018). For example, Kovach et al. (2018) found that while residents with moderate to severe dementia attended mindfulness sessions regularly, they experienced difficulty understanding and engaging with the session content. Similarly, organizational-level constraints, such as limited staffing and environmental distractions, have been noted as barriers to successful implementation in programs like ARCH (Hurley et al., 2020). In our study, residents' initial reluctance to attend was often overcome through gentle encouragement by staff. The use of a chairbased yoga format, emphasizing gentle movement, repetition and relaxation, may have mitigated some of these challenges.

In addition to these reflections on accessibility and participation, our analysis highlighted a number of perceived outcomes associated with the yoga sessions. Following the yoga sessions, staff noted some attendees were more active both during and outside the sessions. Both residents and staff expressed an interest in the continuation of the yoga sessions, and several residents indicated a desire for more activity in general rather than their default state of inactivity, supporting the findings of Benjamin et al. (2014) and Sackley et al. (2006). This increased activity may have been facilitated by the group setting of the yoga sessions, with older people being more likely to engage with group-based than individual exercise (McCaffrey et al., 2017).

A further finding is that some residents appeared to gain a sense of purpose from the yoga sessions through supporting others with the movements, consistent with the findings of Ramanathan et al. (2017). The sense of purpose seemed to foster pro-social behavior, with residents reporting helping each other within the sessions and building a sense of community. Accordingly, the group-based yoga sessions may provide residents with a sense of social inclusion, and a potential way of combatting feelings of loneliness associated with social isolation (Schrempft et al., 2019). Loneliness has been identified as a modifiable risk factor for the development of dementia (Sutin et al., 2020); therefore, group physical activities, such as chair yoga, could be one way of attenuating risk in care home residents, although further research is needed.

Physical benefits such as increased joint flexibility, improved coordination, and improved range of motion were noted from both resident and staff observations, in line with Fan and Chen (2011). The yoga sessions were particularly enjoyed for their relaxation benefits and, in line with Bonura and Pargman (2009), residents considered chair yoga as more relaxing than other chair-based exercise conducted in their care homes. Additionally, noted

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mood improvements suggest the chair yoga sessions might improve mood in both older adult and dementia populations (Chen et al., 2010; Fan & Chen, 2011; Gallego et al., 2011; Litchke et al., 2012). Given the high prevalence of depression and anxiety in care home residents, up to 40% and between 14–22% respectively (Lyketsos & Olin, 2002; Regan, 2016), forms of activity such as chair yoga that both increase enjoyment and relaxation within this population may be beneficial.

Staff and residents provided valuable insights into the challenges and considerations around providing chair yoga sessions within a care home setting and population, including for those with dementia. While residents and staff agreed with the content and duration of the yoga sessions, there was disparity regarding the optimal location for holding them. Opinions ranged from using a separate and undisturbed location, to holding them in the lounges where residents mostly spend their time. Pragmatically, fitting sessions around the care home's daily working rhythm and room layout would seem important for supporting resident engagement. As participants also suggested the term "yoga" could be off-putting for those with preconceptions of yoga as a strenuous practice and may influence whether residents choose to attend the sessions, thought should also be given to how the sessions are promoted to residents.

Limitations and future research

A main limitation of this study was the small sample size, and participant drop-out may have influenced the findings, particularly by reducing the diversity of resident experiences captured in the focus groups. Furthermore, across the two care homes, only three staff were able to be present and support residents at the sessions and subsequently take part in interviews, reflecting well-documented organizational level challenges around staffing constraints in the care home sector (Benjamin et al., 2014). This limited staff availability likely not only influenced the delivery of the intervention but also the extent to which staff perspectives could be captured in the study. Future implementation of similar programs may benefit from a dedicated facilitator supported by at least one additional staff member or volunteer per session, to assist residents with movements. However, given the financial and organizational constraints commonly experienced within care homes, achieving this level of support may be challenging in practice. Nonetheless, even small adjustments, such as identifying a consistent staff member to act as a session champion or incorporating volunteers, could enhance program sustainability and support resident engagement.

While an adequate number of residents consented to join the eight-week yoga program and subsequent focus groups, staff noted a reluctance among some residents to attend sessions without staff input to provide motivation and encouragement. These findings mirror previous research indicating a need for people with dementia to be supported while engaging in physical activity (David et al., 2012; Van Alphen et al., 2016), and should be factored into the delivery of chair yoga classes in care home environments where staff availability may be limited. It is also noted that the duration of the focus groups was relatively short; however, this was to avoid causing any unnecessary fatigue to participants. Future research would benefit from employing a range of methodologies to understand residents' experiences of the yoga, such as observations alongside focus groups. Researchers-inresidence, whereby a researcher is embedded within a non-academic organization, is an alternative model to engaging and supporting care homes in research and has been shown to support relationship building between the researcher, staff, and residents (Latham et al., 2022).

To determine if the social enjoyment noted by participants was attributable to doing a group-based activity rather than doing chair yoga, future research could compare the Lakshmi Voelker Chair Yoga[™] sessions to other group-based activities. It would also be informative to assess the biopsychosocial impact of the sessions across different levels of cognitive impairment and dementia.

Conclusion

Resident and staff feedback suggests Lakshmi Voelker Chair Yoga[™] is a simple, enjoyable, and effective wellbeing intervention, with the potential to address inactivity, low mood, and social isolation in older adult care home residents with and without dementia. Based on this preliminary data, further large-scale research is recommended to investigate biopsychosocial outcomes of this group-based activity among care home populations.

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