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Review Article

The Effect of Community-based Group Activities on Psychological Well-Being in People Living With Dementia: A Systematic Review



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ABSTRACT

Keywords: Dementia psychological well-being community-based group activities Objectives: Approximately two-thirds of people living with dementia live in community settings. Community-based group activities can play an important role in postdiagnostic support and have a range of benefits for people living with dementia. Less is known about the effect these activities can have on psychological well-being. This paper aimed to synthesize evidence regarding the effects of different community-based group activities on psychological well-being in people living with dementia. Design: Systematic review.

Setting and Participants: Studies that included participants living with dementia in community settings. Methods: Literature searches were conducted in CINAHL Plus, PubMed, PsycINFO, and Scopus. Studies were included if they reported on at least 1 community-based group activity for people living with dementia and 1 psychological well-being outcome measure. Findings were reported in the form of a narrative synthesis.

Results: In total, 18 studies were included. Activity types included visual arts (n = 6), singing (n = 5), object handling (n = 3), dance (n = 3), multicomponent arts activities (n = 2), reminiscence (n = 2), and gardening (n = 1). Findings suggest a positive trend in improvements in well-being across most activities, although there was some mixed evidence for the role of arts-based activities. There was limited evidence for a difference in the impact on well-being between activity types.

Conclusions and Implications: There was generally promising evidence for the effect of community-based group activities on psychological well-being in people living with dementia. However, given the limited research in this area, more high-quality research is needed to better understand which activities may be more effective and who they are working for.

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Globally, more than 55 million people are currently living with dementia. In the United Kingdom, dementia costs the economy approximately £34.7 billion annually and contributes to increasing pressure on health care and community-based social services. Approximately two-thirds of people living with dementia live in community settings. Given the individual, societal, and economic impact of dementia, it is important to understand what strategies can support people in their communities after a dementia diagnosis. Evidence suggests that community-based group initiatives, such as choirs, art, and community gardening, can play an important role in

Behavioral and psychological symptoms of dementia can worsen the prognosis and the quality of life for both people living with dementia and their caregivers. Therefore, there is also growing interest in how to promote psychological well-being for people living with dementia. Evidence suggests that participation in community-based group activities can reduce symptoms of common mental health problems, including depression and anxiety, in people living with dementia. ¹²⁻¹⁵ However, less is known about the impact of these activities on psychological well-being. Psychological well-being is more than just the absence of mental health problems. Instead, positive and negative psychological health are considered as separate but related concepts. Although definitions of psychological well-being vary, it has been proposed that well-being is achieved from maintaining a balance between the psychological, social, and

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postdiagnostic support. These interventions are associated with benefits for people living with dementia, including promoting social, ^{6,7} physical, ^{8,9} and cognitive ^{10,11} health and well-being.

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physical challenges an individual faces and the personal resources (psychological, social, and physical) available to manage those challenges. This review specifically focuses on positive psychological health (ie, psychological well-being) in line with the emphasis on "living well" with dementia within the UK's National Dementia Strategy. The strategy of the property of the prope

Psychological well-being is used as an umbrella term that comprises a range of positive psychological constructs (eg. purpose in life, optimism, positive affect). It can be an important resource for people living with dementia, with previous research suggesting that improving psychological well-being, including specific constructs, such as self-esteem and optimism, can promote better quality of life and life satisfaction. ¹⁸ In addition, psychological well-being has been associated with greater cognitive resilience in older adults generally, with better than expected cognitive function considering the individual's neuropathology. 19 Promoting psychological well-being could therefore play a protective role in the progression of dementia as well as improving the individual's capacity to cope with any challenges. Given the potentially modifiable nature of psychological well-being and its related constructs, understanding which interventions can promote psychological well-being could have important implications for improving postdiagnostic support for people living with dementia. However, despite their potential importance, to date the evidence of the impact of community-based group activities on psychological well-being has not been systematically reviewed. The aim of this review was to examine the effect of community-based group activities on psychological well-being in people living with dementia.

Methods

This systematic review was registered on PROSPERO (www.crd. york.ac.uk/prospero/display_record.php?ID=CRD42024599798) and reported in accordance with PRISMA guidelines.²⁰

Search Strategy

Literature searches were conducted in CINAHL Plus, PubMed, PsycINFO, and Scopus from database inception to October 2024. Because of the anticipated limited number of studies in this area, a broad search strategy was used. Search terms were used relating to community-based activities (communit* OR intervention* OR program* OR project* OR initiative* OR scheme* OR service* OR activit* OR group* OR club* OR network* OR meeting* OR therap*), wellbeing ("psychological well*" OR "mental well*" OR "emotional well*" OR "well-being" OR wellbeing) and dementia (dement* OR alzheimer*). These search terms were used across all databases. No filters or limits were used in the searches.

Inclusion/Exclusion Criteria

This review included peer-reviewed studies published in English. No restrictions were placed on date of publication. Specific inclusion/exclusion criteria were based on study design, participants, intervention, and outcome as follows:

Study design: Studies were included if they used a quantitative or mixed methods design. Studies reporting qualitative data only were excluded.

Participants: Studies were included if they reported findings for community-dwelling people living with dementia (any type/severity). Studies were excluded if participants were residing in care or hospital settings only. Studies that included participants with and without dementia were included if findings were reported for people

living with dementia separately. Similarly, if studies recruited individuals from both community and care/hospital settings, only studies that reported findings separately for community-dwelling people living with dementia were included.

Intervention

Studies were included if they explored a community-based group intervention with 1 or more specific activity focus (eg, music, art). General social or peer support groups, pharmacological treatments, and clinical interventions were excluded. Studies were also excluded if the activity was specifically aimed at individuals or carerparticipant dyads.

Outcome: Included studies reported on at least one quantitative measure of psychological well-being, as either primary or secondary outcomes. No restrictions were placed on the type of well-being measure used, provided it measured some form of psychological, mental, or emotional well-being. Specific constructs of psychological well-being (eg, hope, self-esteem) were not included in the search terms, but studies reporting on these were eligible for inclusion. Studies were excluded if well-being was only assessed within a composite score (eg, overall quality of life) that included nonpsychological well-being aspects, or they only reported on negative mental health measures.

Screening Procedure and Data Extraction

Following the removal of duplicates, titles and abstracts were screened by the primary reviewer (G.B.), with 10% screened by a second independent reviewer (S.P.). All full texts were screened by G. B. and 50% each by S.P. and B.S. Disagreements between reviewers were discussed and resolved before starting the next screening stage. Data were extracted using a standardized form in Excel. This included author name(s), year of publication, sample size, demographic information (mean age, gender), country, type of activity, number of sessions, outcome measure used, and key findings. All relevant results for quantitative outcomes of well-being were extracted. For example, if 2 different well-being measures were used, findings for both were recorded. Both primary and secondary outcomes and results from unadjusted and adjusted analyses were recorded.

Risk-of-Bias (Quality) Assessment

Risk of bias was assessed by 2 independent reviewers (G.B., B.S.) using the Joanna Briggs Institute Checklist^{21,22} (see the Supplementary Materials for risk-of-bias assessments). Studies were rated as having low risk of bias if most of the criteria were met, medium risk if more than half of the criteria were met, and high risk if most criteria were not met. No studies were excluded based on their risk-of-bias score.

Data Synthesis

Because of the variety of interventions and outcome measures, it was not appropriate to combine results in a meta-analysis. Instead, findings from included studies are reported in the form of a narrative synthesis and are presented by activity type. In addition, where studies compared different activity types, these findings have been reported in a separate subsection. because of a heterogeneity of study designs and outcome measures, a range of effect measures is reported. Study characteristics are presented in Table 1. Where a study has reported an effect size or there were sufficient data to calculate an effect size, these have been reported in Table 2.

Table 1Study Characteristics

Study	Study Design	Country	Intervention	Well-Being Measure	
Bourne et al (2019) ²³	Quasi-experimental, crossover design	UK (England)	Choral singing	Canterbury Wellbeing Scale (overall well-being	
	Pre-post intervention (single session)		Art viewing	and subscales)	
Brooker & Duce (2000) ²⁴	Within-subjects repeated measures design	UK	Reminiscence therapy	DCM (well-/ill-being)	
	No pre-post measure				
Camic et al (2019) ²⁵	Quasi-experimental	UK (England)	Museum object handling	Canterbury Wellbeing Scale (overall well-being	
	Pre-post intervention (single session)			and subscales)	
Camic et al (2021) ²⁶	Mixed methods	UK (England)	Museum object handling	Canterbury Wellbeing Scale (overall well-being	
	Pre-post session and intervention			and subscales)	
Charras et al (2020) ²⁷	Quasi-experimental, Crossover design	France	Dance intervention	Single well-being question scored between 1	
	Pre-post intervention			"not well at all" and 10 "very well"	
Dawudi et al (2023) ²⁸	Pilot study	Germany	Choir singing	Smiley Scale from the Questionnaire of General	
	Pre-post session			Habitual Well-Being (emotional well-being)	
Hewitt et al (2013) ²⁹	Mixed methods	UK (England)	Gardening	Bradford Well-Being Profile (overall well-	
	Measures during each session (first to last)			being)	
Johnson et al (2017) ³⁰	Quasi-experimental, crossover design	UK (England)	Museum object handling	Visual analog scales (overall well-being and	
	Pre-post intervention (single session)		Art viewing	subscales)	
Koh et al (2020) ³¹	Quasi-experimental	Singapore	Dance intervention	DCM (mood and engagement)	
	Pre-post session and intervention				
Mittelman & Papayannopoulou (2018) ³²	Mixed methods pilot study	USA	Choir singing	Rosenberg Self-Esteem Scale (self-esteem)	
	Pre-post intervention				
Pongan et al (2017) ³³	Randomized controlled trial (using data from	France	Singing	Rosenberg Self-Esteem Scale (self-esteem)	
	LACMé study)		Painting		
n	Pre-post intervention	_			
Pongan et al (2020) ³⁴	Randomized controlled trial (using data from	France	Singing	EVIBE Visual Analog Scale (single question	
25	LACMé study)		Painting	well-being)	
	Pre-post intervention				
Schall et al (2018) ³⁵	Randomized controlled trial	Germany	Art museum-based intervention	Smiley Scale from the Questionnaire of General	
	Pre-post session			Habitual Well-Being (situational emotional	
	Control of the control of the Control	1117	Wastername based to be made to a Cabinet	well-being)	
Strohmaier et al (2021) ³⁶	Secondary data analysis using the Canterbury	UK	Various arts-based interventions (object	Canterbury Wellbeing Scale (overall well-being	
	Wellbeing Scales raw dataset Within and between subject design		handling, music/dance, art viewing, singing)	and subscales)	
	, ,				
Tan et al (2022) ³⁷	Pre-post intervention	Cinganoro	Arts and Dementia program (art appreciation,	DCM (well /ill being mood and engagement)	
Tall et al (2022)	Single-arm study Measures at baseline and 3 time points	Singapore	art making, singing, dance and movement)	DCM (well-/ill-being, mood and engagement)	
			art making, singing, dance and movement)		
Windle et al (2018) ³⁸	including last session Mixed methods longitudinal design	UK (Wales)	Vigual arts program	Greater Cincinnati Chapter Well-Being	
	Pre-post intervention	UK (Wales)	Visual arts program	Observation Tool (7 well-being domains)	
Wu & Koo (2016) ³⁹	Randomized controlled trial	Taiwan	Spiritual reminiscence intervention	Spirituality Index of Well-Being (spiritual well-	
	Pre-post intervention	Idivvdii	Spiritual reminiscence intervention	being)	
	i ic-post ilitervention			Herth Hope Index (hope)	
				Life Satisfaction Scale (life satisfaction)	
Zeilig et al (2019) ⁴⁰	Mixed methods case-study approach	UK	Co-creative group arts (music and dance)	Canterbury Wellbeing Scale (overall well-being	
Zem & et al (2013)	Pre-post sessions	JK	co creative group arts (music and dance)	and subscales)	

Table 2 Study Results

Study	Sample: Total (Mean Age, % Female)	Intervention	Number of Sessions	Control Group	Main Findings	Risk of Bias
Bourne et al (2019) ²³	10 (77, 40%)	Choral singing Art viewing	1 of each session (1 hour)	Participants took part in both activities	Significant increase with large effect sizes found for overall well-being ($r=0.63$), happiness ($r=0.60$) and optimism ($r=0.60$) following the singing session. No significant change found for art viewing. No significant differences in impact on well-being found between activities.	
Brooker & Duce (2000) ²⁴	25 (see paper for age/ gender by site)	Reminiscence therapy	2 weekly sessions (~40 min)	Comparted to structured group activities and unstructured time	Significant differences between conditions. Higher well-being in reminiscence condition compared with structure group activities and unstructured time.	High
Camic et al (2019) ²⁵	80 (75, 33.8%)	Museum object handling	1 session with 12 groups (55 -75 min)	No control group	Overall well-being (d = 0.77) and all subscales (happiness: d = 0.68, wellness: d = 0.43, interest: d = 0.63, confidence: d = 0.58, optimism: d = 0.71) were significantly higher following the session.	
Camic et al (2021) ²⁶	4 (69, 25%)	Museum object handling	3 weekly sessions (1 hour)	No control group	Increase in pre-post overall well-being and subscales but did not reach significance.	Medium
Charras et al (2020) ²⁷	23 (84, 52.2%)	Dance intervention	12 weekly sessions (50 min)	Participants took part in both intervention and control group	Significant pre-post increase in total and mean well-being ($d=0.48$).	Medium
Dawudi et al (2023) ²⁸	19 (77, 56.6%)	Choir singing	7 weekly sessions (1.5 hours)	No control group	Significant pre-post session increase in emotional well-being for 5 sessions ($d = 0.5-0.9$).	High
Hewitt et al (2013) ²⁹	12 (59, 66.7%)	Gardening	46 sessions over 1 year (2 hours)	No control group	Increase in mean well-being for first 8 session, but no significant difference between pre-post scores on either version of measure.	
Johnson et al (2017) ³⁰	36 (74, 30.6%)	Museum object handling Art viewing	1 session of each (45 mins) with refreshment break (25 min)	Participants took part in both activities	Significant pre-post increase in well-being found for both sessions (object handling: $d=0.51$, art viewing: $d=0.26$).	Medium
Koh et al (2020) ³¹	35 (80, 62.9%)	Dance intervention	8 weekly sessions (1 hour)	No control group	Significant pre-post improvement in well-being $(d = 1.07)$.	High
Mittelman & Papayannopoulou (2018) ³²	11 (79, not provided)	Choir singing	13 weekly sessions (2 hours)	No control group	Pre-post improvement in mean self-esteem, but not statistically significant.	Medium
Pongan et al (2017) ³³	Singing = 31 (79, 74.2%) Painting = 28 (80, 57.1%)	Singing Painting	12 weekly sessions (2 hours)	Participants took part in either singing or painting group	Self-esteem improved in both groups but not statistically significant.	Low
Pongan et al (2020) ³⁴	Singing = 31 (79, 74.2%) Painting = 28 (80, 57.1%)	Singing	12 weekly sessions (2 hours)	Participants took part in either singing or painting group	Significant pre-post increase in mean well-being for both singing ($d=0.84$) and painting ($d=0.57$) group. No significant difference found between groups.	Medium
Schall et al (2018) ³⁵	Intervention = 25 (75, 60%) Control = 19 (76, 86.4%)	Art museum—based intervention	6 weekly sessions (2 hours)	Wait-list control group (independent museum visits)	Significant positive change in emotional well-being pre-post each session with medium effect sizes (dcorr = 0.2577).	Medium
Strohmaier et al (2021) ³⁶	201 (72, 40.3%)	Various arts-based interventions (object handling, music/dance, art viewing, singing)	See paper for specifics	Comparisons made between different arts-based activities	Significant pre-post increase in overall well-being (d = 0.79) and subscales (interest: d = 0.59, confidence: d = 0.63, optimism: d = 0.68, happiness: d = 0.69, wellness: d = 0.56) for all interventions combined. Significantly greater increase in optimism found for object handling and art viewing compared with singing or music/dance.	
Tan et al (2022) ³⁷	21 (79, 71%)	Arts and Dementia program (art appreciation, art making, singing, dance and movement)	6–9 weekly sessions (1 hour)	No control group	Significant increase in well-being scores across sessions compared to baseline (second session $r=0.71$, mid-program $r=0.70$, last session $r=0.86$).	Medium

Low	High	Medium
Pre-post increase in mean scores for interest, attention, and normalcy. Decrease in pleasure and negative affect. (Note: statistical significance could not be extracted due to inclusion of people without dementia.)	Control group (no intervention) All 3 outcomes showed pre-post test improvement High in intervention and decrease in control. Pre-post changes significantly different between groups.	Significant pre-post improvement in overall well-Medium being for sessions 1 and 3. Significant increase in confidence and wellness following session 1 only.
No control group	Control group (no intervention)	No control group
12 weekly sessions (2 hours)	6 weekly sessions (1 hour)	4 weekly sessions (1 hour)
Visual arts program	Spiritual reminiscence intervention	Co-creative group arts (music and dance)
54 (78, 48.1%)	Intervention = 53 (74, 64.2%) Control = 50 (74, 74%)	5 (none provided)
Windle et al (2018) ³⁸ 54 (78, 48.1%)	Wu & Koo (2016) ³⁹	Zeilig et al $(2019)^{40}$

Results

Selection Process

Database searches identified 13,851 studies (Figure 1). After removing duplicates, 7634 title/abstracts were screened (reviewer agreement 98.8%), followed by full-text review of 45 studies (reviewer agreement 91.8%). Three additional studies were retrieved from relevant systematic reviews that were identified from the search strategy. In total, 18 studies were eligible for inclusion.

Study Characteristics

Study characteristics are reported in Table 1 and study results are summarized in Table 2. Evidence of impact for different activity types are summarized in Figure 2. Most studies were conducted in the United Kingdom (n = 9), followed by France (n = 3), Germany (n = 2). Singapore (n = 2), United States (n = 1), and Taiwan (n = 1), All studies were published between 2000 and 2023, with the number of studies increasing over time from 1 between 2000 and 2009, to 10 between 2010 and 2019, and 7 from 2020 onward. Study designs included quasi-experimental (n = 5), randomized controlled trials (n = 4), mixed methods pre-post design (n = 4), pilot study (n = 2), and 1 each of the following: single-arm study, within-subjects repeated measures, and within and between subjects design using secondary data. Most interventions were arts-based, including visual arts (n = 6), singing (n = 5), object handling (n = 3), dance (n = 3), and multicomponent arts activities (n = 2). Additional activity types included reminiscence (n = 2) and gardening (n = 1). All activities were aimed at people living with dementia (with or without their caregivers) specifically. The number of sessions ranged from 1 to 46 and individual sessions lasted between 40 minutes and 2 hours. Outcome measures included the Canterbury Wellbeing Scale (n = 5), Dementia Care Mapping (DCM) (n = 3), Smiley Scale from the Questionnaire of General Habitual Well-Being (n = 2), Visual Analog Scale (n = 2), Rosenberg Self-Esteem Scale (n = 2), single well-being question (n = 1), Bradford Well-Being Profile (n = 1), Greater Cincinnati Chapter Well-Being Observation Tool (n = 1), and Spirituality Index of Well-Being (n = 1).

Studies were rated as having low (n=3), medium (n=10), or high (n=5) risk of bias. For the randomized controlled trials, common limitations included a lack of information regarding the randomization method, whether allocation to treatment groups was concealed, and whether participants were analyzed in the groups they were randomized to. For the quasi-experimental studies, methodological limitations included lack of control group and a lack of information about whether follow-up was completed.

Arts-based Activities

Visual arts

In total, 6 studies investigated visual arts-based activities. Of these, 2 explored art viewing only^{23,30} and 4 explored a combination of art viewing and art making.^{33-35,38} In the 2 single-session artviewing interventions, participants were presented with paintings by a gallery educator and encouraged to discuss them. Findings were mixed, with Johnson et al³⁰ reporting a significant improvement in overall well-being after the session and Bourne et al²³ finding no significant difference in composite well-being or subscale scores. Two studies used data from the LACMé study, a randomized controlled trial of a painting intervention that involved participant viewing and discussing professional paintings then creating their own paintings based on a theme over 12 weekly sessions. One study investigated self-esteem and found no significant difference following the painting activity,³³ whereas the other study

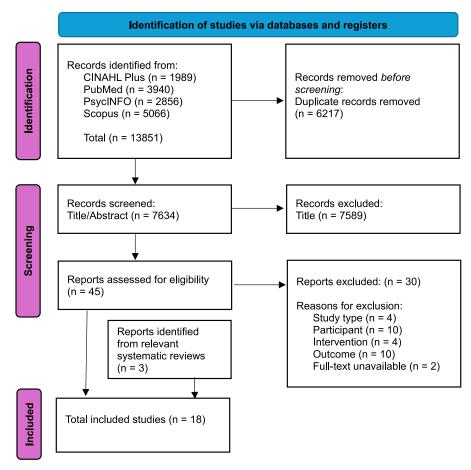


Fig. 1. PRISMA flow diagram.

investigated overall well-being and found significant pre-post session improvements in mean well-being for 9 of the 12 sessions.³⁴ Next, a randomized wait-list control study of an art-museum intervention consisting of themed guided tours followed by art-making workshops found a significant increase in well-being following the intervention and a significant difference in improvements in well-being between the intervention and control groups.³⁵ Finally, Windle et al³⁸ explored the effects of a visual arts program, including art-viewing and art-making activities, on observed well-being. Statistical significance could not be extracted due to the inclusion of people living in care homes. However, pre-post mean scores

presented separately for the community-dwelling participants indicate an increase in interest, attention, and normalcy, and a decrease in negative affect and sadness following the program. Mixed results were found for pleasure and self-esteem, for which mean scores increased from baseline to weeks 1 and 2 but then decreased at 3-month follow-up.

Choral singing

In total, 5 studies investigated choral activities. ^{23,28,32-34} A similar format was used across studies, with professional choral conductors leading the groups and various songs being rehearsed for 1 to 2 hours

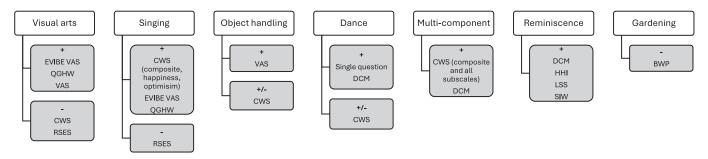


Fig. 2. Evidence for different activities. Key: + "positive evidence" (statistically significant improvement); - "no evidence" (no significant change); +/- "mixed evidence" (mixed findings within or across studies). BWP, Bradford Well-Being Profile; CWS, Canterbury Wellbeing Scale; EVIBE VAS, Evaluation Instantanée du Bien-Etre Visual Analog Scale; HHI, Herth Hope Index; LSS, Life Satisfaction Scale; QGHW, Smiley Scale from the Questionnaire of General Habitual Well-Being; RSES, Rosenberg Self-Esteem Scale; SIW, Spirituality Index of Well-Being; VAS, Visual Analog Scales. Note: findings from Windle et al (2018) were not included in this figure as data regarding significance could not be extracted Note: This figure is an overview of evidence only. It does not reflect the quality of evidence so should be interpreted with caution.

per each session. Participants took part in 7 to 13 sessions, with the exception of 1 study²³ in which only 1 session was run. In relation to outcomes, 3 studies assessed overall or composite well-being measures using various visual analog scales and found significant improvements. Specifically, Bourne et al²³ found significant improvement in composite well-being as well as for happiness and optimism subscales following a single singing session, with large effect sizes (r = -0.60 to -0.63). Dawudi et al²⁸ found significant improvements in well-being following 5 out of 7 sessions and Pongan et al³⁴ found a significant pre-post improvement in well-being overall and specifically following 9 out of 12 sessions. For specific constructs of well-being, 2 studies using the Rosenberg Self-Esteem Scale found no significant difference in pre-post change in self-esteem. 32,33

Museum object handling

Three studies investigated similar museum object handling intervention in which participants were presented with various objects and encouraged to discuss and reflect on them as a group. 25,26,30 All 3 studies used a visual analog scale to measure well-being with mixed findings. Camic et al and Johnson et al reported a significant increase in overall well-being following a single session of object handling, with Camic et al slo finding significant increases in all subscales (happiness, wellness, interest, confidence, optimism). In contrast, Camic et al explored 3 weekly sessions of object handling and found that although mean well-being scores improved in all pre-post comparisons (baseline to post intervention and pre-post each individual session), this was only statistically different for the interest subscale pre-post session 2. The authors note that the small sample size (n = 4) may have increased the risk of type II error.

Dance

Three studies investigated dance-based interventions. 27,31,40 Charras et al²⁷ explored weekly classical dance classes including gait and balance exercise over 12 weeks. Using a single item measure of well-being, findings revealed a significant increase in total and mean well-being following the intervention. Koh et al³¹ explored 8 weekly creative dance sessions led by a creative movement therapist as part of the usual activities run at the participating daycare centers. Changes in mood and engagement were assessed using DCM. Results revealed significant improvements in mean well-being following the intervention. Zeilig et al⁴⁰ explored 4 weekly co-creative arts sessions that involved collaborative music and dance activities. Using the Canterbury Wellbeing Scale, significant pre-post session increases in composite wellbeing were found for sessions 1 and 3 only. For well-being subscales, significant increases in confidence and wellness were found following each session but these only reached statistical significance following session 1.

Multicomponent arts interventions

Two studies explored interventions that included multiple arts activities. 36,37 Tan et al 37 explored an Arts and Dementia Program involving various activities over 6 to 9 weekly sessions including art appreciation, art making, singing, and dance and movement. Using DCM, findings revealed significantly higher well-being in the second session, mid-program, and last session compared with baseline. Strohmaier et al 36 used previously collected data from different community-based settings across the United Kingdom to explore the association between various interventions (including object handling, music and dance, art viewing, and singing) and subjective well-being. Following all activity types, significant improvements in overall well-being and all subscales on the Canterbury Wellbeing Scale were found with medium to large effect sizes.

Other Activity Types

Reminiscence

Two studies investigated reminiscence-based group activities. 24,39 Brooker and Duce 24 used DCM to compare levels of well-being between group reminiscence therapy, structured group activities involving goal-directed games and crafts, and unstructured time. The reminiscence intervention involved engaging with themed topics through discussion and multisensory props. The study found significantly higher levels of well-being in the reminiscence group compared with the other 2 groups. Wu and Koo³⁹ explored the impact of a spiritual reminiscence group on spiritual well-being, hope, and life satisfaction compared with a control group. The intervention involved discussions and activities based on spiritual themes (eg, meaning in life, spiritual and religious beliefs). Findings suggested a significant difference in change scores for spiritual wellbeing, hope, and life satisfaction between groups, with an increase in mean scores observed in the reminiscence group and a decrease in the control condition.

Gardening

Only 1 study investigating horticultural-based activities was identified. Pewitt et al explored the impact of a structured group gardening program on well-being in people with young-onset dementia. This study initially used the original version of the Bradford Well-Being Profile, then swapped to an amended version (also including ill-being items) of the measure, which was released during the data collection period. Findings using the original measure found an increase in mean well-being for the first 8 sessions then some level off due to reaching maximum scores. However, change in well-being between the first and last data collection point was not significant on either version of the Bradford Well-Being Profile.

Comparing Activities

Five of the studies compared different activity types.^{23,30,33,34,36} In general, no significant differences in change in well-being were found between activities except in 1 study. Two studies using data from the LACMé study found no significant difference between singing and painting activities in terms of change in well-being³⁴ or self-esteem.³³ Bourne et al²³ found no significant difference between choral singing and art-viewing activities on composite well-being or any of the subscales. Similarly, Johnson et al³⁰ found no significant difference in change in well-being scores between art viewing and museum object handling. In contrast, Strohmaier et al³⁶ found significantly greater increases in optimism scores following object handling and art-viewing activities compared with music and dance activities.

Discussion

This review identified 18 studies examining the impact of community-based group activities on well-being in people living with dementia. Most studies focused on visual arts or singing activities, with others exploring object handling, dance, reminiscence, and gardening. Overall findings were promising, with evidence of improvements in overall psychological well-being reported across most activity types, although findings for arts-based activities were mixed. Although specific well-being constructs were not used as search terms, they were reported on in 9 studies with mixed findings. Specifically, there was evidence for improvements in hope and life satisfaction, albeit from 1 study only. However, evidence for improvements on the Canterbury Wellbeing Scale subscales (happiness, wellness, confidence, interest, and optimism) were mixed and there was no evidence for improvements in self-esteem across studies.

There was also limited evidence for a difference in the impact on well-being between activity types, with the exception of 1 study that found greater improvements in optimism scores for object handling and art viewing compared with music/dance activities.³⁶

The finding of consistent positive impacts across different activity types may reflect similarities between them. First, they all aim to support engagement in meaningful activities. Previous research has suggested that these sorts of activities can meet fundamental psychological needs in people living with dementia beyond pleasure and enjoyment, including promoting a sense of purpose, coping with changes associated with their dementia, and maintaining a good quality of life. 41 It is worth noting that different activities will be meaningful to different people, so some of these findings may reflect self-selection to activities that participants consider meaningful to them. Next, given their group-based nature, all the community-based activities in this review facilitated social interaction. Greater social engagement has been associated with better quality of life in people living with dementia.⁴² Many of the activities involved meeting with the same group members regularly and encouraging group discussions and co-creativity. This can promote feelings of social connectedness, which may play a significant role in the improvements in well-being found in this review. Moreover, all groups included people living with dementia (with or without their caregivers) only, which may suggest that peer support may also play an important role in contributing to improvements in well-being. Finally, another commonality across the activity types is their potential to facilitate cognitive stimulation. For example, previous research suggests that community-based arts activities can support cognitive function in people living with dementia, with improvements seen across various domains including communication, attention and memory. 10 These shared characteristics across activities may be an important mechanism in explaining the positive impacts observed across different activity types. All of these activities aim to promote engagement in meaningful experiences that align with the individual's interests and occur in a group setting over an extended period. These common elements—rather than the specific nature of each activity—may be what explains the observed benefits. In other words, it may be the interaction and sense of shared experience with others with similar interests that matters most. Similarly, revisiting the definition that well-being is achieved from having a balance between the challenges an individual faces and the resources they have to deal with them, ¹⁶ another possible explanation may be that the potential psychological, social, and cognitive benefits that community-based group activities can have for people living with dementia may be a contributing mechanism for the improvements in well-being.

Strengths and Limitations

To our knowledge, this is the first systematic review investigating the effect of community-based group activities on psychological well-being in people living with dementia. As such, this review provides a valuable synthesis of the current evidence and highlights important gaps in the literature. However, there are also several limitations. To avoid predetermining what activity types would be included, specific search terms relating to activity type (eg, "art" or "horticulture") were not used. Therefore, it is possible that some relevant studies were not picked up by the search strategy. Similarly, for feasibility, only broad search terms relating to well-being were used. As such, studies investigating specific constructs of well-being (eg, "purpose in life," "optimism") may have not been identified. However, where identified studies did report on a specific construct (eg, self-esteem), these findings have been reported in this review. Another limitation of this review is that it is unable to infer any causal effects. Despite the heterogeneity across studies, there are several possible mechanisms that may be contributing to improved wellbeing that were not explored or controlled for, such as the social engagement associated with all the activities. Therefore, it is difficult to ascribe any positive outcomes to the specific interventions.

Another limitation relates to the differing measurement approaches and definitions of well-being across studies. Most included studies used either observational (eg, DCM) or visual analog scale (eg, Canterbury Wellbeing Scale) measures of well-being, both of which are validated for measuring well-being in people living with dementia. However, these 2 measures are underpinned by different conceptualizations of well-being; DCM assesses observed overall well-being by coding behaviors into categories and Canterbury Wellbeing Scale assesses subjective well-being comprising a composite well-being score and subscales (happiness, wellness, confidence, interest, and optimism). This variation makes it difficult to compare findings across studies. Similarly, both tools measure "in the moment" well-being and no studies included longer-term followups, meaning that this review is unable to infer any longitudinal effects of community-based group activities on well-being in people living with dementia.

Another potential limitation relating to well-being measures used is that many of them consider well-being as a linear construct (eg, visual analog scales). Positive and negative mental health are related but arguably separate constructs and there is evidence to suggest that some constructs of positive psychological well-being are not necessarily mutually exclusive. Therefore, it is difficult to differentiate from the current literature whether significant findings reflect improvements in positive well-being aspects (eg, optimism) or a reduction in negative well-being (eg, pessimism). Interestingly, one study updated their well-being measure (Bradford Well-Being Profile) part way through data collection to include additional ill-being items. However, change in well-being was nonsignificant on both versions of the measure.

Finally, given the risk-of-bias scores for many of the studies included in this review, these findings should be interpreted with caution. In total, 15 of 18 studies were rated as having medium to high risk of bias, suggesting uncertainty in the current quality of evidence in this area. Therefore, there is a need for more high-quality studies, particularly with larger sample sizes, control groups, and comparable outcome measures, to better understand the effect of various community-based group activities on well-being in people living with dementia.

Implications and Future Directions

This review has implications for informing policy and social care strategies for postdiagnostic support for people living with dementia. Although there is currently insufficient evidence to make any strong recommendations on which type of group activity may be more beneficial, the studies that did compare activities did not find any difference, which may suggest the beneficial impact of communitybased group activities more generally. Given the financial impact of dementia,² community-based group activities could offer a relatively low-cost, adaptable, and implementable option to support people to live well with dementia. Currently, there are a number of challenges surrounding the implementation and sustainability of these activities, including adequate funding and retaining staff and volunteers. 44 However, the promising findings suggest that investment in and policies that aim to address the availability of community-based group activities could be a valuable resource in improving well-being in people living with dementia. Moreover, given that health and social services are stretched, these activities could help to meet postdiagnostic support needs, fill current gaps in support services, and improve dementia care more generally.

This review also highlights some important evidence gaps. First, most studies identified focused on arts and singing activities. There is

a need for more studies exploring a wider range of community activities, particularly horticultural and physical activities. Similarly, there is a lack of studies comparing the effects of different activity types on well-being in people living with dementia. More studies comparing different activity types are needed to better understand mechanisms associated with specific activities that may be promoting well-being. Relatedly, there is also limited evidence regarding who with dementia may be particularly benefiting from these activities. Given the importance of person-centered support, understanding who is benefiting from different activities can ensure that different needs and interests can be accommodated and identify people whose needs are not being met. Finally, given the risk-of-bias scores for the studies identified in this review, findings should be interpreted with caution. There is a need for more high-quality research in this area to better understand the evidence for community-based group activities on well-being in people living with dementia. In addition to larger sample sizes, future research should consider including robust social engagement approaches in the control groups to try to better understand the additional efficacy of specific activities beyond the positive effects of social engagement.

Conclusions and Implications

Overall, this review found promising evidence that communitybased group activities can positively affect psychological well-being in people living with dementia. These activities may serve as valuable approaches for postdiagnostic support by providing meaningful activities that facilitate active participation and social engagement. More high-quality research is needed to explore a wider variety of activity types, and to better understand who is benefiting and the mechanisms for improvements in well-being.

Disclosure

The authors declare no conflicts of interest.

Supplementary Data

Supplementary data related to this article can be found online at https://doi.org/10.1016/j.jamda.2025.105874.

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