

**Impact of Music Art and Group Recreation on Mental Health and Cognitive  
Performance Among Institutionalized Older Adults**

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**Abstract**

Institutionalized older adults frequently experience depression, anxiety, loneliness, apathy, agitation, and cognitive decline. Although medication is sometimes necessary, daily life in residential care also requires meaningful psychosocial support. This narrative article examines the impact of music, art, and group recreation on mental health and cognitive performance among older adults living in nursing homes and related long-term-care settings. Evidence from randomized and controlled studies indicates that music-based interventions can reduce depressive symptoms, support emotional expression, stimulate autobiographical memory, and, in some programs, improve short-term recall. Art activities offer nonverbal opportunities for choice, creativity, attention, and communication; their most consistent benefits involve mood, engagement, and quality of life, while evidence for global cognitive improvement remains mixed. Group recreation, particularly when matched to residents' interests, abilities, and life histories, can increase pleasure and constructive engagement and may reduce agitation and passivity. These activities appear to work through several overlapping pathways: sensory stimulation, cognitive practice, social connection, behavioral activation, identity preservation,

and restoration of agency. However, results differ according to dementia severity, intervention design, facilitator skill, dose, outcome measure, and degree of personalization. Recreational interventions should therefore complement, rather than replace, comprehensive clinical care. Facilities can strengthen outcomes by embedding culturally appropriate, person-centered programs into the daily schedule and evaluating both psychological and cognitive domains. More rigorous trials are needed to clarify durability, active ingredients, and effects among residents without dementia.

**Keywords:** older adults, long-term care, music therapy, art therapy, recreation, mental health, cognition

## Introduction

Moving into a nursing home or other residential institution often brings safety and medical support, but it may also involve losses of home, familiar roles, privacy, independence, and social networks. Fixed routines and limited opportunities for purposeful action can intensify loneliness, helplessness, boredom, and depressed mood. For residents with dementia, unfamiliar surroundings and difficulty communicating needs may also contribute to anxiety, withdrawal, or agitation. These conditions affect well-being directly and can reduce attention, motivation, and participation in everyday cognitive activity.

Music, visual art, and group recreation are promising because they transform leisure from passive time-filling into meaningful occupation. They can be adapted to physical or cognitive limitations, delivered individually or collectively, and connected to a resident's culture and biography. Their purpose is not simply entertainment. A familiar song may cue memory and

identity; painting may permit communication without demanding fluent speech; and a cooperative game may provide attention practice, social recognition, and success. Research does not justify claiming that these interventions reverse dementia. It does suggest that structured, person-centered recreation can improve the conditions under which residents think, relate, and experience daily life.

This article synthesizes evidence on the mental-health and cognitive effects of music, art, and group recreation among institutionalized older adults. It also identifies mechanisms, practical considerations, limitations, and priorities for care and research.

## **Institutional Context and Therapeutic Pathways**

Recreational interventions operate within an environment that can either support or suppress their effects. In institutional care, a resident may receive adequate assistance with eating, medication, and hygiene while still lacking autonomy, novelty, companionship, and a valued social role. A meaningful activity program addresses these psychosocial needs by creating predictable opportunities for choice, competence, connection, and pleasure.

Several mechanisms may link recreation with mental health and cognition. First, enjoyable activity provides behavioral activation: it interrupts inactivity and increases contact with rewarding experiences. Second, music, colors, materials, conversation, and movement offer graded sensory and cognitive stimulation. Third, group participation provides social cues, shared attention, and belonging. Fourth, familiar activities preserve continuity with earlier identities, such as singer, craftsperson, parent, gardener, teacher, or teammate. Finally, successful participation can restore agency in an environment where many decisions are made by others.

Personalization is central. Theory-based activities matched to personality and functional ability produced better engagement and behavioral outcomes than poorly matched stimulation in nursing-home residents with dementia (Kolanowski et al., 2005, 2011). Thus, the therapeutic element is not merely the presence of an activity; it is the fit among the person, task, environment, and facilitator.

## Effects of Music-Based Interventions

Music is especially accessible in later life because it can be experienced through listening, singing, rhythm, movement, or instrument play. Familiar music may reach autobiographical and emotional memories even when language and new learning are impaired. In groups, singing also synchronizes attention and action, reduces pressure for complex conversation, and gives residents a shared emotional experience.

Controlled research supports important psychological benefits. In a randomized study of older adults with dementia, group music therapy reduced depression and produced modest improvement in cognitive performance, with short-term recall showing particular benefit (Chu et al., 2014). A randomized trial of individualized music therapy likewise reported reductions in anxiety and depression among people with Alzheimer-type dementia (Guétin et al., 2009). Regular singing and music listening, facilitated by caregivers, have also been associated with improvements in mood, orientation, memory, and aspects of executive functioning in people with early dementia (Särkämö et al., 2014). These findings are clinically relevant because depressive symptoms and apathy can limit social participation and make cognitive impairment appear more severe.

Nevertheless, music findings are not uniform. Cooke et al. (2010) found that a music program did not produce consistent overall reductions in agitation and anxiety compared with a reading control, although individual and subgroup responses varied. Raglio et al. (2010) reported behavioral benefits from structured music-therapy cycles, but the magnitude and persistence of response depended on the outcome and observation period. Mixed findings may reflect differences between receptive listening and active therapy, generic playlists and personally meaningful music, individual and group delivery, or trained music therapists and recreation staff.

Program quality therefore matters. Loud, unfamiliar, or culturally inappropriate music can overstimulate residents or provoke distressing memories. Hearing loss may be mistaken for disengagement. Effective sessions begin with preference assessment, comfortable volume, minimal competing noise, and permission to observe rather than perform. Live singing may encourage interaction, while individualized playlists may soothe a resident who cannot tolerate a group. Music should be viewed as a flexible clinical-recreational tool whose immediate outcomes—facial expression, verbalization, calmness, and engagement—may be as meaningful as changes on a global cognitive test.

## **Effects of Art-Based Interventions**

Art offers a different route to expression. Drawing, coloring, collage, clay work, textile craft, and guided viewing involve visual attention, motor planning, decision-making, and symbolic communication. Because the finished product remains visible, art can also support conversation, recognition, pride, and connection with family or staff. The process permits residents to communicate feelings and preferences even when word finding is difficult.

In a multicenter controlled trial, art therapy for older people with dementia was associated with improvements in several domains of mood, alertness, social behavior, and engagement, although cognitive results were not uniformly positive (Rusted et al., 2006). A controlled study comparing coloring and drawing with calculation tasks found that art activity improved apathy and quality-of-life indicators, whereas calculation training produced stronger change on a global cognitive measure (Hattori et al., 2011). This contrast is instructive: an intervention can be valuable for emotional health and participation without generating a large increase in total cognitive-screening scores.

Art sessions are most therapeutic when they emphasize adult identity and process rather than artistic correctness. Infantilizing templates, excessive correction, or comparison of products may undermine dignity. Facilitators can offer two or three manageable choices, adapt tools for arthritis or visual impairment, demonstrate one step at a time, and invite—but not demand—discussion. Familiar cultural designs, photographs, fabrics, and seasonal materials can cue memories. The relevant outcomes include sustained attention, initiation, affect, communication, and willingness to return, not only technical skill.

## Effects of Group Recreation

Group recreation includes games, reminiscence, gardening, movement, reading, discussion, celebrations, household tasks, and Montessori-based activities. Its distinctive advantage is that it combines activity with social participation. For institutionalized residents, being greeted, taking a turn, helping another person, or contributing knowledge can counter the social invisibility that sometimes accompanies dependency.

Observational evidence shows how strongly context influences affect. Nursing-home residents with Alzheimer's dementia displayed positive affect substantially more often during recreational activity than during other observed periods (Schreiner et al., 2005). Montessori-based programs, which break meaningful tasks into achievable steps and use preserved abilities, have increased constructive engagement and pleasure among long-term-care residents with advanced dementia (Orsulic-Jeras et al., 2000). These approaches reduce the demand for abstract instructions and create clear cues for success.

Personalized group and individual recreation may also address responsive behaviors. A controlled trial of systematic individualized interventions reduced agitation when activities were selected to meet the unmet needs underlying residents' behavior (Cohen-Mansfield et al., 2007). In a randomized crossover trial, personalized one-to-one Montessori activities improved engagement and affect and reduced agitation relative to a less individualized comparison condition (van der Ploeg et al., 2013). Continuous activity programming across the day has also been linked to improvement in behavioral symptoms among people with dementia, suggesting that one isolated weekly session may be insufficient for residents whose restlessness or unmet need recurs throughout the day (Volicer et al., 2006).

Person-centered positive-event programs provide further support for individualized pleasure. A randomized trial in nursing homes showed that systematically identifying and delivering preferred activities can improve affective and behavioral outcomes, although implementation and resident response vary (Van Haitsma et al., 2015). Together, these studies favor a flexible menu over a single standardized calendar. A resident who avoids a large sing-

along may engage deeply in a two-person card game; another may prefer dance, prayer, gardening, or storytelling. Nonparticipation should prompt reassessment of timing, pain, fatigue, sensory access, group size, and personal meaning rather than an assumption that the resident is incapable or unmotivated.

## **Mental Health and Cognitive Performance**

Mental health and cognitive performance are related but not interchangeable. Depression, anxiety, pain, poor sleep, loneliness, and overstimulation can impair concentration and recall during assessment. A pleasurable activity may therefore improve observable cognition indirectly by increasing alertness, motivation, and willingness to communicate. Activities can also provide direct cognitive practice through sequencing, naming, matching, turn-taking, problem solving, and remembering lyrics or rules.

The evidence is strongest for immediate or domain-specific changes rather than restoration of global cognition. Music studies sometimes demonstrate gains in short-term memory, orientation, or executive functions (Chu et al., 2014; Särkämö et al., 2014). Art requires focused attention and planning, but its emotional and social effects may exceed measurable change on instruments such as the Mini-Mental State Examination (Hattori et al., 2011; Rusted et al., 2006). Similarly, recreation research consistently shows engagement and affective benefits, while cognitive outcomes are less frequently measured.

Accordingly, evaluation should include both standardized and observational indicators. Facilities may track depression, anxiety, agitation, quality of life, participation, positive affect, attention span, verbal output, recall, and task completion. A stable global score alongside less

agitation and more communication can represent a meaningful outcome. Staff should also consider whether gains transfer beyond the session—to meals, sleep, social interaction, or care cooperation—and whether they persist after the program ends.

## **Practice Implications for Residential Care**

An effective program begins with assessment. Staff should document life history, preferred music and art forms, former occupations and hobbies, culture, language, spiritual practices, sensory abilities, mobility, pain, fatigue, cognitive level, and behavioral triggers. Residents and families can help identify meaningful materials, but current preferences should take priority over assumptions based on the past.

Activities should offer an optimal challenge: enough structure to prevent confusion, but enough choice to preserve autonomy. Instructions can be short, demonstrated visually, and divided into achievable steps. Small groups are often easier for residents with hearing loss, anxiety, or moderate-to-severe dementia. Sessions should occur at times when participants are typically alert, in spaces with good lighting, accessible seating, and limited background noise. Facilitators need skills in validation, cueing, de-escalation, and adapting in real time.

Interdisciplinary coordination strengthens safety and continuity. Recreational therapists can collaborate with nurses, occupational therapists, psychologists, social workers, music or art therapists, direct-care staff, and families. A resident's sudden withdrawal or agitation should not automatically be treated as a recreation problem; it may signal infection, delirium, pain, medication effects, depression, or sensory difficulty. Likewise, recreation complements rather than substitutes for indicated medical or psychological treatment.

Documentation should remain practical. For each session, staff can record attendance, level of assistance, duration of engagement, observed pleasure or distress, social interaction, and any change in target symptoms. Brief repeated measures are often more informative than an occasional lengthy test. Program review should ask who benefits, who is being missed, whether activities are culturally inclusive, and whether residents have real influence over the schedule.

## **Limitations and Research Priorities**

The evidence base contains small samples, heterogeneous interventions, short follow-up periods, and inconsistent outcome measures. Blinding is difficult in psychosocial research, and residents who can participate in trials may differ from those with severe illness, sensory impairment, or advanced dementia. Some studies combine community and institutional samples, limiting direct generalization. Publication bias may also make positive programs more visible.

Future trials should describe intervention content, facilitator qualifications, personalization, adherence, and adverse responses clearly. Larger multicenter studies should measure mood, anxiety, loneliness, agitation, quality of life, and specific cognitive domains, with follow-up long enough to test durability. Research should include residents without dementia, culturally diverse populations, and those with severe disabilities. Economic evaluation is also needed because sustainable staffing and materials determine whether promising programs become routine care.

## Conclusion

Music, art, and group recreation can make institutional care more psychologically supportive and cognitively engaging. Their most consistent benefits are reduced depressive or behavioral symptoms, increased pleasure, communication, and constructive engagement. Cognitive gains are possible, particularly in attention, recall, orientation, and task performance, but are generally modest and intervention-specific. The strongest programs are person-centered, culturally meaningful, appropriately challenging, and integrated into daily care. Success should be judged not only by test scores but also by whether residents experience greater agency, connection, calmness, and purpose. Used thoughtfully alongside comprehensive clinical care, recreation is not an optional diversion; it is a practical component of humane, health-promoting long-term care.

## References

- Chu, H., Yang, C. Y., Lin, Y., Ou, K. L., Lee, T. Y., O'Brien, A. P., & Chou, K. R. (2014). The impact of group music therapy on depression and cognition in elderly persons with dementia: A randomized controlled study. *Biological Research for Nursing*, 16(2), 209–217. <https://doi.org/10.1177/1099800413485410>
- Cohen-Mansfield, J., Libin, A., & Marx, M. S. (2007). Nonpharmacological treatment of agitation: A controlled trial of systematic individualized intervention. *The Journals of Gerontology: Series A*, 62(8), 908–916. <https://doi.org/10.1093/gerona/62.8.908>
- Cooke, M. L., Moyle, W., Shum, D. H. K., Harrison, S. D., & Murfield, J. E. (2010). A randomized controlled trial exploring the effect of music on agitated behaviours and

anxiety in older people with dementia. *Aging & Mental Health*, 14(8), 905–916.

<https://doi.org/10.1080/13607861003713190>

Guétin, S., Portet, F., Picot, M. C., Pommié, C., Messaoudi, M., Djabelkir, L., Olsen, A. L.,  
Cano, M. M., Lecourt, E., & Touchon, J. (2009). Effect of music therapy on anxiety and  
depression in patients with Alzheimer's type dementia: Randomised, controlled study.  
*Dementia and Geriatric Cognitive Disorders*, 28(1), 36–46.

<https://doi.org/10.1159/000229024>

Hattori, H., Hattori, C., Hokao, C., Mizushima, K., & Mase, T. (2011). Controlled study on the  
cognitive and psychological effect of coloring and drawing in mild Alzheimer's disease  
patients. *Geriatrics & Gerontology International*, 11(4), 431–437.

<https://doi.org/10.1111/j.1447-0594.2011.00698.x>

Kolanowski, A. M., Litaker, M., & Buettner, L. (2005). Efficacy of theory-based activities for  
behavioral symptoms of dementia. *Nursing Research*, 54(4), 219–228.

<https://doi.org/10.1097/00006199-200507000-00003>

Kolanowski, A., Litaker, M., Buettner, L., Moeller, J., & Costa, P. T., Jr. (2011). A randomized  
clinical trial of theory-based activities for the behavioral symptoms of dementia in  
nursing home residents. *Journal of the American Geriatrics Society*, 59(6), 1032–1041.

<https://doi.org/10.1111/j.1532-5415.2011.03449.x>

Orsulic-Jeras, S., Judge, K. S., & Camp, C. J. (2000). Montessori-based activities for long-term  
care residents with advanced dementia: Effects on engagement and affect. *The  
Gerontologist*, 40(1), 107–111. <https://doi.org/10.1093/geront/40.1.107>



- Raglio, A., Bellelli, G., Traficante, D., Gianotti, M., Ubezio, M. C., Gentile, S., Villani, D., & Trabucchi, M. (2010). Efficacy of music therapy treatment based on cycles of sessions: A randomised controlled trial. *Aging & Mental Health*, 14(8), 900–904.  
<https://doi.org/10.1080/13607861003713158>
- Rusted, J., Sheppard, L., & Waller, D. (2006). A multi-centre randomized control group trial on the use of art therapy for older people with dementia. *Group Analysis*, 39(4), 517–536.  
<https://doi.org/10.1177/0533316406071447>
- Särkämö, T., Tervaniemi, M., Laitinen, S., Numminen, A., Kurki, M., Johnson, J. K., & Rantanen, P. (2014). Cognitive, emotional, and social benefits of regular musical activities in early dementia: Randomized controlled study. *The Gerontologist*, 54(4), 634–650. <https://doi.org/10.1093/geront/gnt100>
- Schreiner, A. S., Yamamoto, E., & Shiotani, H. (2005). Positive affect among nursing home residents with Alzheimer's dementia: The effect of recreational activity. *Aging & Mental Health*, 9(2), 129–134. <https://doi.org/10.1080/13607860412331336841>
- Van Haitsma, K. S., Curyto, K., Abbott, K. M., Towsley, G. L., Spector, A., & Kleban, M. (2015). A randomized controlled trial for an individualized positive psychosocial intervention for the affective and behavioral symptoms of dementia in nursing home residents. *The Journals of Gerontology: Series B*, 70(1), 35–45.  
<https://doi.org/10.1093/geronb/gbt102>
- van der Ploeg, E. S., Eppingstall, B., Camp, C. J., Runci, S. J., Taffe, J., & O'Connor, D. W. (2013). A randomized crossover trial to study the effect of personalized, one-to-one

interaction using Montessori-based activities on agitation, affect, and engagement in nursing home residents with dementia. *International Psychogeriatrics*, 25(4), 565–575.  
<https://doi.org/10.1017/S1041610212002128>

Volicer, L., Simard, J., Pupa, J. H., Medrek, R., & Riordan, M. E. (2006). Effects of continuous activity programming on behavioral symptoms of dementia. *Journal of the American Medical Directors Association*, 7(7), 426–431.  
<https://doi.org/10.1016/j.jamda.2006.02.003>