

Effects of High-resolution Music Listening on Cognitive Function in Older Adults Living in Residential Care Homes



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12-week high-resolution music listening may help preserve global cognitive function and improve attention and orientation in older adults living in residential care homes.

INTRODUCTION	METHODS	RESULTS	CONCLUSIONS	REFERENCES
Non-pharmacological interventions such as music therapies may help maintain cognitive function in older adults. This study investigated the effects of long-term exposure to high-resolution music (192 kHz/24-bit, exceeding standard CD quality and including audible and inaudible frequencies) on cognitive function in older adults living in residential care homes.	A randomized controlled trial was conducted between May and August 2024 in a residential care home in Suzhou, China. Ninety-six older adults were randomized to high-resolution (HR) music, CD music, or control groups; 90 initiated the study. The HR and CD groups listened to music for 30 min/day, 5 days/week, for 12 weeks, while controls maintained usual routines. Cognitive function, ADL, and depressive symptoms were assessed at baseline and 12 weeks using the MoCA, ADL scale, and GDS-15. Data were analyzed using GEE models under the intention-to-treat principle.	Over 12 weeks, MoCA total scores declined significantly in the control group ($p=0.023$) but remained stable in both music groups. At post-intervention, the HR group had higher MoCA scores than controls ($p=0.041$), while the CD group showed no significant difference. The HR group also showed improvements in attention ($p=0.026$) and orientation ($p=0.011$). ADL outcomes did not change significantly. Depressive symptoms increased in controls ($p=0.021$) but remained stable in both music groups.	A 12-week high-resolution music intervention was associated with preservation of global cognitive function and selective improvements in attention and orientation compared with usual routines in residential care home residents. Music interventions may also help mitigate the progression of depressive symptoms, supporting HR music as a promising non-pharmacological strategy for cognitive maintenance in this population.	Lin L, Zuo S, Liu Y, et al. Effects of broadband music and audible band music on relaxation states and cognitive function in young adults: a randomized controlled trial. <i>Eur J Med Res</i>. 2024;29(1):376. Published 2024 Jul 19. doi:10.1186/s40001-024-01943-z Pérez-Ros P, Cubero-Plazas L, Mejías-Serrano T, Cunha C, Martínez-Arnau FM. Preferred Music Listening Intervention in Nursing Home Residents with Cognitive Impairment: A Randomized Intervention Study. <i>J Alzheimers Dis</i>. 2019;70(2):433-442. doi:10.3233/JAD-190361
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