

Research Brief

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ASSOCIATION BETWEEN MUSIC ENGAGEMENT AND EPISODIC MEMORY AMONG MIDDLE-AGED AND OLDER ADULTS: A NATIONAL CROSS-SECTIONAL ANALYSIS**Keywords:** long-term memory, music interventions, Alzheimer's disease, dementia**Purpose of the Study:** To better understand the impact of music engagement (listening to music, singing, playing an instrument) on memory recall tasks among middle-aged and older adults.**Key Findings:**

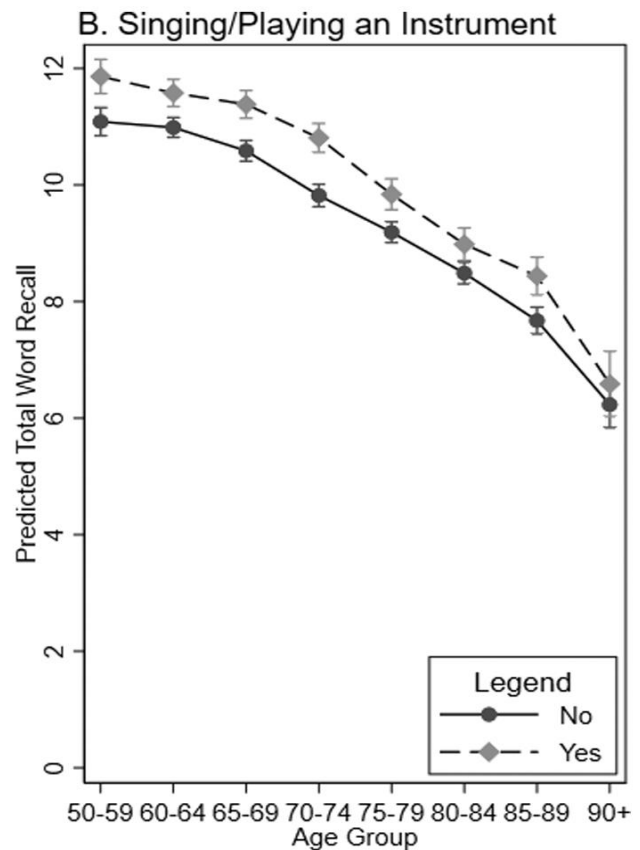
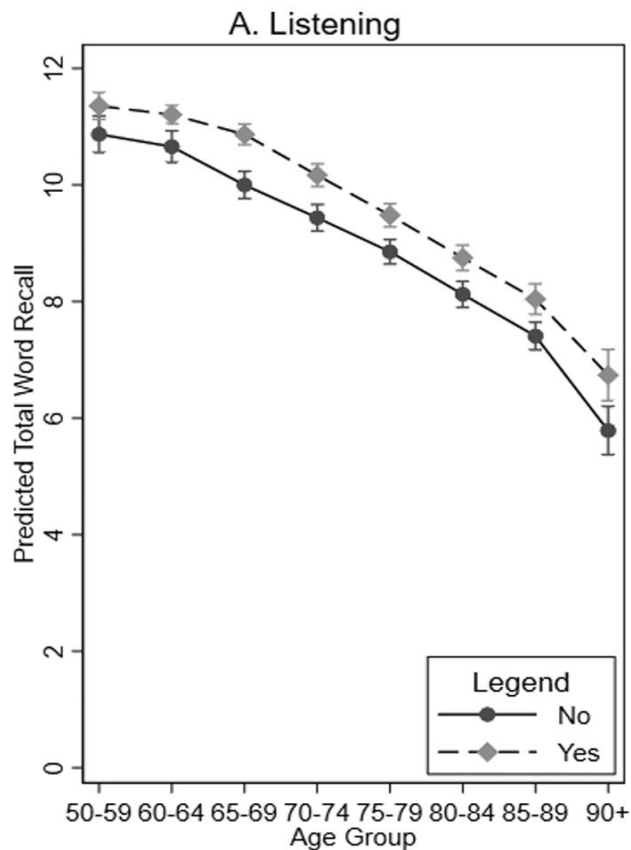
- ✓ Overall, participants who engaged with music performed better on recall tasks, and participants who engaged with music in multiple ways performed considerably better.
- ✓ Older participants performed worse on memory recall tasks than younger participants, but music engagement had a consistently positive impact across all ages.

Major Policy/Practice Implication: Simple music engagement, such as listening to music five minutes a day, could be the foundation for an evidence-based, accessible, and low-cost memory intervention program.**IMPORTANT BACKGROUND INFORMATION**

Though memory decline is a normal aspect of aging, severe memory decline can be a sign of Alzheimer's disease and related dementias. Some research demonstrates that music can be used to improve cognitive function among older adults both with and without dementia. For example, playing an instrument can positively impact executive processing and verbal memory, and listening to classical music can have an overall positive impact on memory. However, previous research has been limited to small study populations. This study assesses the impact of music engagement on memory among a diverse, national population of middle-age and older adults.

STUDY METHODS

Researchers analyzed data from music and memory interview questions among 4,592 cognitively healthy middle-aged and older adults in 2016. The data come from a larger-scale study that selects participants across the nation to be representative of the diverse adult population in the US. Participants were asked the number of hours they listened to music and sang/played an instrument in the past week. They were also asked to recall a list of ten words read aloud by the interviewer both immediately and five minutes later. Researchers also collected health and sociodemographic information about the participants. Researchers used multivariable linear regression to assess the impact of music engagement on memory recall.



KEY FINDINGS

- ✓ **Participants who engaged with music performed better on memory recall.**
 - Participants who listened to music recalled an average of 0.443 more words.
 - Participants who sang/played an instrument recalled an average of 0.396 more words.
 - Participants who listened to music AND sang/played an instrument recalled an average of 0.809 more words.

- ✓ **Older participants performed worse on memory recall tasks, but the positive impact of music engagement remained consistent across all ages** (see graphic in which 'no' indicates no music engagement and 'yes' indicates music engagement).

PRACTICE AND POLICY IMPLICATIONS

Simple music engagement, such as listening to music five minutes a day, could be the basis for an accessible and low-cost memory intervention program. Long-term care providers should consider bolstering music resources, particularly in memory-care units.

ORIGINAL ARTICLE

Rouse, H.J., Jin, Y., Hueluer, G., Huo, M., Bugos, J.A., Veal, B., Torres, M., Peterson, L., Dobbs, D., Meng, H. (2022). Association Between Music Engagement and Episodic Memory Among Middle-Aged and Older Adults: A National Cross-Sectional Analysis. *J Gerontol B Psychol Sci Soc Sci*, 77(3). doi:10.1093/geronb/gbab044

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