

Music and singing can help with pain management

Home > Impacts of arts and culture > Health and wellbeing impacts of arts and culture

This research was conducted by **Amy LiKamWa** and **four others** at the **University of Florida, USA**

Summary

This paper describes a pilot study which took 40 healthy adults and tested their pain sensitivity and tolerance during moments of silence, when they listened to music, and when they were singing. The research found that people took longer to perceive pain and tolerated pain for longer durations when singing compared to when they were listening to music or in silence. Those who claimed to be proficient singers had the highest pain threshold while singing. This means that music possibly offers a low-risk, readily available and accessible and inexpensive pain intervention in therapeutic, clinical or domestic settings.

The study took 40 healthy adults recruited using community-posted flyers, social media posts, and word of mouth

They were all 18–45 years of age, English-speaking, and without significant chronic health conditions. 29 of them had current or past musical training experience. After selecting from a list of 16 songs, participants listened to the audio only for the ‘listening condition’ and sang along with the artist in the ‘singing condition’. There was no audio or singing in the ‘silence condition’. Pain was induced by getting the participants to put their left hand in a cold-water bath. They fed back their level of pain, when they first felt it, and the researchers observed how long they could hold their hands in the bath. Each participant went through each condition (their order being randomly determined) with a break in between. Each person was paid \$30 for taking part.

Any treatment needs to take account of patient wishes

Unwanted singing or music can make people uneasy or uncomfortable or increase their anxiety, potentially exacerbating pain. What is beneficial might not be what is desired by patients. Interestingly, almost a third of the participants in the study said they 'would prefer silence or listening over singing if they were actually in pain'.

Keywords

USA **singing** **experiment** **music**

Title	The effect of music on pain sensitivity in healthy adults
Author(s)	LiKamWa, A., Cardoso, J., Sonke, J., Fillingim, R. B. & Booker, S. Q.
Publication date	2020
Source	Arts & Health, online
Link	https://www.tandfonline.com/doi/full/10.1080/17533015.2020.1827278
Author email	amyjanelkw@gmail.com

By **Culture.Case** | | **Health and wellbeing impacts of arts and culture** |



King's Culture

© Copyright 2026

Designed, developed and maintained by **King's Digital Lab**

Originally built by **weheartdigital Ltd**

Accessibility Statement