

**NCKP 2023**  
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## **Music for Vulnerable Populations: How Our Brains are Wired for Positive Outcomes**

Lois Svard, DMA, NCTM

Because we are hardwired for music as we are for language, music is an essential part of our lives. Language evolved to communicate facts and ideas; music to communicate emotion. Both are equally important. As musicians, we spend years studying, refining our technique and deepening our understanding of music, and music is deeply woven into the fabric of our lives. We have been able to become accomplished musicians not only because our brains are hardwired for music but because we have had the opportunities to develop the musical part of ourselves.

But for many groups of vulnerable people, that connection to music has either been lost or has never had a chance to develop. There are five groups of vulnerable populations discussed in this presentation. Groups 1 – 3: the discussion centers on how music is being used to wire, or rewire their brains for a better quality of life. Groups 4 – 5: because of brain processes involved in music making and listening, music provides a way to reconnect emotionally with self and others.

### **Pre-term infants**

[The Effects of Music Therapy on Vital Signs, Feeding, and Sleep in Premature Infants](#)

<https://www.youtube.com/watch?v=4qjx2BrrQJg>

[Music in premature infants enhances high-level cognitive brain networks](#)

### **Children born into poverty**

[Harmony Project](#)

[Music Enrichment Programs Improve the Neural Encoding of Speech in At-Risk Children](#)

[Music-Based Mentoring and Academic Improvement in High-Poverty Elementary Schools](#)

[Brainvolts](#), Auditory Neuroscience Lab, Northwestern University. This website is a tremendous resource for research concerning music and auditory processing. All papers written by the members of the lab are available on the site, as are videos, slide shows, and more.

Lois Svard. 2023. [The Musical Brain: what students, teachers, and performers need to know](#). New York: Oxford University Press. For a more complete discussion of Harmony Project and children living in poverty, see Chapter 10: “Does Music Really Make You Smarter?” See the Epilogue for a discussion of the homeless.

## **Wounded Veterans**

[MusiCorps](#) The MusiCorps website has links to numerous articles and performances concerning the program. You can also find numerous performances of the MusiCorps Wounded Warrior Band on YouTube.

## **The Homeless**

[Dallas Street Choir](#)

[National Alliance for Music in Vulnerable Communities](#)

[The Dallas Street Choir: the impact of communal singing on those experiencing homelessness](#). Article in The Choral Journal, October 2018.

## **Alzheimer’s patients**

[Music and Memory](#) organization started by Dan Cohen to bring iPods with personalized playlists to dementia patients in nursing homes. Check the “music-based resources” in the menu for current research

[Alive Inside](#) documentary about Dan Cohen’s work with Alzheimer’s patients