



Make a Joyful Noise: Music and Song in the Maintenance of Recovery

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Why Music?

- Music has direct connection to emotion/memory
 - Self-reporting as well as neuroimaging
 - Mood-regulation
- Music can influence decision-making
 - Purchasing decisions
- Motor-response
 - Your brain can dance even if you can't!

Ahtisaari and Karanam (2015) "Music and Emotion"
<http://syncproject.co/blog/2015/7/21/music-and-emotion>

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Why Music?

- Makes music the ideal media for
 - Evoking specific emotions
 - Background music for movies/television
 - Expressing the human condition (song/storytelling/ritual)
 - Influencing behavior
 - commercials/advertising
 - Mood alteration

Ahtisaari and Karanam (2015) "Music and Emotion"
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Krzysztof Penderecki (1960):
Threnody to the Victims of Hiroshima



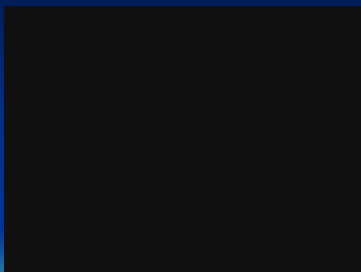
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Music in Declassified Atmospheric
Nuclear Testing Videos



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Music in Declassified Atmospheric
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Mirror Neurons

- Mirror neurons are brain cells that activate both when a person performs an action and when they observe someone else performing the same action. They were first identified in monkeys in the 1990s and are often associated with imitation, empathy, and social learning.
- When people listen to music or songs, especially familiar or emotionally expressive ones, motor regions of the brain can become active even if the listener remains physically still.
- Group singing and synchronized musical activity appear to strengthen social bonding partly through shared neural entrainment and action mirroring. (Karaoke!)
- Choral singing can produce measurable synchronization in:
 - respiration
 - heart rate variability
 - timing of vocal output
 - emotional response

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Mirror Neurons

- Therapeutic uses connected to these systems include:
 - Cognitive behavioral music therapy to address emotional, cognitive, and behavioral challenges
 - music therapy for stroke recovery
 - rhythmic entrainment for Parkinson's disease
 - social engagement therapies
 - Employing music for rehabilitation involving movement and auditory imitation

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Music Therapy

- Music therapy is a form of treatment that uses music within the therapeutic relationship to help accomplish the patient's individualized goals.
- Music therapy can help people manage physical pain and has proven effective in treating a variety of health conditions, including cardiac complications, cancer, diabetes, and dementia.
 - Lower heart rate and blood pressure
 - Reduce stress
 - Improve sleep
 - Boost memory and cognitive function

Psychology Today: <https://www.psychologytoday.com/us/therapy-types/music-therapy>

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Music Therapy

- Music can also have powerful effects on a person's psychological health. It can influence anyone's mood, causing a range of effects from providing comfort to soothing physical pain to boosting energy.
- Other psychological benefits of music therapy include:
 - Lifting one's mood
 - Increasing joy and awe
 - Reducing anxiety
 - Alleviating depression
 - Regulating emotions, particularly difficult ones
 - Facilitating self-reflection
 - Assisting in the processing of trauma

Psychology Today: <https://www.psychologytoday.com/us/therapy-types/music-therapy>

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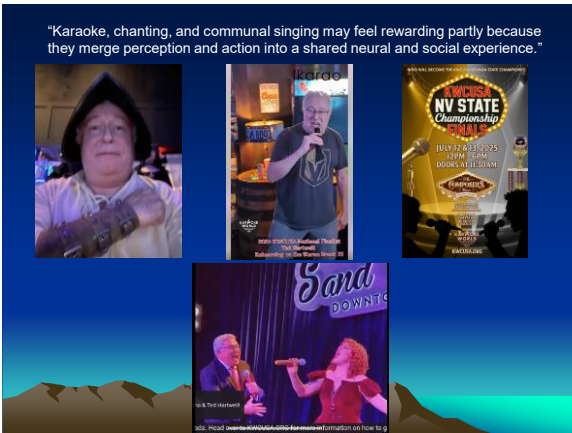
Spasmodic Dysphonia

Spasmodic Dysphonia (laryngeal dystonia) is a neurological voice disorder marked by involuntary spasms of the vocal cords, affecting voice quality and normal flow of speech.

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Group Exercise

On your card, write

- the name of a song or piece of music that has helped/is helping you get through a difficult time in your life;
- the artist, if you remember their name; and
- how it helped/is helping you move through the situation

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