

Singing for the Brain®



a fun, stimulating and social activity for people with dementia and their carers

**Music & Singing - Dementia Congress, Liverpool
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“You’ve just got to try it. It’s wonderful and everyone should do it.
I can’t sing, but a miracle happens and we make harmonies”
Singing for the Brain member



Alzheimer's Society's current Singing for the Brain service:

- For people with dementia in the early to moderate stages of dementia & their carers
- Over 100 groups in England & Wales (at October 2011)
- Led by specially trained singing facilitators
- Supported by volunteers and staff
- Over 44,000 attendances last year

Singing for the brain locations map



Singing for the Brain - the event

- Held in a community venue
 - Weekly, fortnightly – sometimes monthly
 - Starts with café style half hour with refreshments
 - 20 to 30 people ideal (ranges 12 to 50 people)
 - An hour's facilitated & active singing in a circle
 - Informal & non clinical but information available
-

Alzheimer's Society's Singing for the Brain service: Purpose

Active participation and use of memory

- To provide facilitated group session designed around the principles of music therapy & singing

Self expression and creativity

- Designed to help people with dementia & their families to feel part of society where they have a right to artistic and social stimulation.

Friendship & support

- To encourage carers and people with dementia in meeting and getting to know others in the same position as themselves

How music and singing has been shown to help people with dementia

- The part of the brain that works with speech is different to the part that processes music - singing can often still be enjoyed by those with communication difficulties
- Familiar songs often evoke verbal and emotional memories.
- There is as a lot of evidence being socially engaged is good for people with dementia
- Rhythm has also been shown to be beneficial
- Music helps create an environment in which people with dementia can express positive feelings and emotions.

Singing for the Brain - origins

- Started in 2003 by Chreanne Montgomery Smith, Alzheimer's Society West Berkshire
- Funding for 3 week pilot research project in collaboration with Dr Nicholas Bannan of Reading University
- Pilot project research questions:
 - Would people with dementia be able to participate in group singing ?
 - Would progress be identifiable in participants' singing ?
 - Would responses to the activity be positive
 - Would participating carers find the activity worthwhile ?

Singing for the Brain - the session

- Starts with a **welcome!** Everyone by name.
- **Warm-ups:** breath, voice & gentle stretches
- Incorporates **action, rhythm,** clapping & other body percussion
- Varied repertoire – scope for **choice** & favourites
- **Familiar songs** with song sheets and by heart
- **New material** taught by call and response & song sheets
- **Harmony & complexity** with rounds, partner & layered songs and groups may create new lyrics for old
- **Interactive, spontaneous** moments and **laughter**
- Often some songs with hand held **percussion**
- **Occasional instrumental** accompaniment & special projects
- Closes with a 'warm down' and **farewell song**

“Sing sing together,
merrily, merrily sing...”
(& why not dance too!)



Article 27 Human Rights Act

“Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.”

Our vision

Our vision is of a radically improved world for people with dementia.

A world where they have their rights recognised, where they can fully contribute to family life and where they can live with dignity, free from discrimination. A world where they and those who care for them, have their needs fully met.

A world, ultimately, where dementia can be defeated.

Our mission

We exist to champion the rights of everyone with dementia and those who care for them.

Drawing on our unique knowledge:

- We will become a world class authority on all aspects of living with dementia.
- We will be able to guarantee the availability of accurate and authoritative information.
- We will strive for universal access to quality services.
- We will galvanise investment for research into the causes, prevention, treatment and care of people with dementia.

Our values

Inclusion

We work proactively to ensure that we reach out to and involve people from group and community.

Challenge

We strive for innovation based on evidence and are prepared to question the status quo.

Mutual Respect

We work together to create an environment in which people treat each other with respect.

Thank you

Singing for the Brain web page
www.alzheimers.org.uk/singingforthebrain

Video clips
Alzheimers Society
http://www.youtube.com/watch?v=J4S_FX9bieg

NHS choices
<http://www.youtube.com/watch?v=epKPyOR0joM&feature=related>

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Singing for the Brain – Appendix A

Some perceived benefits & effects

- **Communication:** physiological with vocal warm ups, and social & emotional with singing & conversation
- **Cognition:** concentration, attention, memory, mirroring, learning
- **Engagement:** conversation, eye contact, bonding with circle
- **Confidence:** recognition of retained knowledge & skills, development of new ones.
- **Relationships:** a pleasurable outing for person with dementia & carer together. New friendships made
- **Empowerment:** contribute to group, exercise choice, lead parts, help with group tasks, devise lyrics
- **Stress reduction:** gentle aerobic exercise, laughter
- **Reduces stigma:** brings dementia out of shadows

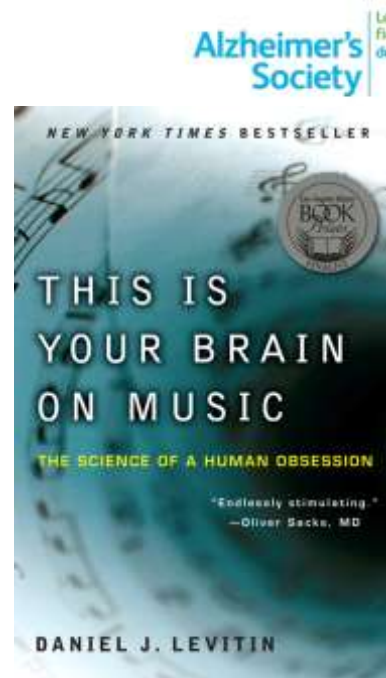
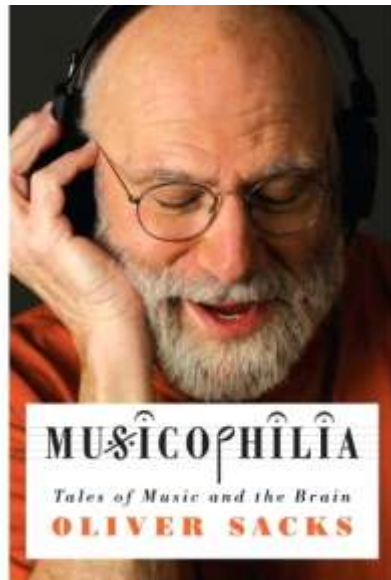
Singing for the Brain – Appendix B

Theories about music & the brain

- Music activates the right and left sides of the brain – activities that engage both sides of the brain at once cause the brain to be more capable of processing info.
- Music is often linked to strong emotion – music can therefore elicit strong memories
- Memories are formed by a series of cues – music will bring multiple strong sensory clues
- The human brain is inherently musical & social – human society and brain evolved with music

Appendix C

“The musical brain” some great books



Appendix C

The Brain and music

Frontal lobe

Insight

Planning

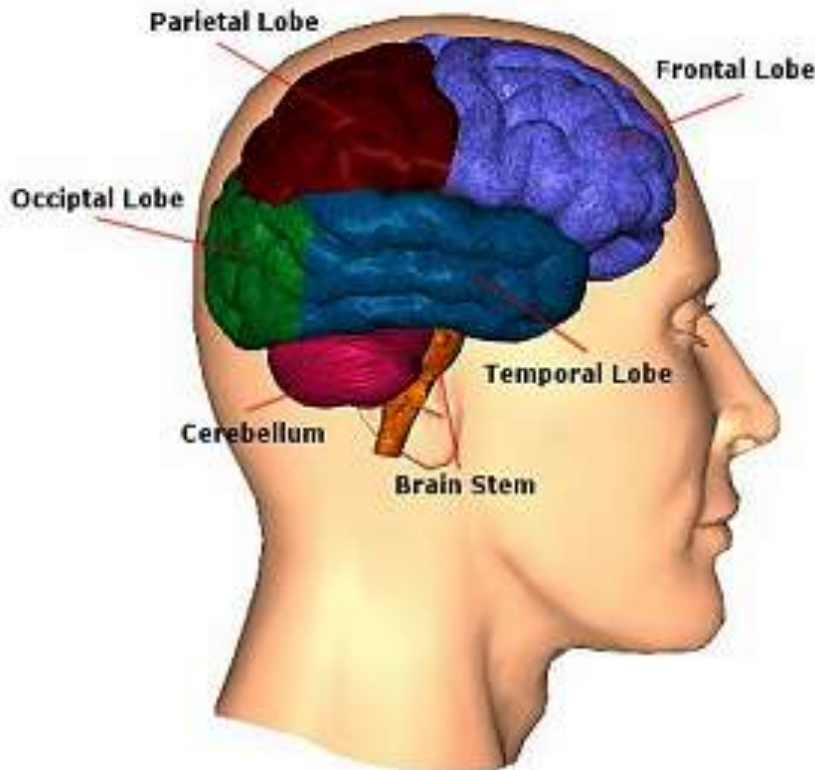
Organisation

Personality

Initiative

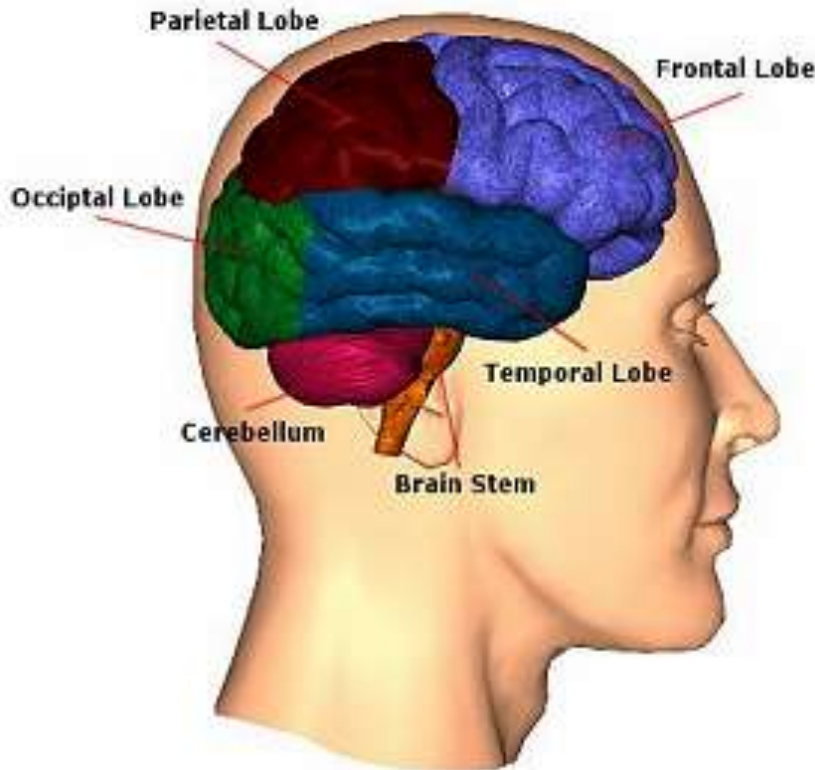
- *Analysis of the structure & meaning of a song.*

- *Self expression*



Appendix C

The Brain and music



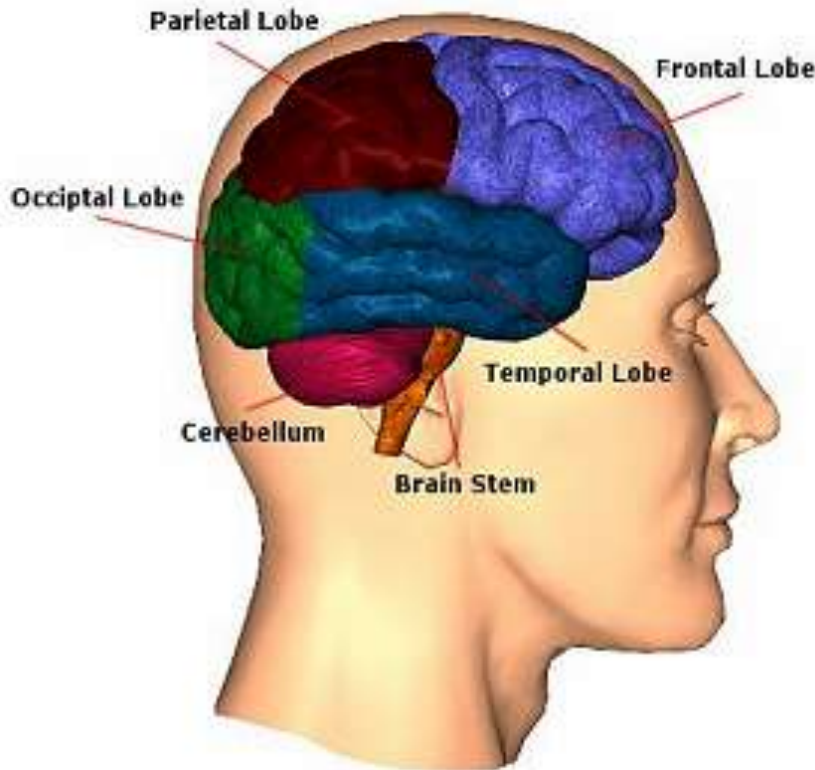
Occipital lobe

Vision

- *Observation of group leader*
- *Use of songbooks or song sheets*

Appendix C

The Brain and music



Parietal lobe

Touch

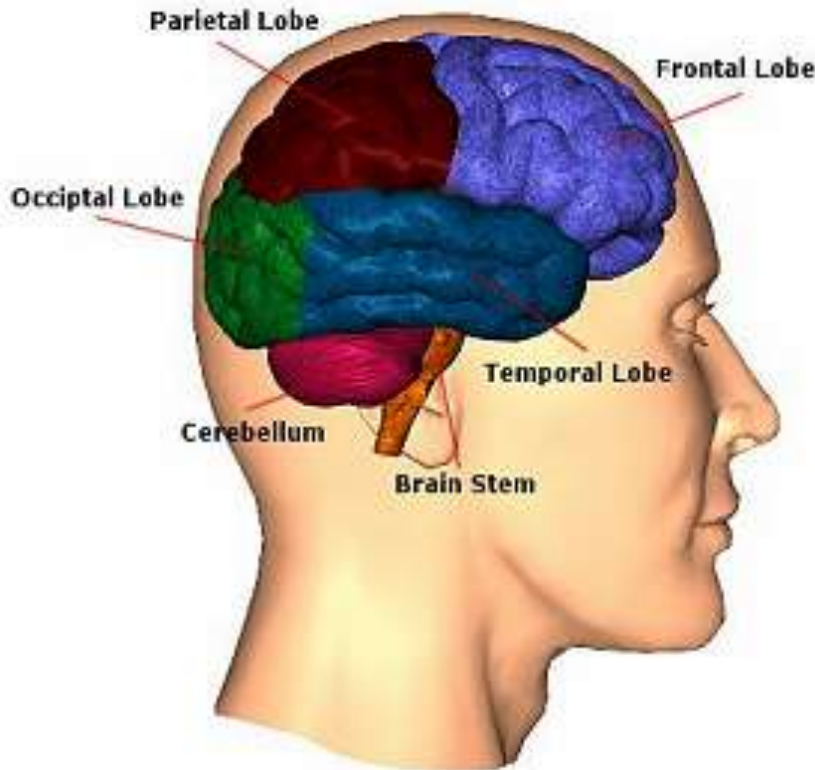
Hearing

Numbers

- *Tactile information from holding an instrument, holding hands, dancing.*
- *Using numbers in a song*
- *Listening to melody*

Appendix C

The Brain and music



Temporal lobe

Memory

Interpretation of sounds

Understanding of speech

- *Listening to music and voices singing*
- *Remembering the lyrics*
- *Interpreting what the leader is asking*

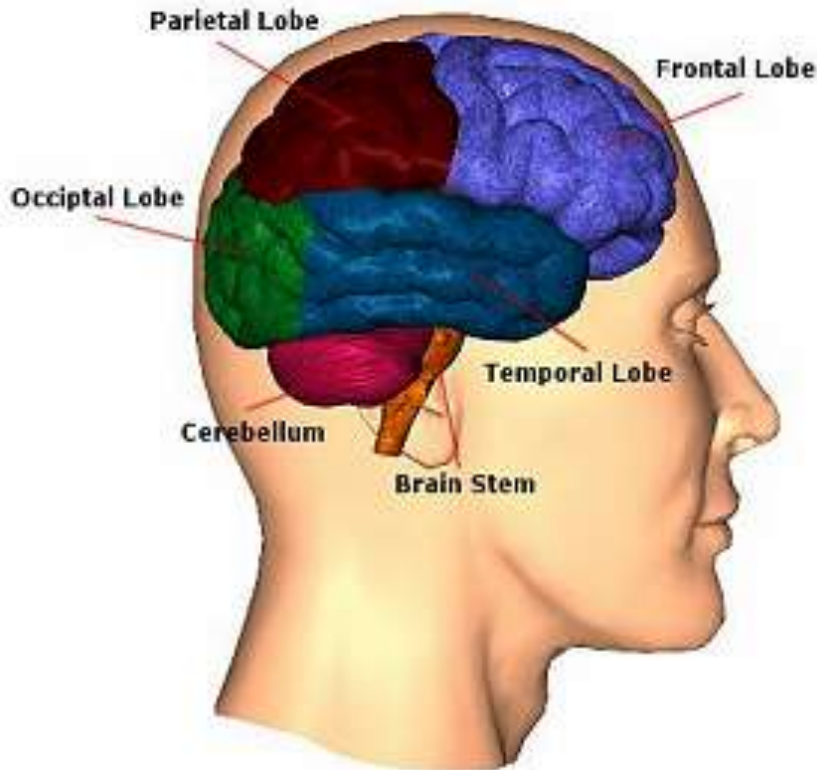
Appendix C

The Brain and music

Cerebellum

Movement

- *Foot tapping*
- *Clapping*
- *Using percussion*
- *Moving to the music*
- *Predicting where the song is going next*



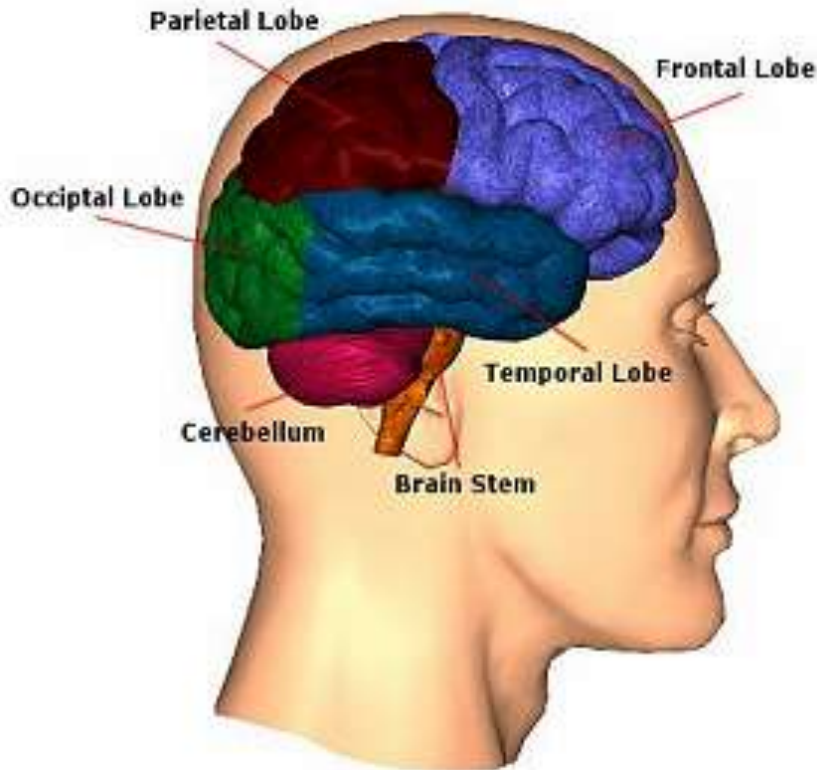
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The Brain and music

Hippocampus

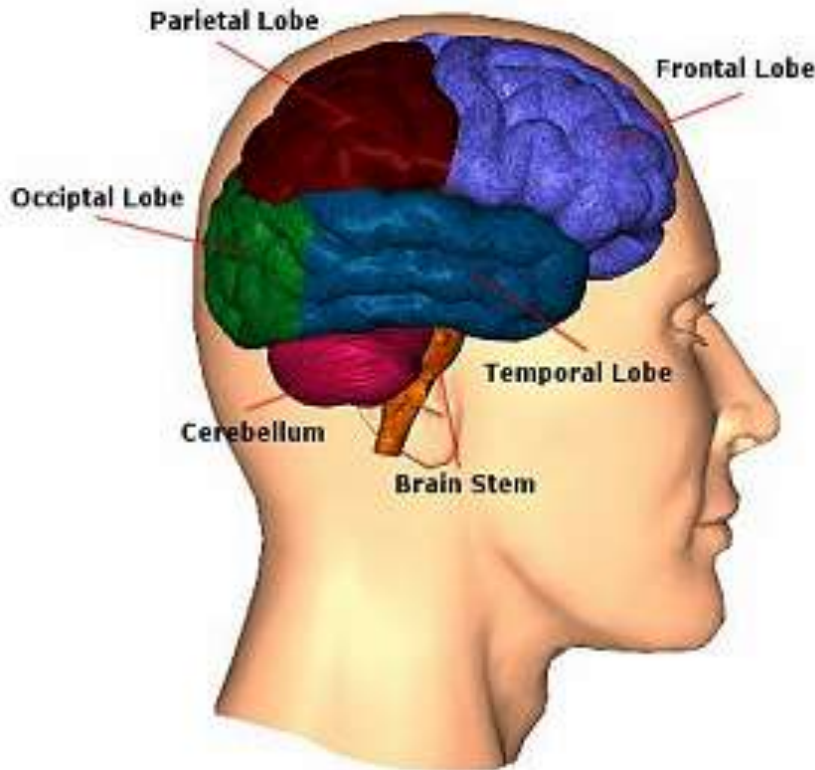
Consolidation of
information from the short
term to long term memory

Spatial navigation



Appendix C

The Brain and music



Nucleus accumbens

Music activates the production of dopamine

Dopamine triggers the brain's sense of reward

Increases motivation

Appendix C The Brain & Music

Music on the mind

When we listen to music, it's processed in many different areas of our brain. The extent of the brain's involvement was scarcely imagined until the early nineties, when functional brain imaging became possible. The major computational centres include:

CORPUS CALLOSUM ➤
Connects left and right hemispheres.

MOTOR CORTEX ➤
Movement, foot tapping, dancing, and playing an instrument.

PREFRONTAL CORTEX ➤
Creation of expectations, violation and satisfaction of expectations.

NUCLEUS ACCUMBENS ➤
Emotional reactions to music.

AMYGDALA ➤
Emotional reactions to music.

SENSORY CORTEX
Tactile feedback from playing an instrument and dancing,

AUDITORY CORTEX
The first stages of listening to sounds. The perception and analysis of tones.

HIPPOCAMPUS
Memory for music, musical experiences and contexts.

VISUAL CORTEX
Reading music, looking at a performer's or one's own movements,

CEREBELLUM
Movement such as foot tapping, dancing, and playing an instrument. Also involved in emotional reactions to music.