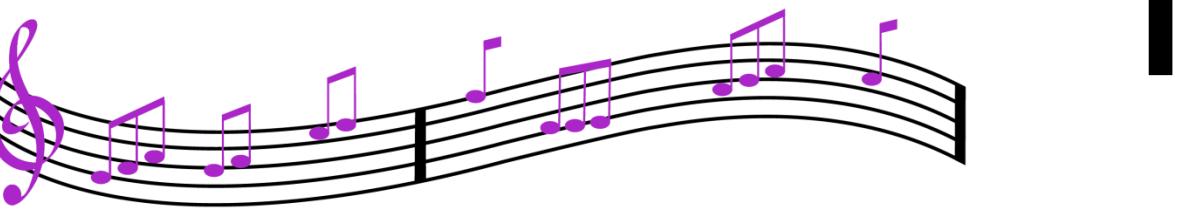


"Best program ever"

"It opens up a door to a new type of communication."

"I love Aphasia Tones...everybody is wonderful singing together."



The Aphasia Tones: Finding Voice Through Song

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"Awesome music!"

"It's easier to sing, than talk....at least for me."

"It makes you feel happy and helps your motor skills!"

Introduction

The singing of familiar songs has long been noted to be a relatively spared ability for many individuals with aphasia (Racette, Bard, & Poretz, 2006). However, Pound et al (2000) point out that the opportunity to be an active member in the creative arts, such as music, is frequently limited by aphasia—even though involvement has been recognized for its “potential in promoting healing and personal development.” On a different note, advanced radiological procedures are investigating where the neurocorrelates of language and music overlap and diverge, helping to determine how these interactions might play a part in the recovery of language (Patel, 2008; Tomaino, 2010).

This poster will:

- highlight the literature involving a life participation approach to aphasia and the therapeutic role of music in aphasia
- describe the development and the daily workings of *The Aphasia Tones*
- identify strategies and adaptations implemented by graduate clinicians to support successful participation in the choir and
- relate feedback from choir members

Background

Music and Life Participation Approach to Aphasia

A Life Participation Approach to Aphasia (LPPA) endorses engaging individuals in relevant and purposeful activities such as drama groups, book clubs, news groups, Toastmaster clubs, photography groups, and computer skills groups (LPAA Project Group, 2000). Pound et al (2000) suggest that participation in these activities supports the principles of social inclusion.

Singing in a choir provides membership in a community in which individuals work together to achieve a shared goal. Music is socially relevant and emphasizes both an individual's identity and membership in a cultural community. As a therapeutic intervention, music frequently produces multiple, overlapping benefits including pride in accomplishment, learning of new skills, pleasure in music, relaxation, and emotional expression.



In a university clinic, graduate students gain valuable clinical experience learning how to support participation through ongoing evaluation, problem solving and creative modifications. Glista and Pollens (2007) cite the value in teaching graduate students to “manage thinking about the intersection between communication and life participation” (pg. 355).

Introduction

Music and Impairment-Based Aphasia Therapy

- Melodic Intonation Therapy (MIT) adapts music for evidence-based treatment of severe expressive aphasia (Sparks, 2008; Schlaug et al. 2008).
- Participants demonstrated greater repetition and recall after production training with choral singing than choral speaking (Racette et al., 2006).
- SIPARIO, a highly-structured music based therapy, was used in Germany to improve verbal output in severe aphasia (Jungblut, 2009).
- Tamplin (2008) found that a regimen of vocal exercises and singing helped to improve speech output in four clients with dysarthria.
- Tomaino (2010) examined the ability of singing to prime verbal recall and the role of song familiarity in the recovery of speech in a single case study of a musicologist with severe nonfluent aphasia.
- Wan and colleagues (2010) consider singing to be a particularly valuable therapeutic tool, citing increased engagement of the auditory-motor feedback loop in the brain compared to playing instrumental music. They also support the research suggesting that there is a “shared network in the brain that underlies both speaking and singing” (p. 287).

Choir Description

Choir Members

- The 25-35 participants of the CSUEB weekly aphasia group self-selected into the choir activity
- Over the course of the five quarters offered (Fall 2009-Winter 2010), choir membership grew 58%, from 14-24 members



Aphasia Tones members:

- men and women
- ranged in age from early twenties to late seventies
- range of aphasia types, severity, and time post-onset
- varied musical backgrounds
- had not sung publicly since their strokes

Efforts to Increase Member Participation

Choir members:

- suggested songs
- voted on choir name and concert dress
- participated in quarterly concerts open to family, friends, and CSUEB students and staff
- introduced songs at concerts via personalized scripts
- evaluated whether a song should stay in the group repertoire
- provided quarterly feedback through aphasia-friendly surveys

Room organization included:

- assigned seating to promote mutually supportive partnerships
- physical scaffolding for those with right-sided hemiplegia (e.g., resting music binders on a central table, partners turning pages)
- wheel-chair accessibility

Session Elements

Focus on Aphasia Friendly Techniques

Rehearsal Structure

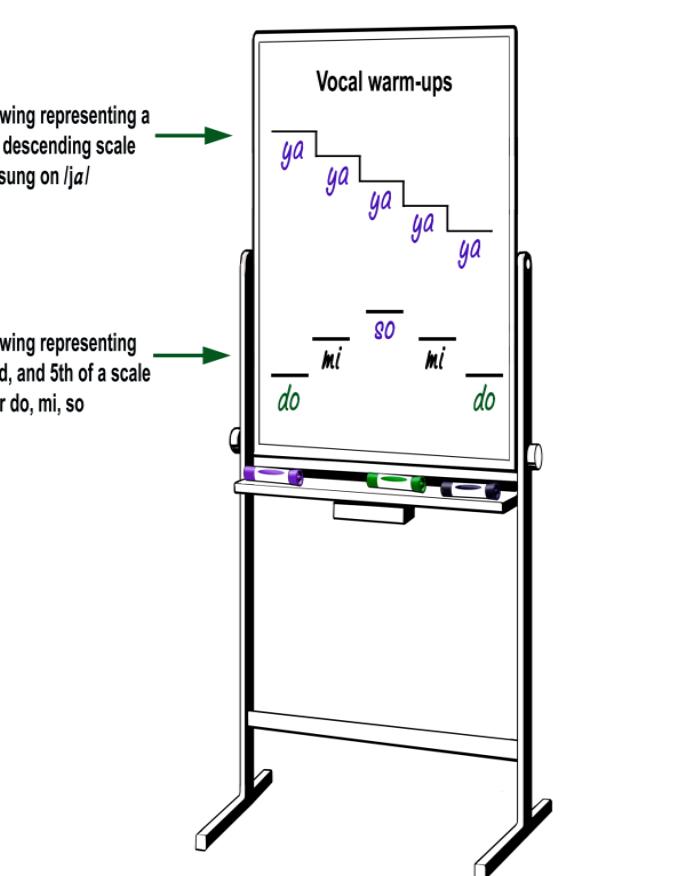
The goal of a session was to present 25% new material and 75% review. New songs were introduced one week and repeated the following week. The 50 minute sessions consisted of the following elements:

Aphasia-Friendly Language
Clinicians used:

- slowed verbal rate
- short, clear sentences
- gestures and/or visual aids

"Aphasia Friendly" Announcements

Warm-ups
- ascending and descending scales on vowels
- solfège (do, re, mi, fa, etc.)



Songs

Song Selection Process

Choir members suggested songs. Clinicians and directors reviewed song choices and added additional potential songs. Directors selected and introduced potential songs. Members voted “thumbs up” or “thumbs down” for each song.

Song Selection Criteria:

High familiarity and popularity
Common vocabulary
“Singability”

- easy melody
- moderate tempo
- repeatable chorus
- simple rhythms

Additional Singing Supports

- Song elements such as verses and choruses were modified to increase repetition of familiar lyrics and decrease semantic load
- Tempo was slowed to a comfortable singing rate
- Group members tapped to maintain rhythm and to facilitate production of difficult words
- CD provided for home practice of choir arrangements

Sample Musical Concepts:

Two-part harmony
Dynamics (crescendo/decrecendo)
Chorus and verse
Lead and back-up vocals
Alternating parts
Attending to director gestures

Sample Song Repertoire:

Imagine John Lennon
Let It Be The Beatles
Under the Boardwalk The Drifters
I Can See Clearly Now Johnny Nash
Stand By Me Ben E. King
Dock of the Bay Otis Redding
Dancing Queen ABBA

Choir Team Roles

All clinicians and volunteers watched a training DVD on supportive communication, and debriefed weekly with the supervisor.



Choir Directors

Graduate speech-language clinician or undergraduate music major
Role: Directed weekly 50 minute sessions
Responsibilities: Taught proper posture, voice projection, and vocal warm ups; selected weekly practice order of songs; rehearsed songs and taught musical concepts; decided on performance order and directed concerts
Number: Single director or 2 co-directors

Supporting Clinicians

Graduate speech-language clinicians
Role: Assisted logistics of 50 minute sessions
Responsibilities: Developed weekly materials (e.g., music binders, seating charts, song lyrics); made weekly announcements; provided supportive communication assistance; developed surveys; solicited client feedback regarding music and program; provided verbal models; assisted with tracking printed lyrics
Number: One or two clinicians

Volunteers

Undergraduate students in the Communicative Sciences and Disorders and/or Music departments
Role: Accompanied the choir on the piano during rehearsals and performances
Responsibilities: Encouraged clients to play rhythm instruments (e.g., tambourine, maracas, etc.); participated in the weekly debriefing with supervisor
Number: One or two volunteers

Supervisor

Clinical Supervisor, CCC-SLP
Role: Supervised choir team
Responsibilities: Led weekly clinical debriefings or e-mail exchanges, helped team members to evaluate the successes and challenges of each session and to identify potential solutions
Number: Single supervisor

Aphasia Education and Advocacy

- Clinicians had the opportunity to provide aphasia advocacy and education by explaining the nature of the communication disorder to the volunteers from the music department, especially to the student musicians who came in to accompany for a concert.
- To celebrate Aphasia Awareness Month in June, choir members were encouraged to speak about their experiences with aphasia and with the choir during the 2010 spring concert, and to introduce the songs using short self-written scripts.
- The Aphasia Tones* name was posted on the main university marquee to promote the Spring concert to the campus at large. This was the first time the word “aphasia” had appeared on the marquee.



Measures & Feedback

Surveys

Clinicians generated a quarterly aphasia-friendly survey to gather input from the choir members regarding their experience. Suggestions or changes based on member input were discussed at the post-quarter evaluation with the Choir team and noted in the quarterly report.

Sample Survey Question in aphasia-friendly format:

1. How much did you enjoy participating in the choir?
<input checked="" type="checkbox"/> Not at all <input type="checkbox"/> Okay <input type="checkbox"/> A lot
1 2 3 4 5 6 7 8 9 10

Other Sample Survey Questions and Statements:

- Overall, what did you think of the song choices?
- I enjoyed learning about pitch/harmony
- Would you like to have a performance?
- Were your expectations met for this group?
- Did the music in the choir folders help you participate in singing?
- Have you missed singing since your stroke?
- Have you sung in a group since your stroke?

Qualitative Input

Members indicated a high level of satisfaction with choir, and several expressed that choir was the highlight of their week. When asked about the choir experience during interviews, multiple members conveyed that the program was fun and improved over the year. After performances, members expressed success, pride, and appreciation.

When asked why they enjoy choir, participants shared:

“I think everyone who’s in choir enjoys it because...they can pronounce the words when singing. It’s easier for them to sing it out instead of saying it out.”

“I love the music. It’s helped my speech so tremendously. Singing is helping me connect together!”

“It was hard work, but it paid off.”

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For Further Information

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