MY TOPIC: MUSIC IN SPEECH THERAPY IN THE CZECH REPUBLIC

Reading 1

ARTICLE: Integrating Music Therapy Services and Speech-Language Therapy Services for Children with Severe Communication Impairments: A Co-Treatment Model

METHODOLOGY / DESIGN

Qualitative research: Case study, observation (video recordings). Classroom-Based Colaborative SLP/MT Model.

WHERE THE RESEARCH IS CONDUCTED?

Ohio, US. Preschool classroom.

WHO IS THE RESEARCH DONE FOR?

The research was done for a specialist who works with a child with severe speech impairments which hinder daily communication. The specialist can be a teacher (preschool teacher in this case) in cooperation with speech therapist and a Music therapist providing consultations on appropriate strategies to the teacher.

WHAT WAS FOUND?

Effects mentioned in the theoretical review:

- promotion of breath and muscle control
- stimulated vocalization
- better receptive and expressive language skills
- improvement of articulation
- more effective learning of sings (AAC) by autistic children
- Music evokes nonverbal communication,
- surpasses emotional, physical, cultural, intellectual limits.
- Music can help to reduce echolalia (in mental retardation case)

Only short-time effects could be found in this research:

- increased engagement and participation (a step by step decrease of leaving the group activities) of the child in group activities in the class while using music
- increase of proper social contact

JUSTIFICATION - WHY IS THIS READING SUITABLE FOR MY TOPIC?

I think that this reading provides a basic introduction to my topic. It shows an overview of more researches done in the past and their findings. It also points out that the combination of music therapy and communication, although the positive effect is quite obvious, is not discussed enough in the literature. Which makes me think that I might have a chance to explore a large area in my research.

Reading 2

ARTICLE: Study of accent-based music speech protocol development for improving voice problems in stroke patients with mixed dysarthria

METHODOLOGY / DESIGN

Quantitative research.

WHERE IS THE RESEARCH CONDUCTED?

Seoul, Korea.

WHO IS THE RESEARCH DONE FOR?

Specialists who work with stroke patients with mixed dysarthria.

WHAT WAS FOUND?

• improvement in the area of respiration, phonation, articulation, resonance, prosody

JUSTIFICATION - WHY IS THIS READING SUITABLE FOR MY TOPIC?

This article shows another group of clients music therapy can be used with. Therefore the music element is used there in a different way – it mostly focuses on the accent. It provides some general information about dysarthria. We can find there many references to other researches and literature about music therapy too.

Reading 3

ARTICLE: Melodic intonation therapy: back to basics for future research

METHODOLOGY / DESIGN

A critical review of literature on melodic intonation therapy (MIT).

WHERE IS THE RESEARCH CONDUCTED?

Montreal, QC, Canada.

WHO IS THE RESEARCH DONE FOR?

The research is done for an academic public of speech therapy specialization or – more narrowly - aphasia focused speech therapists.

WHAT WAS FOUND?

- The relative role of rhythm and pitch in MIT's therapeutic effect has not been tested yet.
- There are some other components of this kind of treatment which should be tested in terms if MIT.
- MIT is considered as an appropriate treatment for Broca's aphasia, but it has the potential to help with motor speech deficits too.

JUSTIFICATION - WHY IS THIS READING SUITABLE FOR MY TOPIC?

Its goal is to distinguish between melodic intonation therapy (MIT) and it's variations. The article brings up an idea of music being rather useful as a therapy medium of something called "speech apraxia" than aphasia. Which – as many other fields – the authors suggest to be explored in future studies.

Reading 4

ARTICLE: *Effects of music therapy in the treatment of children with delayed speech development - results of a pilot study*

METHODOLOGY / DESIGN

Quantitative research. Speech development test, non-verbal intelligence test, music therapy assessment scales, Nordoff-Robbins scales.

WHERE IS THE RESEARCH CONDUCTED?

Witten, Germany.

WHO IS THE RESEARCH DONE FOR?

Specialists focusing on preschool children (3,5 – 6 years old) with delayed speech development.

WHAT WAS FOUND?

- positive development after implanting music therapy in terms of:
 - o phonological capacity
 - $\circ \quad \text{understanding of speech}$
 - o cognitive structures
 - o action patterns
 - o level of intelligence
 - o convergence of developmental and biological age
- significant changes communication, client-therapist relationship

JUSTIFICATION - WHY IS THIS READING SUITABLE FOR MY TOPIC?

It shows that the effect of music therapy can be demonstrated in numbers too. There's a suggestion to investigate the mechanisms in depth in future studies.

Reading 5

ARTICLE: Music training: Lifelong investment to protect the brain from aging and hearing loss

METHODOLOGY / DESIGN

Quantitative research.

WHERE IS THE RESEARCH CONDUCTED? Illinois, USA.

WHO IS THE RESEARCH DONE FOR?

Specialists focusing on adult clients with presbycusis.

WHAT WAS FOUND?

There have been three general themes discovered:

- Age-related declines in auditory processing are not inevitable.
- Music training is a powerful strategy to mitigate age-related decline in nervous system function.
- Early auditory experiences, such as through music, are investments in healthy aging that pay lifelong dividends for auditory processing.

This article focuses on my field of interest in speech therapy – on people with hearing impairment. I find it extremely important that music can help also in case of presbycusis because as we all know the average length of life is getting longer and the number of old people is getting into a huge mass. We really need to look for strategies to make our old age as comfortable as possible.

An interesting idea is to use music not only as a rehabilitation tool but also as a tool of primary prevention of hearing loss. Also it is important to realize that music therapy isn't an ultimate way of therapy – some people are just not that drawn to music.

Suggestions for further exploration:

- There have been no studies of biological changes following music training later in life.
- It is thought that the emotional salience and motivation of a training regimen can bolster its neuroplastic potential.

Reading 6

ARTICLE: Emotion Without Words: A Comparison Study of Music and Speech Prosody

METHODOLOGY / DESIGN

Quantitative research. Questionnaire - respondents ranking with Likert scales.

WHERE IS THE RESEARCH CONDUCTED?

University of Jyvŕskylâ

WHO IS THE RESEARCH DONE FOR?

Probably for music therapists or speech therapists who want to work on client's non-verbal skills.

WHAT WAS FOUND?

- Speech prosody can communicate a phrase's emotional content without lexical elements and that the results are comparable, though less intense, than the same emotion conveyed by music.
- Musicians showed greater statistical reliability in their ratings of happiness across happy stimuli and the non-musicians greater statistical reliability in their ratings of happiness across sad stimuli.
- Stronger and less varied ratings of music than speech prosody comparable, though less intense, than the same emotion conveyed by music.

JUSTIFICATION - WHY IS THIS READING SUITABLE FOR MY TOPIC?

A great idea is presented that could be used in speech therapy while working on developing non-verbal communication (in order to be able to tell the difference between sad and happy face, melody, ...).