Speech and Music Therapy Co-Treatment Approach to Aprosodia in Right Hemisphere Brain Damage (RHD)

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Purposes
1) To examine the effects of an innovative combined music and speech therapy treatment approach in a college-based clinic to improve expressive linguistic and affective aprosodia in a participant with right hemisphere brain damage (RHD).
2) To qualitatively describe students’ learning outcomes from co-delivering this treatment.

Methods
• Single-subject, clinical research study of novel aprosodia treatment delivered by students in a college-based clinic.
• Participant:
  • 70-year-old male with RHD due to a stroke.
  • Mild-executive moderate function deficits.
  • Memory and language skills were functional.
  • Expressive linguistic and affective aprosodia characterized by frequent rising intonation at ends of declarative sentences that was not characteristic of his premorbid vocal pattern.
• Clinicians:
  • CB: a senior in the MT program completing his first practicum with adults and his first co-treatment session with SLP.
  • SC: a first year SLP graduate student completing her first practicum with adults and her first co-treatment session with MT.
• Eager to learn more about how speech therapy and music therapy could complement one another to reach a common goal.
• Informal assessment assessed receptive and expressive affective and linguistic prosody pre-and post-treatment (see below).

Client Outcomes

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<th>Baseline</th>
<th>Post-Treatment</th>
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<tbody>
<tr>
<td>Affective Prosody</td>
<td>66%</td>
<td>100%</td>
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<tr>
<td>Linguistic Prosody</td>
<td>87.7%</td>
<td>100%</td>
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<tr>
<td>Speech Rhythm</td>
<td>75%</td>
<td>85%</td>
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• Significant improvement in affective and linguistic prosody; results did not generalize to spontaneous conversation.
• Client’s response to treatment and interaction with students was highly positive.
• Client’s caregiver reported that the session was a highlight of the client’s week, and that he had few other events in his life that brought such enjoyment.
• Client continued in a speech/music group co-treatment session the following semester, focused on use of choral singing to enhance language and speech. Continued high level of attendance and engagement.

Student Outcomes
• Learned to co-plan, co-implement and co-write about session, treatment and results.
• Increased understanding of shared and unique vocabulary and concepts.
• Increased understanding of other discipline, thus increased awareness and willingness to pursue future collaboration.
• Increased confidence due to having overcome challenges.
• Increased experience with and opportunity for future scholarly endeavors.
• CB: “I gained the knowledge and vocabulary to comfortably navigate conversations pertaining to speech therapy practice, and have a much better understanding of the SLP profession”.
• SC: “I developed a greater understanding and appreciation of music therapy, while expanding my own clinical skills. I believe [client] made the progress he did as a result of our interprofessional collaboration”.

Discussion, Limitations, Future Directions
• Larger studies of this treatment approach for aprosodia in RHD needed.
• Continue to develop assessment tool and treatment approach.
• Develop strategies to address generalization of treatment gains.
• Continue to develop IPE and interprofessional practice in our clinics and report on outcomes.

References