

ARTICLE

Finding common ground: Exploring speech language pathologists' experiences of collaboration with music therapists in treating people living with aphasia

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ABSTRACT

The purpose of this phenomenological study was to investigate speech-language pathologists' (SLPs') experiences of collaboration with music therapists (MTs) in treating people with aphasia. Our analysis of the data yielded mixed outcomes, highlighting/identifying aspects that support and challenge collaboration. Data was collected using semi-structured interviews with three participants. The participants were SLPs who had experience treating people with aphasia in hospital and community-based settings. Thematic analysis was used to identify components of MT-SLP collaborations in treating aphasia. Results revealed the following themes: personal and clinical aspects, and systemic challenges of MT-SLP collaborations. Participants' feedback on the thematic analysis was incorporated into the discussion which presents insights into the overarching qualities of successful MT-SLP collaboration and the contributions of music in aphasia treatment. This research provides a list of music interventions which may be a resource for SLPs and MTs in treating aphasia. Additionally, topics discussed in this research may assist SLPs and MTs in advocating for collaborative care of people living with aphasia.

KEYWORDS

phenomenology,
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INTRODUCTION

The purpose of this study was to investigate speech-language pathologists' experiences in collaborating with music therapists (MTs) and incorporating music into aphasia treatment. The motivation for choosing this topic comes from my¹ internship experience of collaborating with a

¹ In this study, the first person is used in reference to Author 1, who was the principal researcher in this study.

speech-language pathologist in facilitating online group music therapy sessions for adults with various types of aphasia. I enjoyed this collaboration and learned a great deal in the process. I was curious to know more about interdisciplinary collaborations and the impact of collaborative care on those involved. This research was conducted as part of the academic requirements for my programme of study under the supervision of Heidi Ahonen (Author 2). Ethics approval for this study was granted by Wilfrid Laurier University's Research and Ethics Board (REB #8410).

Speech-Language Pathology is a well-established allied-healthcare profession which focuses on assessing and treating various barriers to communication. The terms speech-language pathologist, speech-language therapist, and speech therapist are often used interchangeably. For the purposes of this study, the term speech-language pathologist (SLP) will be used for consistency. Speech-language pathology is the most common therapeutic modality involved in treating aphasia (John Hopkins Medicine, 2024). SLPs are trained to address communication challenges in the following treatment domains: speech, language, social communication, and cognitive communication (American Speech-Language-Hearing Association, n.d.).

Phenomenological inquiry was used to explore the following research questions:

1. What are SLPs' experiences of interdisciplinary collaboration in treating aphasia?
 - a. What are SLP's experiences in collaborating with music therapists?
2. What are SLP's perceptions of the impact of music in treating aphasia?
 - a. What are the perceived benefits of using music in aphasia treatment?
 - b. What are the perceived limitations of using music in aphasia treatment?
3. What are the practical aspects of MT-SLP interdisciplinary collaboration in treating aphasia?
4. What music therapy interventions use speech therapy ideas?

BACKGROUND INFORMATION

Aphasia is a language disorder which impairs the ability to communicate with others (Johns Hopkins Medicine, 2024). Aphasia is indicative of damage to the language-dominant left hemisphere of the brain, typically caused by stroke, head injury, brain tumour, infection, or dementia (Johns Hopkins Medicine, 2024; National Library of Medicine, 2022). Different types of aphasia such as Broca's aphasia, Wernicke aphasia, and Global aphasia can be delineated, based on the extent and location of the damage to the brain. Primary progressive aphasia (PPA) is a degenerative form of aphasia considered to be a "type of frontotemporal dementia" (Mayo Clinic Staff, 2023). Diagnosis of aphasia typically involves neuroimaging of the brain and an SLP assessment. Communication is integral to everyday life; as such, aphasia can have a devastating impact on the human connection, resulting in loss of self-esteem and social isolation. It is important to note that aphasia typically does not impair an individual's inherent competence but rather conceals it (Aphasia Institute, n.d.).

A SLP adopts a variety of approaches in treating aphasia, depending on the assessment and the extent of language impairment. The Life Participation Approach to Aphasia (LPAA) is a social model of aphasia care which focuses on re-establishing meaningful participation in life (Chapey et al., 2000; Holland, & Elman, 2020). The LPAA is a holistic approach to aphasia care which enables clients to

actively participate in their recovery. Clients are encouraged to collaborate with their SLP in decision-making regarding their treatment goals and interventions.

Music therapy encompasses a myriad of diverse orientations, approaches, methods, and models (McFerran et al., 2023). Music therapy practice is a fluid and dynamic process involving the intentional use of music therapy interventions within a therapeutic relationship. The choices surrounding the approach and methods of treatment are informed by external and individual contextual factors – for example, culture, clinical setting, diagnosis, and client preferences and strengths. Taking into account these factors, this enables music therapists to provide care tailored to the unique needs of each client. Music psychotherapy typically focuses on addressing psychosocial issues presented by the client (Kim, 2016). Music psychotherapists may assume an eclectic approach in therapy, incorporating elements from psychodynamic, humanistic, behavioural, cognitive, and systems-based orientations. Psychodynamic concepts such as transference and countertransference within a therapeutic relationship are integral to most music psychotherapy approaches.

The value of counselling in aphasia treatment is being explored in relation to addressing co-morbid mental health concerns such as mood disorders and social isolation (Sekhon et al., 2022). In Canada, professional title regulation for counselling and psychotherapy varies from province to province. The Canadian Counselling and Psychotherapy Association (CCPA) offers a nationwide definition for numerous counselling professions and psychotherapy noting that these related practices involve an interpersonal process offered by a skilled professional to effect positive change (CCPA, 2024). Although there is considerable overlap between these professions, psychotherapy training and scope of practice enables registered psychotherapists to use specialised interventions to treat individuals with chronic or severe mental health issues. In contrast, counselling may focus on supporting individuals through challenges of everyday life.

Psychotherapy which primarily involves speech as a means for expression may be less accessible to people with aphasia due to the nature of their impairment. Music psychotherapy offers clients opportunities for social interaction and self-expression through the thoughtful use of music (Kim, 2016). More research may be beneficial in clarifying the role that music psychotherapy can play in treating aphasia.

LITERATURE REVIEW

Literature exploring various aspects of music and aphasia care was examined to provide context for this research. Articles were selected from communication and rehabilitation focused journals in accordance with the purpose of the research. Relevant themes identified in the research included: types of interventions and treatment protocols, rationales for music-based aphasia treatment, and the application of research to clinical practice.

Interventions and treatment protocols

Most articles discussed discipline-specific treatment protocols for aphasia (i.e., SLP or MT). An exception to this was the research of Hurkmans et al. (2015), which focused specifically on Speech-

Music Therapy for Aphasia (SMTA). Musical interventions involving singing or vocal production were prevalent in the literature. These included Melodic Intonation Therapy (MIT; Curtis et al., 2020; Liu et al., 2022; Merrett et al., 2019), choral singing (Fogg-Rogers et al., 2016; Tamplin et al., 2013; Zumbansen et al., 2017), individual singing and/or vocalizing (Kasdan & Kiran, 2018) and songwriting (Mantie-Kozlowski et al., 2021). Other music interventions included instrument playing to address goals in the cognitive and motor domains (Magee et al., 2017) and phrase completion using recorded music (Chiapetta et al. 2022; Faroqi-Shah et al., 2020).

Rationale for music-based aphasia treatment

Research suggests that music-based interventions can target multiple treatment domains for people living with aphasia. This suggests that music may be a valuable medium for treating people with aphasia. Hurkmans' (2020) investigation of the treatment of aphasia and co-morbid motor-speech disorders (MSDs) suggests a possible motor-based mechanism underlying music-based interventions for aphasia. Music therapy interventions have also been shown to positively impact aspects of language recovery, such as naming and repetition of words and phrases (Liu et al., 2022). Kasdan and Kiran (2018) suggest that melody appears to aid word production and may serve as a helpful tool in language recovery. Music therapy has been shown to have a positive impact on functional communication, also referred to as everyday communication (Fogg-Rogers et al., 2016; Hurkmans et al., 2015; Liu et al., 2022). Research also suggests a potentially mitigative effect of musical training on linguistic syntactic processing in adults with aphasia (Chiapetta et al., 2022; Faroqi-Shah et al., 2020). Faroqi-Shah et al. (2020) suggest that musical training may mitigate the effects of aphasia by increasing the potential for neuroplasticity.

Psychosocial well-being is considered an important goal of aphasia rehabilitation due to the susceptibility of people with communication disorders to develop mood disorders (Chapey et al., 2000; Sekhon et al., 2022). Music-based intervention in aphasia treatment is characterised as a valuable tool for increasing social interaction, coping skills, and mood (Fogg-Rogers et al., 2016). Music therapy is also described as effective in improving "psychosocial outcomes in aphasia patients after stroke" (Liu et al., 2022, p.870). Additionally, therapeutic songwriting resulted in an improved quality of relationships for an individual with PPA (Mantie-Kozlowski et al., 2021). Auclair-Ouellet et al. (2022) discuss an Intensive Comprehensive Aphasia Program (ICAP), a non-musical treatment protocol focused on investigating the effects of intensity (i.e., frequency and dosage) on language, functional communication, emotional well-being, and quality of life in people with aphasia. In contrast to music-based interventions described above, the ICAP had no significant impact on the participants' "emotional well-being [and] quality of life" (Auclair-Ouellet et al., 2022, p. 1312).

Connecting research with clinical work

Merrett et al. (2019) discuss the challenges in researching the operational principles and effectiveness of standardised treatment protocols such as MIT. They highlight the contradictory approaches of therapeutic clinical work and efficacy-based research, noting that clinical work is often client-focused and requires in-the-moment adaptability. In contrast, efficacy-based research focuses on "standardization, generalizability" and "statistically sound evidence" (Merrett et al., 2019, p. 429).

A lack of agreement about outcome measures was identified in the literature. This was described as a confounding factor in studies which evaluate the efficacy of treatments (Auclair-Ouellet et al., 2022).

Additionally, Fogg-Rogers (2016) observe a lack of concurrence regarding a mode for comparison between qualitative and quantitative aphasia research. They observe that this creates difficulty when comparing qualitative and quantitative findings. The literature highlights the need for exploring how to connect research to clinical work and determine best treatment practices. Developing and refining outcome measures for aphasia treatment and standards of comparison between diverse research methodologies may play an important role in this endeavour.

Summary of the literature

Research exploring collaborative MT-SLP treatment of aphasia was limited in the literature reviewed. Hurkmans et al.'s (2015) research showed positive outcomes for client's receiving collaborative MT-SLP care (SMTA) which suggests that more research focusing on collaborative treatment of aphasia is warranted. Benefits of music intervention were present across multiple aphasia treatment domains including motor aspects of speech, communication, and psychosocial well-being. The impact of music based interventions on psychosocial well-being is significant due to the prevalence of comorbid mood disorders and psychosocial distress experienced by people with aphasia (Sekhon et al., 2022). Moreover, an intensive non-musical treatment protocol focusing on language and communication was shown to have limited impact on improving psychosocial well-being in people with aphasia (Auclair-Ouellet et al., 2022). However, this finding should be interpreted with care, as some non-musical aphasia treatment approaches such as the LPAA do account for the importance of psychosocial well-being in aphasia care (Chapey et al., 2000).

A notable finding of this literature review was the challenge of connecting research with clinical work. (Merrett et al., 2019). This challenge was attributed to the contradictory natures of research and clinical work and exposes an opportunity for research which aims to find common ground between these contrasting elements of aphasia care. This study aims to address this challenge by gaining insights from SLPs perspectives regarding challenges faced in their clinical work and opportunities for growth within their profession.

METHODOLOGY

The purpose of this study was to investigate SLPs' experiences in collaborating with MTs and incorporating music into aphasia treatment. Phenomenological inquiry was chosen for this study because it focuses on both the lived experience of a phenomenon and its meaning (Van Manen, 1997). Phenomenological inquiry recognises the subjective aspect of human experience and offers a means to consider and amalgamate multiple perceptions of a phenomenon (Jackson, 2016). Researchers combine a variety of methods and techniques to illuminate and describe the defining qualities of a phenomenon and formulate an interpretation of the data in response to the research questions. This encourages the researcher to be creative, reflective, and flexible during the research process, as they consider and incorporate new information as it arises (Jackson, 2016). A technique integral to all variations of phenomenological inquiry is "bracketing" (Jackson, 2016, p. 710)

Bracketing, also referred to as *epoche*, requires the researcher to intentionally identify and suspend their biases and preconceptions surrounding the phenomenon. This process enables the researcher to be receptive to all aspects of the data gathered and adopt a holistic understanding of the phenomenon.

My experience of collaborating with an SLP in treating aphasia was integral to the motivation for conducting this research. I perceived this experience to be enjoyable, engaging, and a valuable learning opportunity. I also carried the assumption that it was an overall positive experience for the SLP and clients. It was important that I considered these perceptions and assumptions through a reflexive approach in order to be fully open to the data which may include differing experiences of collaboration.

METHODS AND TECHNIQUES

This study explores topics such as music therapists' scope of practice, perceived benefits of incorporating music into aphasia treatment, perceived strengths and challenges within speech-language pathology's scope of practice, frameworks used for understanding communication, and challenges experienced in initiating interdisciplinary collaborations. Through discussion with my supervisor and consideration of the methodology, semi-structured interviews and thematic analysis were determined to be appropriate methods for exploring these topics. In accordance with these methods, individual participant interview findings are presented separately, followed by the thematic analysis of the collated interview data. Methods and techniques used in each step of the research will be discussed in further detail below.

Participant recruitment

This study used criterion-based purposive sampling (Jackson, 2016). Three participants were selected based on the following inclusion criteria:

1. 18 years or older
2. Accredited SLPs
3. Have experience treating aphasia in group and/or individual settings
4. Have collaborated with a music therapist before OR have interest in collaborating with a music therapist.
5. Proficient in English

Participants were recruited by emailing an advertisement to relevant professional and personal contacts, and the National Aphasia Association. Recipients were encouraged to share the notice among their own contacts. Item 4 on the inclusion criteria initially read, "have collaborated with a music therapist before." This was modified to accelerate initially slow recruitment. Modifying this inclusion criterion also provided a variety of participant perspectives. Three participants were recruited for this small-scale student research project. The participants were required to sign a consent document informing them of the potential benefits and risks of participation in the research.

Data collection

Data was collected using individual semi-structured interviews, conducted and recorded via the video conferencing platform Zoom. Interviews were one hour in length and scheduled at the participants' convenience. This data collection method was chosen to afford the interviewer flexibility during the interview process and encourage the collection of detailed and comprehensive data which reliably represents the participants' experiences (Jackson, 2016). An interview guide with suggested questions was used as a reference by the interviewer (Appendix A).

Data analysis and interpretation

Data was analysed using the techniques and process of thematic analysis, described by Braun and Clarke (2006, 2022). I adopted an inductive approach, where identification of themes was reliant on the contents of the data. Interviews were transcribed and read multiple times to allow for ample familiarisation with the data. Manual coding was used throughout the process to extract codes and generate, review, and refine themes. Data analysis occurred in two main phases: analysis of individual participant interviews and thematic analysis of all interviews. The overall process was iterative and involved ongoing engagement with the data resulting in a fluid process of coding and recoding, and proposing, refining, and defining themes.

The findings were summarised and shared with participants. Participants were asked to review and comment on the results in either a written questionnaire or a second semi-structured interview (Appendix B). This choice was offered to accommodate the participants' schedules and preferences. This process provided additional data and increased the trustworthiness of the results (Abrams, 2016). Two participants chose to share their comments on the results in a semi-structured interview conducted via Zoom. These conversations were not recorded, but detailed notes were taken. The remaining participant provided feedback via the questionnaire (Appendix B). Individual participant results are presented as a descriptive summary of the data collection interview. Overall results are presented in the format of themes and descriptive sub-themes.

Ethics

This research posed low risk to participants. Ethical considerations included the right to dignity and respect, the right to privacy and protection of personal information, and informed consent. Additionally, there was potential social risk for participants, namely, inadvertent identification by members of their professional community due to relevant contextual information in the research report. Participants were informed of this risk prior to participation and their right to withdraw consent at any time during the research process. Participants were also offered a chance to read the research report and be consulted regarding the inclusion of direct quotes and personal contextual information. This research project was approved by Wilfrid Laurier university's Research and Ethics Board (REB #8410).

FINDINGS

All three participants were SLPs experienced in working with people with aphasia. Two had previous experience collaborating with MTs. The third had no experience collaborating with an MT, but indicated interest in this. Their prior experience in collaborating with dietitians and occupational therapists indicated their general interest in interdisciplinary collaboration.

Participant 1

In discussing their path toward becoming an SLP, participant 1 (P1) described having the opportunity to observe a “vibrant” speech-pathology student as being instrumental in their choice to pursue this career. They indicated that their interest in “sociological framework[s] of participation” and communication, as well as Luria’s neuropsychological approach to rehabilitation supported their interest in working in aphasia treatment (Akhutina, 2015; Mikadze et al., 2018). The LPAA (Chapey et al., 2000; Holland & Elman, 2020) was discussed as currently influential in their work with individuals with aphasia.

This participant discussed previous collaborations of treating aphasia in group settings with music therapists, noting mixed outcomes. Some collaborations were described as having limited success while others as being highly successful. Factors that influenced the success of the collaborations included the structure and number of sessions offered and the skill of the MT. They suggested a series of 8 - 10 weekly group sessions as most effective in encouraging client participation. The predictable yet flexible structure of the sessions was also cited as having a positive impact on participation and client outcomes. P1 viewed the MT’s musicality and ability to inspire and “convey the value” of music therapy to the participants as influential to the success of the collaboration.

P1 also identified and described various music interventions - vocal warm-ups, lyric substitution and fill-in-the-blank songwriting methods, music and relaxation, and singing familiar songs - that they perceived to be particularly beneficial to participants. Additionally, intentional use of PowerPoint slides during online sessions had a positive impact on group outcomes. The importance of socialisation and conversation in increasing brain stimulation was discussed and P1 described group music therapy as a “novel and highly beneficial” opportunity for communication and brain stimulation. In P1’s words: “Music therapy ... where you just relax, and communication just happens embedded in something else is possibly the added magic of the offering of music to people with aphasia.”

P1 discussed psychosocial aspects of aphasia including comorbid mood disorders and identity changes in clients. P1 observed that psychotherapy and counselling skills were “not really embedded” in the SLP training they received. They shared knowledge of pediatric play-based interventions, which they identified as most similar to counselling skills in their education. Their reference to play-based interventions appeared to correspond well with their interest in LPAA and music therapy. P1 perceived that clients receiving care from professionals, such as SLPs, occupational therapists, and physiotherapists, often expect the practitioner to “fix” them. P1 commented that it is often not possible to “repair [a speech impairment] to the extent that the individual wants it repaired” which has required SLPs to “look at a positive way of going through rehab[ilitation].” Based on what P1 shared, they

appeared to imply that basic counselling skills for SLPs could be useful in facilitating clients' adjustments to the challenges of having aphasia, including tempering clients' expectations regarding realistic rehabilitation goals.

During the conversation, P1 discussed challenges in determining best practices for the treatment of aphasia. These challenges involved broad issues, such as the evolution of theoretical frameworks in research and practice, and difficulty in demonstrating to funders the positive impacts of social frameworks of treatment and rehabilitation.

Participant 2

Participant 2 (P2) indicated that they did not have formal musical training, but they had experience singing in a choir as a child and a general appreciation for a wide variety of music. They indicated that they generally had positive experiences of interdisciplinary collaboration with dietitians and occupational therapists but did not have the opportunity to collaborate with a music therapist. They also identified skills or traits that contributed to successful collaboration as "openness to other ways of thinking," curiosity and desire to learn, and mutual prioritisation of clinical goals. They shared that part of their motivation in volunteering for this research project was to learn practical ways of incorporating music into their clinical work and finding resources for connecting with MTs in their region.

In discussing their perceptions of music therapy, this participant noted that music therapy is an effective resource in treating speech disorders such as aphasia and that they would like to learn more about practical aspects of treatment. P2 described language impairment assessment as a "challenging experience" for patients and "not necessarily the best for building rapport." This reflection led P2 to "wonder if rapport building would be easier for [MTs]" due to the "motivating" and "immediately gratifying" nature of music.

P2 described their previous experience of treating aphasia in individual and group settings. An overview of the clinical process for individual and group treatment of aphasia highlighted various clinical priorities at different stages of treatment. In discussing how music could fit into aphasia treatment at various stages, they noted that they had previously tried MIT but found it not very effective. They shared that they were uncertain if they were facilitating it correctly. P2 did not indicate if they had received specialised training in MIT facilitation. Additionally, they shared that they had engaged clients in singing familiar songs, such as Happy Birthday, with the intent of using music to access automatic language.

Drawing while listening to music was discussed as another possible intervention for aphasia treatment. I shared my experience of facilitating this as a form of improvisation. I indicated that drawing to music can support clients in expressing and externalizing their thoughts and emotions, and that adopting an improvisatory approach could promote a sense of freedom for clients. P2 appreciated this idea and shared that they thought it could be a beneficial way for SLPs to approach the common rehabilitation goal of holding a writing implement. P2 elaborated, sharing that in their experience, clients are sometimes apprehensive about trying to write and can become discouraged by the results of their efforts. P2 indicated that they thought drawing while listening to music could release the pressure to achieve expected outcomes and therefore reduce apprehension and frustration

experienced by clients. Listening to preferred music and song-sharing were also discussed. I described these as simple but effective ways to promote agency and offer validation to clients through intentional choice-making. P2 thought that this was a music intervention they could support clients with and suggested that selecting preferred music could be included as a “goal” for some clients.

Psychosocial aspects of aphasia conditions were discussed, including change of identity and the development of mood disorders in clients with aphasia. P2 indicated that they had received additional training in motivational interviewing to expand their skill set when treating patients with aphasia. They also shared experiences in observing a correlation between the severity of language impairment and the likelihood of a patient developing a mood disorder.

Participant 3

Participant 3 (P3) described having a strong musical background, including formal instrumental training. They indicated that, before becoming an SLP, they had been interested in pursuing music therapy as a career. They also shared that “[music] never leaves you” and accordingly find that they are able to incorporate music into aphasia treatment, when working independently and in collaboration with the MT at their place of employment.

This participant described their experience collaborating with the onsite music therapist as primarily positive and shared that they “think there needs to be more collaboration.” This collaboration occurred primarily in the in-person treatment of individual patients. Collaborative treatment was described as being effective in targeting three domains: language, cognitive communication, and voice. Language domain interventions involved composing and singing songs to encourage specific language goals such as naming the days of the week. Cognitive communication interventions were targeted at improving attention and working memory through rhythmic or melodic pattern recognition and re-production using drums or other instruments. P3 noted that words were sometimes added to the patterns, where appropriate. Vocal domain interventions involved improving breath support, encouraging phonation, and singing.

P3 shared that they felt “very lucky” to be able to offer co-facilitated treatment to individual patients with aphasia. They noted that co-facilitated treatment of individual clients may be considered “expensive” but that they “didn’t see it that way” due to the numerous positive outcomes of this sort of treatment. In discussing the skills or traits that contributed to the successful nature of their collaborations, P3 cited their personal musicianship skills and “coming in with an open mind” as having positively impacted their ability to collaborate effectively with MTs. They noted similar attributes in their collaboration partner as having a positive impact on the collaboration. Additional factors that appeared to positively impact collaborative treatment were clarity of facilitator roles, clinical goals, and treatment plan.

P3 provided insights into the positive outcomes of collaboration with MTs, describing benefits related to professional growth, clinical scope, and client experiences. Mutual learning was the primary professional benefit of collaboration with music therapists. The process was described by P3 as “kind of magical” and akin to a “jam” session noting “that’s when my brain activates.” Collaboration with MTs was also noted to expand the scope of treatment by allowing for the possibility of addressing psychosocial and wellness goals, noting that “it [music] makes people happy.” Finally,

this participant noted they observed collaborative treatment of aphasia with music therapists often resulting in unexpected outcomes for clients describing this phenomenon as “the magic of music.”

Although they experienced many positive collaborative experiences, they also identified challenges in initiating collaboration, related to changes in workplace environments and a misunderstanding of the scope of MT.

THEMATIC ANALYSIS

The thematic analysis resulted in three themes – *Personal Aspects*, *Clinical Aspects*, and *Systemic Challenges* – for the collaborative treatment of aphasia (Figure 1). For the Personal Aspects theme, four sub-themes were identified - *openness*, *musicianship skills*, *confidence* and *professional learning*. Four sub-themes of the Clinical Aspects theme were identified - *establishing common goals*, *clarity of facilitator roles*, *diverse music interventions* and *expanded scope of practice*. Two sub-themes of the Systemic Challenges theme were identified: *determining best practice* and *workplace culture*. Two sub-sub-themes of the determining best practice sub-theme were identified: *demonstrating the benefits of collaborative treatments* and *securing funding*. Two sub-sub-themes of the workplace culture sub-theme were identified: *attitudes towards collaboration* and *attitudes towards music therapy*.

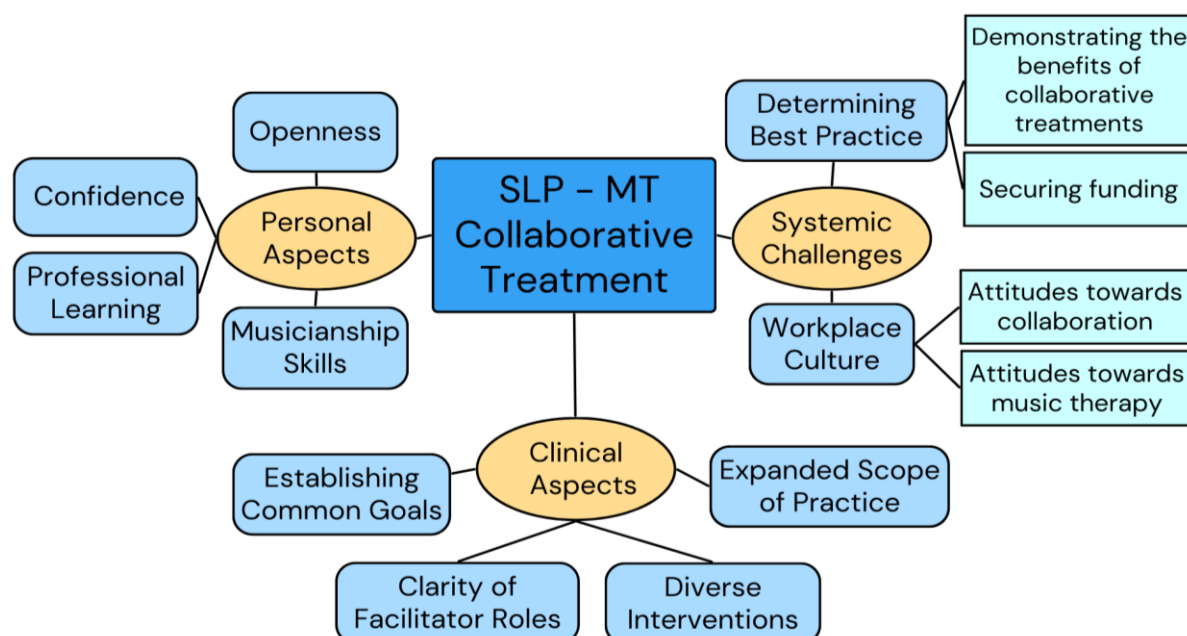


Figure 1: Thematic analysis of all participant interviews (alternative text description in the Appendix C)

Personal aspects of collaboration

Personal aspects of collaboration included personal traits which were perceived to support collaboration and ensure beneficial outcomes to clients and practitioners of interdisciplinary collaborations. These were Openness, Musicianship skills, Confidence, and Professional learning.

Openness and related personal traits were perceived by all participants as positively influencing collaborative treatments. Openness was described in a few ways such as a “willingness to collaborate” (P3), receptiveness towards “other ideas and other ways of thinking” (P2), curiosity, and enjoyment of learning (P2). Openness was identified as an important element of collaboration for both SLPs and MTs. Facilitator adaptability during sessions was also described by P1 as important in facilitating aphasia treatment.

Musicianship skills were cited by two participants as having an impact on the quality of collaborative treatment of aphasia. Discussion of musicianship skills related to both SLP and MT musical skill and experience. P3 described both the value of their own musical training and the expertise of the music therapist as being important to the success of previous collaborations. They described their musical training as helpful in understanding how the elements of collaborative treatment “tie in together.” P1 described the success of previous collaborations with MTs as related to the skill of the MT and the quality of musical experiences. In their experience, more successful collaborations involved musical experiences which were “inspiring” and in turn motivating to the participants.

Confidence in professional competencies was cited by two participants as being important to the success of interdisciplinary collaborations. Participants described confidence as the professional’s ability to not feel “intimidated” (P3) or “threatened” (P1) by the skill and expertise of their collaborator. This was described as an important quality for both MTs and SLPs.

Professional learning was perceived by two participants to be an important aspect of interdisciplinary collaborations. P2 perceived that their natural curiosity and enjoyment of learning contributed to making collaboration a “more positive experience” (P2). P3 noted that they learned a lot from their collaborations with MTs. It appears that the desire to learn can play a role in the success of interdisciplinary collaborations. Additionally, professional learning can be a positive outcome to practitioners of interdisciplinary collaborations.

Clinical aspects of collaboration: what, how, and why?

The clinical aspects of interdisciplinary collaboration explored the questions of what elements are important to the success of collaborative treatment, how we facilitate collaborative treatment, and why collaborative SLP-MT treatment of aphasia is important. Specific aspects related to each of these questions included Establishing common goals, Clarity of facilitator roles, Diverse interventions, and Expanded scope of practice.

Establishing common goals was perceived as important to the success of interdisciplinary collaborations by all participants. P2 attributed their positive experiences with collaboration to having a shared goal for treatment which becomes “top priority.” P1 and P3 also described the collaborative nature of determining “shared goals” (P1) and “making a [treatment] plan together” (P3). Establishing

common goals within a treatment plan appears to be foundational to the success of collaborative treatment because it provides a framework for treatment and guides decision-making related to how we facilitate collaborative treatment.

Clarity of facilitator roles was identified by two participants as important for successful interdisciplinary collaborations. This theme was discussed in relation to the following aspects of the clinical process: assessment, treatment planning, and treatment facilitation. Facilitator roles were revealed to vary depending on the client and nature of the clinical process. P3 described the importance of knowing and staying within their scope of practice as an SLP. Additionally, P3 indicated that in previous collaborations with MTs, they had been responsible for assessing the client and determining treatment goals. P1 described the role of facilitators in a broader sense as co-creating an “inspiring” and therapeutic environment for clients. Clarity of roles regarding treatment facilitation is included in the discussion of musical interventions below.

Diverse music interventions were identified as supportive to aphasia treatment. Table 1 provides a summary of music interventions discussed by the participants.

| Intervention name and description | Treatment domains and goals | How is it facilitated? (roles) | Additional considerations |
|---|--|---|---|
| Songwriting through Lyric Substitution | Psychosocial <ul style="list-style-type: none"> Creative expression Self-expression Language <ul style="list-style-type: none"> Word cueing | Co-facilitated | Choose songs strategically to balance predictability and creativity. Group or individual sessions |
| MT composed songs | Language <ul style="list-style-type: none"> Specific goals such as saying the days of the week. | Co-facilitated is best. Could be facilitated individually once the song is created depending on musical skill and comfort of the facilitator. | Group or individual sessions |
| Song-sharing (Choosing, listening and discussing preferred music) | Psychosocial <ul style="list-style-type: none"> Promoting agency through choosing songs. | Co-facilitated or individually facilitated by MT or SLP | Group or individual sessions |
| Melodic or Rhythmic Pattern Copying | Cognitive <ul style="list-style-type: none"> Memory Attention Psychosocial <ul style="list-style-type: none"> Turn taking | Co-facilitated or individually facilitated by MT or SLP | Group or individual sessions |
| Melodic Intonation Therapy (MIT) | Language <ul style="list-style-type: none"> improving expressive language | Individually facilitated by MT or SLP | Individual sessions |

| | | | |
|-----------------------------------|--|---|---|
| Singing Familiar Songs | Language <ul style="list-style-type: none"> • Accessing automatic language Psychosocial <ul style="list-style-type: none"> • Relaxation | Co-facilitated or individually facilitated by MT or SLP | Group or individual sessions |
| Vocal and Movement-Based Warm-ups | Vocal <ul style="list-style-type: none"> • Phonation • Breath support Psychosocial <ul style="list-style-type: none"> • Relaxation • Somatic awareness | Co-facilitated or individually facilitated by MT or SLP, depending on comfort of facilitator. | Group or individual sessions |
| Music and Guided Relaxation | Vocal <ul style="list-style-type: none"> • Breath support Psychosocial <ul style="list-style-type: none"> • Relaxation • Somatic awareness | Co-facilitated or individually facilitated by MT or SLP | SLP may wish to choose pre-recorded music if facilitating individually. Group or individual sessions |
| Drawing to Music | Movement/motor <ul style="list-style-type: none"> • Holding a writing implement Psychosocial <ul style="list-style-type: none"> • Self-expression • Creative expression | Co-facilitated or individually facilitated by MT or SLP | Group or individual sessions |

Table 1: Music Therapy (MT) and Speech-Language Pathology (SLP) Interventions for Aphasia

Expanded scope of practice was perceived as a result of collaborative treatment and to provide benefit to clients by allowing co-facilitators to address a wider range of treatment domains. Psychosocial aspects of wellness and treatment emerged as a primary benefit of SLP-MT treatment of aphasia. P2 noted that language assessment can be a challenging experience for clients with language impairments and perceived this to be a challenge in developing rapport with clients. They perceived music therapy as a profession well suited to developing rapport with clients due to music being “more immediately gratifying” and “motivat[ing]” (P2). Additionally, two participants discussed the possibility for unexpected positive treatment outcomes in collaborative treatment of aphasia between SLPs and MTs. P3 noted that in their experience, additional benefits to the client “seep through once you start music therapy.” P1 shared that “any form of stimulation is beneficial” to clients even when the outcomes are “not necessarily what you were intending.”

Systemic challenges to collaboration

All participants identified various systemic challenges to initiating collaborative SLP-MT aphasia treatments. S Systemic challenges related to broad professional issues, such as determining best practices for treatment, and attitudes towards music therapy and interdisciplinary collaboration within institutions which typically employ SLPs and MTs.

Determining best practice includes demonstrating the benefits of and securing funding for music therapy and collaborative treatment of aphasia. This was perceived as a challenge to initiating collaborative treatment, attributed to shifting values underpinning theoretical frameworks and approaches to research and aphasia treatment. P1 noted that funders typically want to see how treatment “fix[es]” language impairment and that SLPs are “constantly trying to demonstrate” the value of improving quality of life for individuals with aphasia. P3 also perceived that collaborative SLP-MT treatment is considered an “expensive” treatment option by funders. P3 also shared that they and their previous collaborating partner (MT) “don’t see it that way,” and perceived the increased benefits of collaborative treatments to outweigh the increases in cost.

Workplace culture and attitudes surrounding collaboration and music therapy were identified as having a negative impact on participants’ attempts to find collaboration partners and to initiate opportunities for interdisciplinary collaboration. P3 described an inconsistent valuing of interdisciplinary collaboration in their place of employment. This was attributed to a lack of understanding of the “significance” and benefits of joint SLP-MT sessions. P3 also suggested that practitioners may be hesitant to participate in collaborative care if they hadn’t had previous exposure to interdisciplinary collaboration.

P2 also experienced uncertainty in knowing where to connect with MTs and expressed a desire for resources to help find collaboration partners. P1 noted that, although they were open to collaborating with music therapists, opportunities for collaboration had been few, and many collaborations had been brief with mixed outcomes.

DISCUSSION

The interview findings described three SLPs’ experiences of collaborating with MTs and incorporating music into aphasia treatment. Thematic analysis provided further description and delineation of specific aspects of collaborative SLP-MT treatment of aphasia. This section presents an interpretation of the findings, conveyed in three main sections: Qualities of positive collaborative experiences, the Role of music in SLP-MT collaborative treatment of aphasia, and Reasons for not choosing music in aphasia treatment.

Qualities of positive collaborative experiences: Balance between structure and freedom

The thematic analysis identified three themes of SLP-MT collaboration, discussed in the previous section. Reflections on the data revealed an overarching thematic principle of balance between structured and mutable elements of collaborative aphasia treatment. For the purposes of this discussion, mutable, adaptable, or flexible aspects of treatment will be referred to as elements of freedom. The balance between structure and freedom is noted and described across all three themes.

Sub-themes within the personal aspects of collaboration theme which embody the balance between freedom and structure include Openness and Confidence. Openness is marked by curiosity, receptiveness towards diverse ideas and adaptability. Within the collaborative clinical context,

openness allows clinicians the freedom to approach clinical work in a co-creative way. Confidence in professional competencies is distinguished primarily by a clinician's assurance in their expertise and skill. This is important because it provides clinicians with a foundational structure for understanding their contributions and role within interdisciplinary collaborations. Bar et al. (2018) recognise that health-care professionals' attitudes towards interdisciplinary collaboration contribute to effective teamwork. They identify personality traits such as "openness to experience" (p. 41) and professional attributes such as "competency and autonomy" (p. 41) as crucial components of positive attitudes towards interdisciplinary collaborations and "collaborative working environments" (p. 41).

Within the clinical domain of collaboration, the qualities of freedom and structure were represented across all themes: goals, roles, interventions, and unexpected outcomes. Establishing common goals and clarifying facilitator roles were described as crucial for providing structural guidance during interdisciplinary collaborations. The musical interventions experienced and described by participants are particularly significant because they contain the capacity for offering both structure and freedom in clinical collaborations. The nature of the interventions used provided structure to the clinical process. Client-centred facilitation of the interventions allows for adaptability and freedom within the clinical process. All participants described the importance of a balance between structure and freedom within their experiences noting that these elements had the capacity to reduce the pressure experienced by clients and often resulted in positive "unexpected outcomes" (P1 and P3). P1 described the value of flexible vocal warm-ups, which allowed participants the opportunity to discover their voices in a creative way with no demands and expectations. P1 also describes the value of both structure and freedom embedded in fill-in-the-blanks song modification interventions. They note that the familiarity and structure of the song provided predictability and the opportunity to change the lyrics offered freedom through creative selection of personalised lyrics. Hurkmans et al. (2020) also note the importance of balance between structure and freedom. They describe SMTA as a "dynamic process" in which "musical elements are interwoven" to provide standardised and personalised care to clients (p. 948).

Systemic aspects of collaboration - such as determining best practice and securing funding, and workplace culture and attitudes - were primarily described by participants as contributing to challenges faced in initiating interdisciplinary collaborations. Determining best practice in clinical care and securing funding for collaborative treatment of aphasia are reliant on research which demonstrates the effectiveness of various types of interventions and treatment protocols. Challenges demonstrating the value of collaborative treatments were described by participants as related to a need for more research regarding the benefits of collaborative treatment and a need to conceptualise "impairment within a more encompassing value system" (P1). Merrett et al. (2019) also explore challenges in determining best practice by discussing the often incongruent nature of efficacy research and clinical work. They note that "research is generally focused on standardization, generalizability, and the provision of adequately powered and statistically sound evidence. In contrast, clinical work is usually client-centric, requiring flexibility to address the needs of the individual patient" (p. 429). These examples are interesting because they allude to an imbalance between structure and freedom within the systemic aspects of collaboration.

I found the personal and clinical aspects of SLP-MT collaboration unsurprising as I had experienced the usefulness of those qualities during collaborative experiences in my internship. In discussing the systemic challenges of SLP-MT collaborations, I learned a great deal from the participants. At times, there appeared to be an undercurrent of frustration towards the systemic challenges they had experienced. I found this to be revealing of their passion towards their work and commitment to the clients they serve.

The magic of music: Describing the role of music in SLP and MT aphasia treatment

During initial interviews with participants, collaborative experiences involving music were described as “magic” by both P1 and P3. What is the role of music and music therapy in interdisciplinary collaborations? This section explores the role of music in interdisciplinary collaborative treatment of aphasia through a music psychotherapy student’s perspective. Through this, I begin to demystify music therapy and the impact of music in aphasia.

The overall qualities of positive collaborations were described in terms of a balance between structural elements of clinical work and freedom, or as flexible elements of clinical process. This balance is intrinsic to music therapy practice, using music’s inherent structural elements and the freedom to modify these elements. Bruscia’s (1987) landmark text describes numerous models of improvisational music therapy. A common feature among the models is the discussion of musical form and ways to incorporate structure and freedom within therapy sessions to best serve the clients’ needs. Collective music-making is an inherently collaborative process in which various structural elements of music are combined and experienced in novel ways (Wigram, 2004). Each music-maker is a participant in this process, making it well suited to a client-centred approach.

In addition to a client-centred focus, it is common for music therapists to approach clinical work with a resource-oriented framework (Rolvjord, 2010). This involves “nurturing [the] strengths, resources, and potentials” (p. 74) of the client, rather than the limitations of their diagnosis or disability. Within this framework, a client’s innate musicality is considered to be a resource, so a resource-oriented focus offers agency and choice to clients by fostering an environment which allows for musical co-creativity and collaboration between clients and clinicians. A resource-oriented approach to music therapy aligns well with sociological frameworks of communication and aphasia care, such as the LPAA.

The idea of equating music with magic is interesting and familiar to me. In reflecting on this idea, I experienced conflicting responses. I first noticed that my thoughts moved towards early formative musical experiences, such as the first time I heard a favourite song on the radio or played in an ensemble. These are moments where I remember feeling the magic of music which was often composed of sensory and/or emotional experiences such as tingling, a headrush, butterflies in the stomach, and/or a sudden and brief wave of emotions. In contrast, I felt that likening music to magic could be perceived as overlooking the many years of musical practice and clinical training that music therapists undertake to develop and hone their skills.

Another interesting topic that arose in conversation with P2 was the role of music in developing rapport with clients. P2 wondered if music might assist in building rapport. My first response was to agree. However, I recognised that caution was required with this assumption. Music therapy can be an enjoyable and empowering way to encourage self-reflection and connection with others. However, music therapy can also elicit unexpected responses which may not be beneficial or pleasant to the client, so music can be contraindicated in some cases. Therefore, it is important to recognise that if music is used inappropriately, it may not be helpful in building rapport. More research and advocacy work are needed to unravel the “magic” of music, understand the multi-faceted impact of music, and clearly define the role of music within aphasia care and SLP-MT collaborations.

Reasons for not using music

Participants noted that, in their experience, MTs’ scope of practice appears to be less understood than that of other allied health professions. This suggested a lack of understanding regarding the role of music therapists, the clinical processes used in music therapy, and the mechanisms which make music therapy an effective treatment for aphasia. Participants also indicated a lack of access to music therapy as a resource for interdisciplinary collaboration, due to very few music therapists being employed at their workplaces. Additionally, P3 observed that, in their workplace, the MT appeared to experience limited access to resources. Although they didn’t elaborate on the nature of the resources, they did note that the MT was employed at their workplace on a part-time basis. I related to P3’s comment about limited resources because of experiences during my multisite internship. Access to office and clinical spaces, music instruments, and technology varied from site to site and was limited at times.

Among MTs it is known that advocating for your profession is often necessary for employment (Kern & Tague, 2017). This “burden of advocacy” is a common reason for music therapists to seek employment in other professions which are more well-established (Branson, 2023, p. 15). Interdisciplinary advocacy has the potential to relieve some of the burden faced by music therapists. Additionally, continued research exploring explanatory neurological theories for incorporating music into aphasia care, research exploring clients’ experiences in receiving collaborative MT-SLP aphasia care, and investment in clinical and professional resources could support advocacy efforts and improve clinical care.

The participants’ observations regarding barriers to using music in aphasia treatment were unsurprising to me due to my internship experiences. During my multisite internship, I noticed contextual variation in how music therapy and interdisciplinary collaboration were understood and valued. At internship sites where interdisciplinary collaboration was actively encouraged through site-specific educational programming, the understanding of music therapy was greater and music therapists and interns were more integrated into the facility and treatment teams. At internship sites without embedded interdisciplinary training, opportunities for collaboration tended to rely on individual practitioner’s openness and willingness to collaborate and work with students.

CONCLUSIONS

Conducting this research has increased my understanding of speech-language pathology practice and theories as they relate to aphasia. This project has enabled me to reflect on how I conceptualise the role of the music, apply it in clinical work, and communicate this with clients and colleagues. I intend to continue seeking out opportunities for collaboration and consider how I can contribute to creating tools for developing collaborative practices. The small sample size of this study allowed for flexibility in the interview process, which resulted in the collection of rich and interesting data.

Insights gained from this data revealed systemic challenges in initiating and maintaining collaborative environments and offered ideas for supporting clinical work and advocacy. Systemic challenges identified included a lack of resources for connecting with music therapists, workplace culture and attitudes towards collaboration, and the ongoing process of determining best practices in aphasia treatment. Potential solutions include process-driven systems and resources within organisations for encouraging interdisciplinary collaboration, more aphasia research including the impact of music and benefits of collaborative treatment, and opportunities to observe interdisciplinary collaboration.

In sum, increased awareness of MTs' scope of practice and music-based interventions that require no prior musical training might encourage hesitant SLPs to use music and to collaborate with an MT.

Limitations

This study is limited primarily by the small sample size which may reduce generalisability of the results. The time constraints of completing a research project in a Master's level program prohibited collecting data from a larger sample size. Further research with a larger sample is suggested. It was encouraging that each participant indicated an interest in music therapy and interdisciplinary collaboration. However, future research could involve participants who hold less welcoming views towards interdisciplinary collaboration.

Suggestions for future research and practice

Based on this small-scale study, it is recommended that future research includes investigation of the efficacy and benefits of collaborative MT-SLP treatment of aphasia, barriers to collaboration, and resources for fostering collaborative environments. Additional recommendations for research include investigation of the challenges in determining best practice and applying research to clinical practice, and exploration of both client and clinician perspectives. This research has motivated the first author to explore options for pursuing a collaborative practice.

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APPENDIX A

Interview Guide

Describe your path to becoming a speech language pathologist.

Describe your experience in treating people with aphasia.

How do you incorporate music into your treatment protocols for people with aphasia?

Describe your experiences of collaborating with music therapists to treat aphasia.

- What factors do you think contributed to the success or failure of this collaboration?

What benefits do you perceive in using music therapy to address aphasia?

What limitations do you perceive in music therapy scope of practice in treating aphasia?

Do you think that there are limitations in your own scope of practice as a speech language pathologist?

- What are those perceived limitations?

What sorts of responses do you notice in clients with aphasia when using music and/or participating in music therapy?

- How do these responses differ from sessions with no music?
- How does it feel to observe these responses in participants/clients?

What sort of practical advice would you like to share with other speech language pathologists who want to incorporate music into their treatment protocols for people with aphasia?

What sort of practical advice would you like to share with music therapists treating aphasia?

APPENDIX B

Results Interview / Questionnaire

Please describe aspects of the results that you agree with, if any.

Are there aspects of the results that you find surprising?

- If yes, please describe those aspects.

Please provide any further comments regarding the results of this study.

Please describe the impact that this research will have on your work with individuals with aphasia.

Please describe the impact this research will have on your interdisciplinary collaborations in the future.

Please provide any other comments you have regarding the results of this study.

Please provide any other comments you have regarding your experience of participating in this study.

APPENDIX C

Alternative Text Description of Figure 1

Thematic Analysis of All Participant Interviews

Figure 1 contains a flowchart which provides an overview of the 3 themes, 10 sub-themes and 4 sub-sub-themes of SLP-MT Collaborative Treatment. Themes, sub-themes and sub-sub-themes are listed here:

SLP-MT Collaborative Treatment

Personal Aspects

- Openness
- Musicianship skills
- Confidence
- Professional learning

Clinical Aspects

- Establishing Common Goals
- Clarity of facilitator roles
- Diverse interventions
- Expanded Scope of Practice

Systemic Challenges

- Determining Best Practice
 - Demonstrating the benefits of collaborative treatments
 - Securing funding
- Workplace Culture and Attitudes
 - Attitudes towards collaboration
 - Attitudes towards music therapy

Ελληνική περίληψη | Greek abstract

Εύρεση κοινού πεδίου: Διερευνώντας τις εμπειρίες των λογοθεραπευτών από τη συνεργασία τους με μουσικοθεραπευτές στη θεραπεία ατόμων που ζουν με αφασία

Christine Hudson | Heidi Ahonen

ΠΕΡΙΛΗΨΗ

Σκοπός αυτής της φαινομενολογικής μελέτης ήταν να διερευνήσει τις εμπειρίες των λογοθεραπευτών (ΛΘ) από τη συνεργασία με τους μουσικοθεραπευτές (ΜΘ) στη θεραπεία ατόμων με αφασία. Η ανάλυση των δεδομένων έδωσε μικτά αποτελέσματα, αναδεικνύοντας/εντοπίζοντας πτυχές που υποστηρίζουν και δυσκολεύουν τη συνεργασία. Τα δεδομένα συλλέχθηκαν από ημιδομημένες συνεντεύξεις με τρεις συμμετέχοντες. Οι συμμετέχοντες ήταν λογοθεραπευτές που είχαν εμπειρία στη θεραπεία ατόμων με αφασία σε νοσοκομειακά και κοινοτικά περιβάλλοντα. Η θεματική ανάλυση χρησιμοποιήθηκε για τον εντοπισμό των παραμέτρων που προέκυψαν από τη συνεργασία ΜΘ-ΛΘ στη θεραπεία της αφασίας. Τα αποτελέσματα ανέδειξαν τα παρακάτω θέματα: προσωπικές και κλινικές πτυχές, καθώς και συστημικές προκλήσεις των συνεργασιών ΜΘ-ΛΘ. Η ανατροφοδότηση των συμμετεχόντων σχετικά με τη θεματική ανάλυση ενσωματώθηκε στη συζήτηση, η οποία παρουσιάζει πληροφορίες σχετικά με τις γενικότερες ιδιότητες της επιτυχημένης συνεργασίας ΜΘ-ΛΘ και τη συμβολή της μουσικής στη θεραπεία της αφασίας. Η έρευνα παρέχει έναν κατάλογο μουσικών παρεμβάσεων που μπορεί να αποτελέσει πηγή για τους ΛΘ και τους ΜΘ στη θεραπεία της αφασίας. Επιπλέον, τα θέματα που συζητούνται στην παρούσα μελέτη μπορούν να βοηθήσουν τους ΛΘ και τους ΜΘ να προωθήσουν τη συνεργατική φροντίδα των ατόμων που ζουν με αφασία.

ΛΕΞΕΙΣ ΚΛΕΙΔΙΑ

φαινομενολογία, μουσικοθεραπεία, παθολογία ομιλίας και γλώσσας, αφασία, διεπιστημονική συνεργασία