

NEUROLOGIC MUSIC THERAPISTS' PERSPECTIVES ON NEUROLOGIC MUSIC  
THERAPY: AREAS OF STRENGTH AND AREAS FOR POTENTIAL GROWTH

BY

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THESIS

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### **Abstract**

Limited literature exists providing a critical analysis of Neurologic Music Therapy (NMT) as a model of music therapy. This qualitative research study, therefore, sought to explore the strengths and weaknesses of NMT, particularly in its approach to disability, through the perspectives of practicing Neurologic Music Therapists. Participants were recruited from the Directory of Current NMT Affiliates, from relevant social media groups, and by referral. Five board-certified music therapists who currently practice NMT or have practiced NMT within the last five years were participants in this research. Data was collected through interviews between the researcher and each participant, in which six discussion prompts were asked. These interviews were recorded and transcribed, after which the researcher utilized inductive coding techniques to uncover prominent themes in the interviews. Six themes emerged in the data. Three themes reflected Neurologic Music Therapists' perceived areas of strength for NMT as a model: 1) Supported by Empirical Evidence; 2) Client and Caregiver Agency; and 3) Helpful in Addressing Specific Goals. Three themes reflected perceived areas for potential improvement for NMT as a model: 1) Issues with the Academy of Neurologic Music Therapy and the NMT Training; 2) Ableism in Practice; and 3) Narrow Goal Areas. This study adds information to gaps in the literature and could act as a starting point for further studies exploring the strengths and limitations of NMT. Due to limited representation in the participant group, this researcher would recommend repeating this study with a larger group of participants representing a wider range of identities.

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## Introduction

At some point during high school, I became fascinated by the human brain; I wanted to understand how and why people behaved the way they did. Looking back, I realize that there is much more complexity and nuance to human behavior, but at the time I wanted to know as much as possible about the brain in order to understand people. It was only natural, therefore, that I decided to study psychology in college. Meanwhile, I was also a classically trained pianist who had taken lessons since I was four years old. Music had always been an integral part of my identity and was my main source of self-expression. Discovering the field of music therapy, therefore, was life-changing for me. This was a career path which seemed as though it would combine my interest in psychology with my love of music, so, as I began applying to colleges, it was only natural that I auditioned for several music therapy programs.

Throughout my undergraduate coursework in music therapy, I continued to be most intrigued by classes which taught about brain structures and functions, and, specifically, the ways in which music is processed within the brain. Naturally, I was excited to discover Neurologic Music Therapy (NMT), a specialization which teaches specific techniques designed to influence cognition and brain functions related to motor skills and speech. As an undergraduate student, therefore, I always assumed that I would eventually take this training and practice Neurologic Music Therapy techniques with patients.

Upon completion of my undergraduate coursework, I completed a six-month clinical internship in hospice. Hospice music therapy was completely different from the behaviorally-focused music therapy I had learned as an undergraduate student. The culture of the hospice agency I worked for was much more holistic and centered on creating a "perfect" death experience for the individual--in whatever way was meaningful to them. There was no focus on

behavior change or brain change; the focus was on spiritual, mental, and emotional wellness while keeping our patients as physically comfortable as possible. This internship experience changed my perspective on music therapy and on what it meant to be "well."

After practicing as a board-certified music therapist for a couple of years, I decided to apply for graduate school in order to further my music therapy and counseling skills. While I knew going into the program that there would be a large focus on social justice, I didn't realize at the time that, in addition to learning more in-depth music therapy and counseling concepts, I would also be learning to unlearn deeply embedded systemic beliefs and values in order to practice anti-oppressively. One such system which I began to learn how to challenge was ableism. I began to question why we, as therapists, ask disabled clients to perform in certain ways and why we prioritize "rehabilitation" over accommodation. These questions were at the forefront for me as I eventually did complete the Neurologic Music Therapy training course.

While participating in the Neurologic Music Therapy training, I noticed that a few of the instructors spoke about NMT as the "true" music therapy and were openly disparaging of other ways of practicing. I also noticed that the ways in which a few of the instructors spoke about disabled people was very deficit-focused and that many of the NMT techniques are centered around the idea of making disabled people "less disabled." Furthermore, NMT prioritizes quantifiable, measurable data and does not seem to leave much room for other ways of "knowing." Going through this training after spending years in my graduate program learning about anti-oppressive practice made me wonder how NMT can be integrated into anti-oppressive, disability-centered practice.

## Review of Literature

While extensive music therapy literature exists on Neurologic Music Therapy (NMT) and the efficacy of specific NMT techniques, there is little to no literature providing a critical analysis of NMT. Before discussing the need for critical analysis, however, I will provide an overview of NMT and the existing research on this music therapy specialization. The Academy of Neurologic Music Therapy defines NMT as “the therapeutic application of music to cognitive, affective, sensory, language, and motor dysfunctions due to neurologic disease of the human nervous system...[It is] a standardized system of clinical techniques that use the functional perception of all properties of music to train and retrain brain and behavior function.” (NMTAcademy.co). In other words, Neurologic Music Therapy practitioners utilize specific techniques targeted to address precise areas of brain functioning. The idea is that, through participation in musical activity, participants will experience changes to neural pathways within the brain, thereby resulting in nonmusical changes to physical and cognitive functioning.

The major musical element resulting in brain change, according to NMT researchers and practitioners, is rhythm. Participating in a musical activity, or even simply listening to music, results in rhythmic entrainment between the musical stimulus and the brain. Thaut, McIntosh, and Volker (2015) describe entrainment as “a temporal locking process in which one system’s motion or signal frequency entrains the frequency of another system” (para. 1). According to this definition, therefore, the brain can lock into the rhythm of a musical sound source and utilize this rhythm to organize a specific function. This phenomenon has received a great deal of attention in the area of motor rehabilitation. In fact, some of the earliest NMT research when the discipline was first established in the 1990s focused on the ability of auditory rhythmic patterns to entrain movement patterns in patients with movement disorders (Thaut et al., 2015). A few of the

movement disorders and injuries that these studies focused on included hemiparetic stroke rehabilitation (Thaut et al., 1993, 1997; Whittall et al., 2000; Thaut et al., 2002), Parkinson's disease (Thaut et al., 1996; McIntosh et al., 1997), traumatic brain injury (Hurt et al., 1998), and cerebral palsy (Thaut et al., 1998). These studies found that rhythmic entrainment significantly improved the success of interventions targeting specific motor goals, such as gait training and arm and hand rehabilitation.

The success of rhythmic music interventions on motor rehabilitation goals led to the development of the three sensorimotor NMT techniques: Therapeutic Instrumental Music Performance (TIMP), Patterned Sensory Enhancement (PSE), and Rhythmic Auditory Stimulation (RAS). TIMP is defined as “a neurologic music therapy (NMT) technique which uses carefully selected and positioned acoustic and electronic instruments in upper extremity rehabilitation” (Thaut, 2005 as cited in Haire, 2021, p. 197). In other words, the Neurologic Music Therapist carefully selects instruments and therapeutically designed patterns to assist the NMT participant in meeting desired movement goals. PSE is “a technique which uses the rhythmic, melodic, harmonic and dynamic-acoustical elements of music to provide temporal, spatial, and force cues for movements which reflect functional exercises and activities of daily living” (Thaut, 2005). Music therapists utilizing PSE may create a sequence of music-cued movements which, when combined, form a functional movement sequence, such as brushing one's teeth or completing a sit-to-stand motion. RAS is “a neurologic technique used to facilitate the rehabilitation, development, and maintenance of movements that are intrinsically biologically rhythmical” (Thaut, 2005). Most frequently, RAS is used to assist in gait training by providing a rhythmic sound source to which the brain can entrain.

In addition to sensorimotor techniques, Neurologic Music Therapy also includes techniques for cognitive rehabilitation and maintenance and speech and language rehabilitation. The cognitive rehabilitation techniques include Musical Sensory Orientation Training, Musical Neglect Training, Auditory Perception Training, Musical Attention Control Training, Musical Mnemonics Training, Associative Mood and Memory Training, and Musical Executive Function Training. These techniques are frequently used with individuals with disorders of consciousness, Alzheimer's and other dementias, and various developmental and learning disabilities. The speech and language techniques include Melodic Intonation Therapy (MIT), Musical Speech Stimulation, Rhythmic Speech Cuing, Vocal Intonation Therapy, Therapeutic Singing, Oral Motor and Respiratory Exercises (OMREX), Developmental Speech and Language Training Through Music, and Symbolic Communication Training Through Music. Of these, MIT is the most frequently researched technique as it predates NMT and is used by other disciplines such as Speech Language Pathologists in addition to music therapists (Cowen, 2014). MIT is used extensively to assist people with aphasia in regaining expressive speech.

A review of literature written by Neurologic Music Therapists, as well as this author's participation in NMT training, reveals a pervasive belief amongst prominent NMTs that Neurologic Music Therapy is the "true" or "ideal" form of music therapy, superior to music therapy techniques and methods which prioritize more abstract social, emotional, spiritual, or cultural goals. The Handbook of Neurologic Music Therapy describes music therapy as being historically rooted in social science concepts and as being used to focus on goals "of emotional expression, of creating and facilitating group association, integration, and social organization, of symbolically representing beliefs and ideas, and of supporting educational purposes" (Thaut et al., 2014, p. 1). The Handbook goes on to discuss the emergence of neuroscientific research in



the 1990s focused on music's specific influence on regions of the brain. This research indicated that specific music interventions could successfully effect brain change in order to "retrain and re-educate" an injured brain (p.1). According to the authors of the handbook, the results of this neuroscientific research indicate that music is most effective as a stimulus influencing the neurophysiology of cognition and sensorimotor functions rather than as a "carrier of sociocultural values in the therapeutic process" (p. 2).

Another observation this author made through reading literature written by NMT's founders and educators and by participating in NMT training is that the Academy of Neurologic Music Therapy places a heavy value on quantitative data based in traditional research methods. Two main components of NMT are the Rational Scientific Mediating Model (RSMM) and the Transformational Design Model (TDM), both of which involve a process of assessment, evaluation, and treatment utilizing standardized musical and nonmusical data-tracking procedures. The RSMM is a model used by researchers in order to determine the most optimal uses of music in order to achieve specific neurological and behavioral functions (Thaut et al., 2014), while the TDM is utilized by NMT clinicians within music therapy treatment (Hurt-Thaut & Johnson, 2015).

The RSMM is a research model used to "translate music into a 'mediating' language of therapy and rehabilitation" (Thaut et al., 2014, p. 3); or, in other words, a process of translating musical functioning and processes into nonmusical functioning and processes. There are four steps within the RSMM: 1) Musical response models; 2) Nonmusical parallel models; 3) Mediating models; and 4) Clinical research models (Thaut et al., 2014). The first step, musical response models, involves investigating the neurobiological and behavioral processes involved in music perception and performance in the areas of cognition, motor control, and speech and

language. During this step in the RSMM, an NMT practitioner would be looking into which specific musical processes effect areas of cognition, movement, or speech. The next step, nonmusical parallel models, involves two phases. The first phase consists of exploring basic concepts, mechanisms, and processes involved in specific nonmusical neurologic functions. The second phase entails comparing the musical processes involved with specific brain functions identified in the first step (musical response models) with the nonmusical processes identified in the second step (nonmusical parallel processes). If parallel processes are discovered—in other words, if there are shared processes between musical and nonmusical neurological functions (i.e. motor control, attention, sensory perception, etc.)—and if the shared processes in music might enhance the parallel nonmusical functions, then one would move on to the third step in the RSMM, mediating models. The mediating models stage consists of developing and studying hypotheses based on the parallel processes discovered in the previous stage of the RSMM. If significant changes to nonmusical functions or behavior are found as a result of musical engagement, then one would move on to the fourth and last step of the RSMM, clinical research models. This final step involves applying the findings from the third step with clinical populations in order to identify therapeutic effects and to establish a body of research supporting the use of music to effect specific changes (Thaut et al., 2014).

The Transformational Design Model (TDM) is used by clinical Neurologic Music Therapists throughout the treatment process. This model consists of five to six steps: 1) Assessment; 2) Goals and objectives; 3) Nonmusical exercise stimulus; 4) Therapeutic music exercise; 5) Reassessment (not necessarily done in every session); and 6) Transformation/Transfer (Hurt-Thaut & Johnson, 2015). The assessment stage involves gathering information about a client's diagnosis and evaluating functional needs. Following

assessment, the Neurologic Music Therapist should set goals and objectives by identifying both immediate and long-term need. After setting goals and objectives, the NMT will identify a nonmusical exercise which addresses the functional goal, followed by translating the nonmusical exercise into a therapeutic music intervention. The music intervention should be based on scientific logic, musical logic, and therapeutic logic. In some sessions the NMT may reassess using the same assessments as in the assessment stage. The final step involves transferring the functional behavior targeted through musical interventions into the client's everyday life (Hurt-Thaut & Johnson, 2015).

This author believes there to be many benefits to Neurologic Music Therapy. For instance, a major component of NMT is teaching the client or the client's caregiver(s) to utilize the NMT techniques on their own, thereby reducing the need for the Neurologic Music Therapist and setting the stage for the client/caregiver to feel empowered. Additionally, the NMT techniques are based off of neurobiological research, making the exercises more targeted to specific outcomes and increasing the likelihood of success in achieving a client's rehabilitative goals. Furthermore, NMT's focus on quantitative data, evidence-based research, and the use of standardized assessments may make it a more "credible" form of music therapy in the eyes of other disciplines within the medical field, increasing patients' access to this type of music therapy and making it easier to code and bill for. However, this author believes there are also valid criticisms of NMT and the way it views disability. As Pickard et. al (2020) state, "As therapists, our values and beliefs about disability ultimately impact our approach to practice." If we, as therapists, view disability through a deficit lens, then we are more likely to approach therapy from a position of trying to force the client to fit a non-disabled mould. While not every Neurologic Music Therapist practices through a deficit-lens, the NMT course material tends to

be taught using pathologizing language which implies that disabilities are problems for the therapist to solve. LaCom and Reed (2014) stress this point, not just in NMT but in the field of music therapy as a whole, stating that they often find definitions of concepts such as health, goals, and strengths and needs to be problematic due to “the definition of disability as pathology, rather than as an aspect of identity or social context” (para. 42). They go on to say that defining the work of music therapy using this pathologizing language can sometimes be necessary to justify its use within a medical model; however, it is important to recognize that a compromise can still be made to “allow for ever evolving and subjective definitions of both disability and music therapy.”

Based on a review of the literature, this author found that another potential criticism of Neurologic Music Therapy is that it does not always take a whole-person approach to treatment. Thaut (2005), one of the founders of NMT, claims that music is more effective as a stimulus to treat neurobiological conditions than it is as a “carrier of sociocultural values in the therapeutic process” or as a means of addressing overall wellness. Other music therapists, psychologists, and researchers, however, find value in a more holistic biopsychosocial-cultural-spiritual approach to treatment, in which a person is viewed through multiple lenses rather than a single lens. In the 1970s, George Egans established the term “biopsychosocial,” an approach to treatment which believes that “to understand and respond adequately to patients’ suffering—and to give them a sense of being understood—clinicians must attend simultaneously to the biological, psychological, and social dimensions of illness” (Borrell-Carrio et al., 2004, p. 576). Since the inception of this model, other clinicians and researchers have called for the inclusion of a fourth dimension—the spiritual dimension—as research has increasingly revealed the impact of spirituality on health and well-being (Anandarajah, 2008). Furthermore, the cultural context of a

person's issues must be taken into consideration when working with said person to develop resources to deal with the challenges they are facing. Rather than simply practicing from within a biopsychosocial model, therefore, it may be more encompassing to approach clients from within a biopsychosocial-cultural-spiritual model. Music therapy is a field which frequently touts the power of music to influence people across multiple domains; however, Neurologic Music Therapy tends to focus on one domain or one goal at a time rather than considering the entire person.

Upon reflecting on both the strong points of Neurologic Music Therapy and its areas for potential growth, this author became interested in the perspectives of other Neurologic Music Therapists. The author is personally aware of several music therapists who practice from an anti-oppressive lens and are also Neurologic Music Therapy affiliates who utilize NMT techniques in their clinical work. Reflecting on this, the author became curious to know how Neurologic Music Therapists incorporate NMT into a holistic, anti-oppressive practice which centers, rather than pathologizes, disability. It is the goal of this thesis project, therefore, to explore both the strengths and weaknesses of Neurologic Music Therapy, particularly in its approach to disability, through the perspectives of practicing Neurologic Music Therapists.

**Research Questions:**

- 1) What do practicing or currently practicing Neurologic Music Therapists see as the strengths and weaknesses of Neurologic Music Therapy as a model of music therapy?
- 2) In what ways do practicing music therapists think Neurologic Music Therapy centers disabled clients? In what ways do practicing music therapists think Neurologic Music Therapy utilizes a deficit lens of disability?

- 3) How do Neurologic Music Therapists currently approach goal setting and treatment planning with clients?
- 4) How do Neurologic Music Therapists view the role of the therapist and the role of the client?
- 5) From the perspective of practicing or recently practicing Neurologic Music Therapists, how can The Academy of Neurologic Music Therapy improve its training to become more disability centered?

### **Method**

Based on this author's review of Neurologic Music Therapy literature as well as personal observations in the NMT training course, it is hypothesized that Neurologic Music Therapists will identify areas of need for NMT, specifically pertaining to language used to discuss disability, the view of disability as a social versus a physical construct, and the possibility for NMT to utilize a more holistic biopsychosocial-spiritual-cultural approach to wellness. It is also hypothesized that Neurologic Music Therapists' perspectives of NMT and its areas of need will vary greatly based on the therapist's educational background and self-identified theoretical orientation.

### **Participants**

Potential participants were recruited through a search of the Directory of Current NMT Affiliates on the Academy of Neurologic Music Therapy website. Participants were also recruited from relevant social media groups and by referral. Potential participants were sent an email detailing the study to gauge interest in participation, and those who expressed a desire to participate were sent a consent form and information on participation in the research.

Requirements for participation were that the participant must: 1. Be board-certified by the

Certification Board for Music Therapists; 2. Be currently certified as Neurologic Music Therapy Affiliates or Fellows or have been within the last five years; and 3. Currently utilize Neurologic Music Therapy techniques in their work with clients or have utilized these techniques within the last five years. Five participants engaged in this research.

### **Methodology**

The purpose of this qualitative descriptive study is to examine the perspectives of currently or recently practicing Neurologic Music Therapy affiliates and fellows to identify areas of perceived strength and areas of potential improvement in Neurologic Music Therapy. Due to the exploratory nature of this study, the research methodology is qualitative, and the data collection method utilized was interviews between the researcher and each participant. This data collection method was chosen so that participants would have the opportunity to provide detailed responses to each research question and to allow for flexibility in scheduling times that enabled those interested to participate. The interviews were conducted via password-protected Zoom meetings. IRB approval was received prior to conducting the research.

### **Research Instrument**

#### Discussion Prompts for Interview Participants:

- 1) How would you describe your theoretical orientation to music therapy, and how do you find that this impacts your practice as a Neurologic Music Therapist?
- 2) What do you find do be areas of strength for Neurologic Music Therapy as a model of music therapy?
- 3) What do you find to be areas of potential improvement for Neurologic Music Therapy as a model of music therapy?
- 4) In what ways do you think Neurologic Music Therapy techniques are helpful to clients?

- 5) In what ways do you think Neurologic Music Therapy techniques may cause harm to clients?
- 6) In your opinion, how does Neurologic Music Therapy approach disability? In what ways is its approach beneficial and in what ways is its approach harmful?

### **Data Collection and Analysis**

The individual interviews were recorded and transcribed. Following the completion of transcription, a copy of each transcribed interview was sent to the corresponding participant to confirm that the transcription accurately reflected their views and conveyed their ideas. The researcher read through the transcriptions and utilized inductive coding techniques to uncover prominent themes which arose throughout the interviews. During this process, the researcher first used in vivo coding, extracting codes from the participants' own words, and then used descriptive coding, taking the participants' words and condensing them into a single word or idea.

Following completion of the research, the recordings of the interviews will be destroyed in order to protect participants' anonymity.

### **Findings**

At the start of each interview, each of the five participants was asked to describe their theoretical orientation to music therapy. Of the five participants, three described their theoretical orientation as eclectic. Of these three, one participant described their orientation as drawing from collectivist, person-centered, and trauma-informed theories of practice; one participant discussed person-centered and anti-oppressive practices as informing their orientation; and one participant talked about pulling from humanistic and behavioral models. One participant described their orientation as being humanistic at the core and focused on psycho-social-spiritual domains.



Another participant primarily discussed her view of music therapy as being based off the idea of using music as a tool to achieve non-musical goals.

Of the five participants, three discussed their undergraduate music therapy training and how it influenced the development of their theoretical orientation. One participant was trained at a school that taught from a Neurologic Music Therapy (NMT) perspective; however, this participant has since moved away from these ideals in favor of a more eclectic approach. One participant was trained at a school centering a humanistic perspective and continues to describe their orientation as humanistic, although has since trained in NMT. A third participant discussed the influence of their undergraduate education being focused on a behavioral model. This participant now describes their orientation as primarily humanistic, though they state that they occasionally draw from their behavioral background. None of the participants described themselves as being solely NMT practitioners; rather, the participants discuss drawing from NMT techniques and teachings in addition to those of other methods and models.

Through the process of coding the interviews, six themes emerged in the data. Three themes reflected Neurologic Music Therapists' perceived areas of strength for Neurologic Music Therapy as a model, and three themes reflected Neurologic Music Therapists' perceived areas for potential improvement for Neurologic Music Therapy as a model. [See Table 1.](#)

Themes:

Areas of Strength:

- 1) Supported by Empirical Evidence
- 2) Promotes Client and Caregiver Agency
  - a. Empowerment
  - b. Motivation

3) Helpful in Addressing Specific Goals

Areas for Potential Improvement:

1) Issues with the Academy of Neurologic Music Therapy and the NMT Training

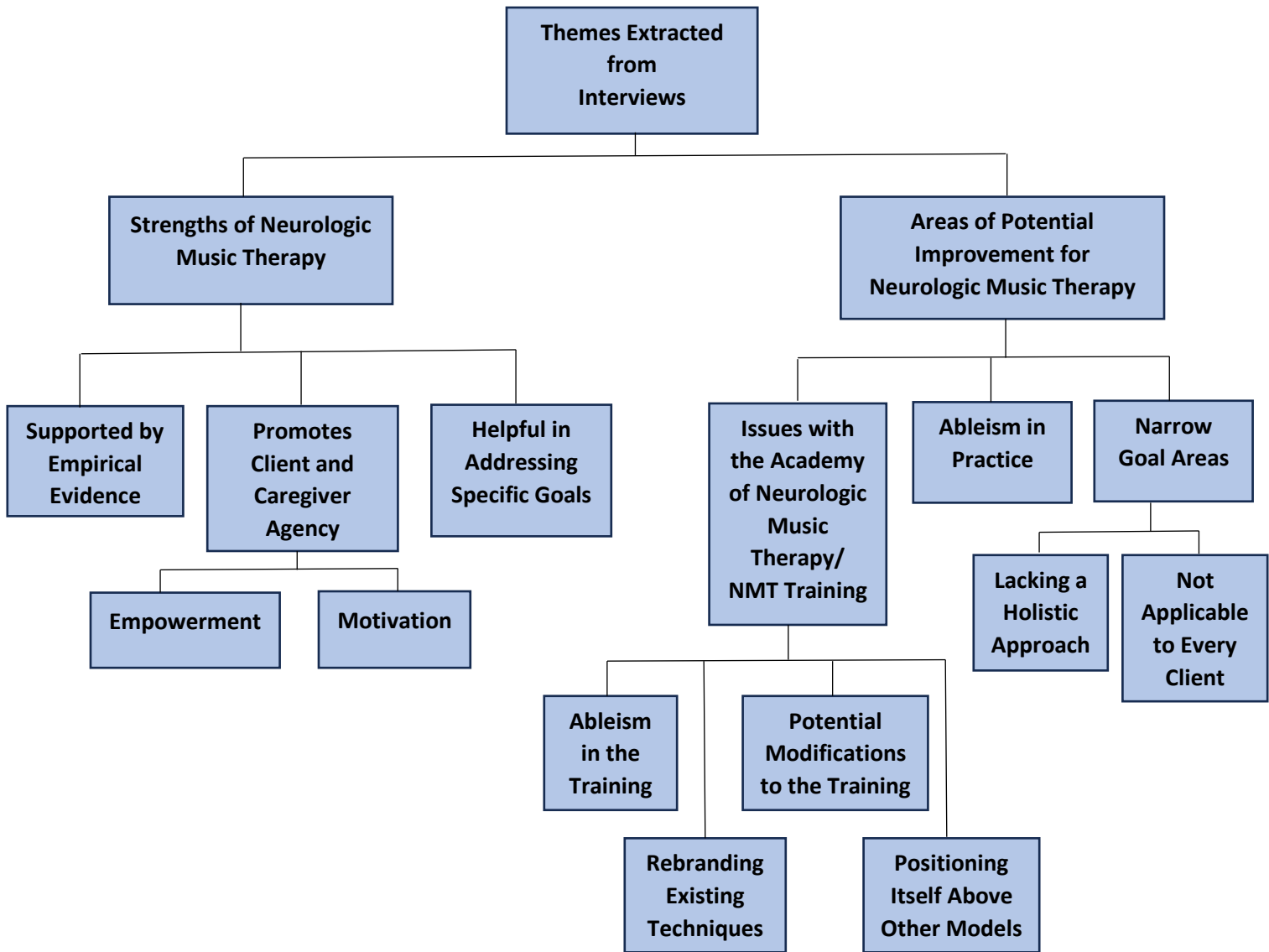
- a. Ableism in the Training
- b. Potential Modifications to the Training
  - i. Longer trainings
  - ii. Client focused vs. credibility focused
- c. Rebranding Existing Techniques
- d. NMT Positions Itself Above Other Models.

2) Ableism in Practice

3) Narrow Goal Areas

- a. Lacking a Holistic Approach
- b. Not Applicable to Every Client.

Table 1: Themes and Subthemes



**Analysis of Themes**

Areas of Strength

The first category, areas of strength, had three themes: 1) that NMT is an approach that is supported by empirical evidence; 2) that NMT promotes client and caregiver agency; and 3) that NMT is helpful in addressing specific goals.

*Supported by Empirical Evidence.* Each of the five participants discussed the importance of NMT's strong body of research and the concrete data supporting the efficacy of NMT techniques. These and similar comments emerged as a theme which the researcher titled "Supported by Empirical Evidence." Each of the five participants described this theme as being one of the strengths of Neurologic Music Therapy. For instance, Participant 1 discussed how Neurologic Music Therapists "take what we know about neurology to create direct pathways for neurological healing." Participant 3 also emphasized this point, stating that they find it helpful to have "more understanding of how music actually works in the brain," and that they can "[use] the music and the elements to actually impact areas of the brain and [know] how it actually interacts in the brain."

Participant 3 also referenced the value of NMT's strong body of research, describing it as "the most heavily researched and evidence-based approach to music therapy," and, due to this large body of evidence-based research, NMT techniques are supported by "concrete data that are universally used and have universal expectations for results." The use of NMT techniques typically results in quick and clear results, which Participant 2 discusses in relation to their experience working with children in a pediatric rehabilitation hospital. This participant said, "to see from within one session improvement, and then within their six week stay like a total improvement—was cool! It was great to be a part of that."

Due to the neurological research backing Neurologic Music Therapy, many of the participants found that it is easy to communicate the benefits of NMT to non-music therapists—including both clients and colleagues in other disciplines. Participant 2 talked about how, because NMT often yields immediate results, clinicians in other fields see the efficacy of the techniques and are more likely to view music therapy as a valid and evidence-based profession

within the existing medical model of healthcare. Participant 5 also brought up the benefit of being able to communicate about NMT more easily to other healthcare professionals, stating that it's "easier to explain NMT to non-music therapists using really concrete language and research and being able to say, 'This is how what I'm doing musically effects the brain, and this is why it's going to make a difference for the client.'" Participant 3 talked about how this has been helpful in developing a music therapy program at an inpatient rehabilitation facility, stating that, "having that extra certification, and the fact that it's recognized by the World Federation of Neuro-Rehabilitation, the WFNR, all of that is very, very helpful in program development."

Participant 4 discussed how, in addition to being able to communicate the benefits of NMT to colleagues, they have also found that clients have been more receptive to music therapy once presented with research. This participant stated that, "There have been a few patients that I've worked with that have been like, 'What you do is not real, blah blah blah,' and then I've printed out articles and shown them specifically—like, there was one patient that I was doing RAS with, and I...printed out a list of all these sources, and I was like, 'This is research-based, it's science.' And then they were kind of like, 'Oh, really?' Like, 'Wow!'"

*Promotes Client and Caregiver Agency.* Three of the five participants discussed caregivers' and clients' agency in treatment as another strength of Neurologic Music Therapy. This theme emerged primarily through two subthemes: Empowerment and Motivation. Participant 1 stated that, due to the concrete and instantaneous results discussed in the previous section, clients may experience feelings of immediate gratification. Participant 1 went on to say, "I think that can be really motivating and empowering, especially for people who are struggling with gait or struggling with speech or, you know, those things that NMT really does provide concrete solutions for."

Participant 2 spoke about caregivers' feelings of empowerment particularly in-depth, recounting their experience as a music therapist in a pediatric rehabilitation hospital. While working in this environment, Participant 2 has become aware of the ways in which caregivers may feel displaced from their role as caregiver when their child or dependent is hospitalized. Participant 2 stated "The reason I liked it [NMT] so much was because I could teach the parents, and then the parents could do it...Hospital rehabilitation is an environment in which parents are displaced from their role as caregiver, and so that was a fun way to be like, "Okay, I'm gonna tap, and then we're gonna sing this song, and then you're gonna try it and I'm gonna help you out, and then now you have this skill." The benefit of being able to teach NMT techniques to clients and caregivers was also discussed by Participant 5, who stated, "I think one of the benefits is that you can teach these techniques either to the client or the caregiver. And they can use these techniques on their own, so that can be really empowering. I think as a therapist we shouldn't want to be needed by our clients forever. I think our goal should be for the clients to not need us anymore. So, I think NMT does a good job of, I think, empowering the clients or caregivers to not need us anymore and to be able to do these things on their own and to keep working towards things without us."

Participants also talked about how NMT can be effective in increasing client motivation to participate in treatment. Participant 5, like Participant 1, brought up the idea of immediate gratification due to the immediacy of results when using NMT techniques. They said, "I know personally it can be really hard to be working on something for a long time and not really seeing any progress for a while. Like that can make you lose motivation. So being able to see the progress right away I think can be really motivating for clients."

*Helpful in Addressing Specific Goals.* All five participants discussed how Neurologic Music Therapy is highly effective in addressing specific goal areas—particularly within the physical, cognitive, and communicative domains. Participant 1 addressed this point by stating that, “I think NMT does a few things really well. I feel like they do speech really well, attention skills, cognitive skills, stuff like that. So, the stuff that's super, super concrete.” Participant 4 provided a specific example of the use of NMT to address a physical goal, describing how it works by saying, “We’re not just playing the drum, we’re actually working on their bicep flexion and extension, and...it’s proven that you can do more repetitions of it when there’s a song playing and you’re not just focusing on the bicep curl itself, you’re...focusing on playing a drum.” Participant 3 works in an inpatient rehabilitation hospital and described using a specific NMT technique to work towards goals in the communicative domain. This participant said, “I do Melodic Intonation Therapy, and that’s the one that I see the most clear results from. And it is pretty amazing to see how somebody can go from singing to speaking a sentence very quickly.” Participant 5 also mentioned that NMT is useful in addressing rehabilitative goals, while also pointing out that it is important for the client to be the one who wants to address those goals. Participant 2 discussed using NMT in a non-traditional sense to address goals related to self-regulation. For example, this participant discussed an experience in which they used Rhythmic Auditory Stimulation (RAS) to address self-regulation for a client rather than RAS’s traditional use, which is to improve gait. The participant said, “Even just with something like RAS, right, I’ve used that with one of my autistic students because they like to run and they’re also really dysregulated, and so we needed some sort of regulation activity so we could do the things that he wanted to do, but he was too dysregulated to do those things. So, I’d be like, ‘Alright, let’s run around and try and move our body to the beat!’ And it was successful, it’s still successful, it’s

been many years, and so yeah, I think it has a lot of self-regulation stuff, even if that's not what the goal of the techniques are.”

### Areas for Potential Improvement

The second category, areas for potential improvement, had three themes: 1) issues with the Academy of Neurologic Music Therapy/NMT Training; 2) ableism in practice; and 3) narrow goal areas.

*Issues with the Academy of Neurologic Music Therapy/NMT Training.* All five participants identified areas of potential improvement for the Academy of Neurologic Music Therapy and its certification program. Through analysis of this theme and the ways in which each participant discussed the theme, four primary subthemes emerged: a) Ableism in the Training; b) Potential Modifications to the Training; c) Rebranding Existing Techniques; and d) NMT Positions Itself Above Other Models.

Ableism within the Neurologic Music Therapy training sessions was identified as a problem by Participant 3, who stated, “The NMT training...definitely had some ableism throughout, especially related to disability, and sort of had the perspective of therapist and client fixing or changing who the client is, and...it was not neurodiversity-affirming at all.” This participant went on to say that, while perhaps individual Neurologic Music Therapists are mindful of reducing the impact of ableism within their practice, “the way it was presented in the training was not supportive of that, so I could see people coming out of the training and using it in somewhat harmful ways.” Participant 5 also identified ableism within the training, pointing out that, “I noticed a lot of ableism in the training for sure.” This participant added that, “the attitude in the training was definitely like, ‘Of course everyone wants these things, or like, of course everyone wants to be typical or non-disabled. So, we should use these techniques because



obviously that's what everyone wants.'" Participant 5 also mentioned that the way NMT is presented in the training positions the therapist as the expert and the client as someone in need of being helped or fixed.

The participants also identified potential modifications to the NMT training which could improve the experience for trainees. For example, Participant 2 wondered whether it might be beneficial for the training to be longer. They said, "I...think that the fact that I was able to sit on my couch for three days and get this specialization that's nationally accredited...I don't know, some people could say that that's accessible, which maybe it is—it was accessible to me! And other people could say that that's not enough to have a specialization, so there's both sides of that." Participant 4 said that a modification they would like to see in the training is more discussion about potential adaptations to NMT techniques, mentioning that in certain workplaces or settings you may have to modify techniques in order to adapt to the client and the situation. Another potential modification Participant 2 mentioned that they would like to see in the training and chapter meetings is more of an emphasis on building relationships with clients. Participant 5 made a similar point, stating that, "I feel like sometimes NMT—or the way NMT is presented—isn't entirely client-focused. It's sometimes more focused on the credibility of NMT." Participant 5 also stated that they would like to see a greater emphasis on how and why Neurologic Music Therapists select certain goals, saying, "The techniques are great and they do what they say they do, but sometimes it's like...why are we trying to make those changes? Or like, why are we trying to change our clients in those ways? And...who is setting those goals? Is it the client setting those goals for themselves or is it the therapist just being like, 'This is how I think you should be, this is what I think is important for you, so that's what your goal is going to be.'"

A third subtheme emerged within Participant 2 and 3's interviews. Both of these participants noticed that several NMT techniques have been "rebranded" from existing music therapy techniques. Participant 2 pointed out that, "[The Academy of Neurologic Music Therapy] [has] basically rebranded things that are widely used in music therapy as this special thing. Like Therapeutic Singing. It's just singing. You're just singing with a client, like, why are we pretending it's...different when we call it that, or...it's different from an NMT perspective when it's really just singing with a client to reach a variety of goals?" Participant 3 had similar feelings about NMT techniques and said, "Like Therapeutic Singing, for example, it's really just a fancy way of saying 'singing.' Or like Rhythmic Speech Cuing is a fancy way of like, 'lyric fill in.' Like it's a lot of things that other music therapists do all the time, but with the fancy NMT terminology."

Finally, the fourth subtheme that emerged throughout the interviews has to do with the idea that, as a whole, the Academy of Neurologic Music Therapy positions NMT as being superior to other types of music therapy practice. Four of the five participants mentioned that they noticed this attitude during the NMT training and found it to be problematic. Participant 1 described this mindset as being, "all about shitting on all of the other disciplines and saying that they're not as worthwhile." They went on to add, "There's just so much disheartening emotional environment in the NMT world. Because if you're not doing NMT then you're not doing it right, and that's just not true." Participant 2 made a similar point regarding their training experience, stating that, "I think the whole thing kind of just undermined every other approach to music therapy." Participant 3 agreed that the training could be improved by "having the mind open to the many other approaches to music therapy....I felt that the training was really like, "This is the only way to do music therapy." Participant 5 described the prevailing attitude within the NMT

community as, “an attitude of like...elitism, in a sense? Like, ‘This is the only way to do music therapy, all other methods are inferior, no one else does research...,’ all that kind of stuff.”

*Ableism in Practice.* Participants discussed ableism within the NMT *training* as a subtheme, but ableism in *practice* also stood out as its own distinct theme. Participant 1 brought up the concern that “NMT doesn't include any acknowledgement of neurodiversity as a good thing” and that its goals are concerned with “getting people to communicate in the way that the rest of the world views as normal.” Participant 1 credited this with “the goals of NMT [being] written from a politically capitalist, heteronormative view.” Participant 2 recognized NMT's position within these systems as well, talking about its dependence on the existing medical model of healthcare. “Historically, music therapy has clung to medical models to survive and establish itself within systems already, and I think that's where NMT comes from,” Participant 2 said, “And now that people are moving away from that...it also could be the thing that's preventing music therapy from evolving further, 'cause it wants to keep clinging to medical models, which we know—or we have a lot of research about—many people are unhappy with those models, and they don't feel heard in those models.”

Participants also talked about how many Neurologic Music Therapists take a “let me fix you” approach to disability. Participant 3 mentioned that “it is a framework that makes it easy to see your client as ‘less than’ and you are trying to fix them and change them to make them more like yourself.” Participant 5 also mentioned the potential for therapists to attempt to change or fix their clients when practicing from a Neurologic Music Therapy framework. They said, “Its approach seems to be very much positioning the therapist as the expert. And I think its approach is also from the perspective of ‘people with disabilities need to be more neurotypical, or more physically non-disabled.’ So I also think its approach is also coming from the view of trying to

make disabled people less disabled.” Participant 2 also criticized the “let me fix you” mentality that seems to be prevalent within the NMT community, stating, “I think it’s more about assimilating the client and not so much about accepting the client.” They also added that, “If we’re approaching disability from the perspective of, “Let me fix you,” that’s very ableist, it’s very harmful.”

Participants also expressed the ways in which ableism may occur in practice when therapists are the ones deciding upon goals with little to no input from clients. Participant 5 wondered, “Who is setting those goals? Is it the client setting those goals for themselves or is it the therapist just being like, “This is how I think you should be, this is what I think is important for you, so that’s what your goal is going to be.” Participant 5 went on to add, “Or if the client is someone who maybe can’t communicate what they want their goals to be, I think it’s important to look at it like, “Okay, who are these goals benefitting?” Like, are the goals benefitting the client or other people, like parents or maybe teachers or other people?” Similarly, Participant 3 wondered if sometimes Neurologic Music Therapists choose to use techniques and work towards goals with the intention of changing something about the client that doesn’t necessarily need to be changed “when their environment could be adapted in a way that supports them better.” Participant 2 also expressed concern about who is setting goals and why, wondering, “If the client doesn’t really want this skill, but we’re just projecting, you know, “You used to walk, you should walk again!” But maybe that’s not what the client wants to work on at the time, or at all, and I think that could be an issue.”

*Narrow Goal Areas.* While the participants in this study found NMT to be highly effective in targeting specific goal areas, they also found that focusing too intently on certain domains can result in the neglect of other domains. For instance, while NMT techniques are

excellent tools to address physical, cognitive, and communicative goals, Neurologic Music Therapists may not be as attuned to what is going on for a client socially, emotionally, spiritually, or culturally. All five participants brought up concerns related to this theme, and these concerns fell into one of two subthemes: 1) Lacking a Holistic Approach, and 2) Not Applicable to Every Client.

One concern raised frequently throughout the interviews was the lack of a holistic approach to treatment within NMT. Participant 1 summarized this concern by saying, "NMT does a few things really, really well, but it doesn't apply to a huge portion of what reality is. So, it pretty much misses the mark for treating the whole person." Participant 5 described NMT as being formulaic; therefore, this could cause the issue of a therapist "going based off of this formula and not fully seeing the client as an individual." Similarly, Participant 3 brought up the point that when a therapist's work becomes too formulaic or too clinical "rather than just being in the moment and actually just being expressive with your clients," a client's creativity and ability to express themselves can be hindered.

When following a formula to address a specific goal, it is possible for the therapist to miss out on other important things that are occurring simultaneously for a client. Participant 5 emphasized this point by saying, "I feel like the idea in NMT of, 'oh, we should only be working on one goal at a time,' can potentially be harmful because if you're working specifically on a physical goal and you're rigidly focused on just that one goal, you might miss out on a lot of other things that are going on for that client. Like emotional, social, spiritual kind of stuff." Participant 2 discussed this concern in relation to their work as a music therapist in a pediatric rehabilitation hospital, which they describe as a very emotional environment. This participant used a patient with a TBI as an example of this, stating, "You expect someone with a TBI, when

they're starting to regain their skills...to be angry and irrational, and that's part of the healing process. Like, I had a girl that was really angry, and had I just done NMT techniques I would have ignored all those other things that were going on for her."

Participants also acknowledged that NMT may not be appropriate for every client in every circumstance. Participant 4, who works in an inpatient pediatric rehabilitation hospital, talked about how, due to timing issues, some of their patients would not be appropriate for certain NMT techniques, stating, "In my practice, because I am seeing them inpatient, I'm like, 'Oh, if they were just one more month out or in outpatient, NMT would benefit them so much.'" This participant also talked about how NMT could be too structured for certain clients, stating, "I think it's really helpful for the people that it's appropriate for with disability, but I think in some settings it might be just not appropriate for specific disabilities? I think for a lot of disabilities that I've seen it would be really appropriate, but some of them...the structure of it might not be appropriate." Participant 2 also talked about how NMT might not be a match for every client, commenting that, "Neurologic Music Therapy isn't universally applicable with all the clients that we work with. If I had a kid that I was like, 'Okay, we're gonna tap this along with the metronome...' Like, they don't care about that, you know what I mean? ... Half my students would probably hate the noise. And that's something they do a lot, right? It just isn't always universally applicable, or, like, they don't care about it, so they're not gonna do it. But maybe they care about other things that maybe come from other approaches." Participant 5 further emphasized the idea that NMT may not be the most appropriate approach for every client, stating, "Just because NMT techniques are proven scientifically to work to address certain things, that doesn't mean those are the only things that work. And sometimes a client might respond better to a different way of doing things."

## Discussion

### Application of Themes to Research Questions

What do practicing or currently practicing Neurologic Music Therapists see as the strengths and weaknesses of Neurologic Music Therapy as a model of music therapy?

Through the process of coding, this researcher found that participants discussed Neurologic Music Therapy's strengths and weaknesses in six categories, including three areas of strength and three areas of potential improvement. The three areas of strength were: 1) Supported by Empirical Evidence; 2) Client and Caregiver Agency; and 3) Helpful in Addressing Specific Goals. The three areas of potential improvement were: 1) Issues with the Academy of Neurologic Music Therapy and the NMT Training; 2) Ableism in Practice; and 3) Narrow Goal Areas.

These themes reflected this author's findings in existing NMT literature. Much of the literature describes the efficacy of the application of NMT techniques to specific outcomes. The participants in this study also found that NMT techniques are helpful in achieving goals in specific domain areas—especially physical, cognitive, and communicative domains. On the other hand, participants found that there is a potential within NMT to ignore other domain areas when focusing on those specific goals. For instance, one participant discussed her experience working with a client in a rehabilitative setting. While the primary purpose of treatment was to address physical rehabilitative goals, the client was also experiencing feelings of anger related to her recovery. The participant stated that it was important for her, as a therapist, to address those feelings with her client rather than focusing solely on the physical aspect of her treatment. NMT literature states that music is more effective as a stimulus to treat neurobiological conditions than it is as a “carrier of sociocultural values in the therapeutic process” or as a means of addressing

overall wellness (Thaut, 2005); however, based on the interviews conducted as part of this study, it seems as though many NMT clinicians find value in a more holistic approach in which multiple domains are addressed and acknowledged within music therapy treatment.

Based on both a review of the literature and this author's own participation in the NMT certification process, it was this author's prediction that other NMT practitioners have observed ableism in both the training and the practice of NMT. The participants in this study confirmed this hypothesis, noticing ableism in the language used to discuss disability in NMT training and resources and in the way goals are set. In particular, the participants noticed that NMT practitioners often approach goal setting using a deficit lens of disability in which they seek to "fix" their clients by making them more neurotypical or nondisabled. The participants critiqued this positioning of the therapist as the expert and the client as someone in need of being changed and discussed the need for NMT to become more disability-affirming.

Additionally, this author predicted that the participants in this study may discuss how NMT is often positioned as being the "superior" approach to music therapy. Indeed, most participants observed the prevalence of this attitude during their participation in NMT certification. For instance, one participant talked about a prominent NMT practitioner and educator displaying a disparaging attitude towards improvisational models of music therapy. Other participants also noticed that NMT leadership presented NMT as being the "true" form of music therapy while other methods and models are not as effective. This attitude towards music therapy was also prevalent in the literature. For instance, *The Handbook of Neurologic Music Therapy* describes music therapy as being historically rooted in social science concepts and as being used to focus on goals "of emotional expression, of creating and facilitating group association, integration, and social organization, of symbolically representing beliefs and ideas,



and of supporting educational purposes” (Thaut et al., 2014, p. 1). The Handbook goes on to discuss the emergence of neuroscientific research in the 1990s which indicated that specific music interventions could successfully effect brain change in order to “retrain and re-educate” an injured brain (p.1). According to the authors of the handbook, the results of this neuroscientific research indicate that music is most effective as a stimulus influencing the neurophysiology of cognition and sensorimotor functions rather than as a “carrier of sociocultural values in the therapeutic process” (p. 2).

In what ways do practicing music therapists think Neurologic Music Therapy centers disabled clients? In what ways do practicing music therapists think Neurologic Music Therapy utilizes a deficit lens of disability?

Participants found that one of the strengths of Neurologic Music Therapy is its ability to increase caregiver and client agency. By teaching clients or caregivers to utilize NMT techniques on their own, without the assistance of the music therapist, clients and caregivers take a more active role in the treatment process. This can lead to an increased sense of empowerment for both clients and caregivers. Additionally, this can decrease feelings of displacement for caregivers, particularly when their dependent is in a hospital setting or another setting where the caregiver takes on less of a “caregiving” role. Clients may also experience a lack of control in hospital settings; therefore, they might also feel empowered by taking control of their treatment in NMT. Taking on a more active role in the treatment process and seeing tangible results can also increase a client’s sense of motivation to engage in treatment. This may be a way in which Neurologic Music Therapy can center disabled clients—by providing space to take on an active role in progressing towards their goals and by restoring a sense of control over their environment.

On the other hand, participants identified many ways in which Neurologic Music Therapy utilizes a deficit lens of disability. Participants in this study identified several ways in which ableism is prevalent in the practice of Neurologic Music Therapy. Neurologic Music Therapy exists within a Western medical model of healthcare that tends to position the therapist as “expert” and the client as someone to be fixed; this perpetuates ableist systems and creates an unequal power dynamic within the therapeutic relationship. Additionally, participants mentioned that Neurologic Music Therapy goals are often written from a politically capitalist and heteronormative viewpoint, both of which are systems which tend to uphold ableist structures. Participants were also concerned that these goals are frequently written without input from the client or without taking into consideration who is benefiting from treatment. Ableism prevalent within the practice of Neurologic Music Therapy, therefore, is seen as an area in need of improvement for NMT as a model.

How do Neurologic Music Therapists currently approach goal setting and treatment planning with clients?

Participants in this study expressed concern that Neurologic Music Therapists frequently set goals based on neurotypical and nondisabled societal norms. Participant 1 specifically brought up the fact that Neurologic Music Therapy goals are written from a politically capitalist worldview, which tends to uphold ableist systems and structures. Participants also talked about how goals are often selected without input from the client and are based on what the therapist thinks is important for the client. A frequent goal is to rehabilitate clients or restore functioning rather than to explore accommodations. Additionally, participants discussed the concern that many Neurologic Music Therapists set goals which primarily benefit others—such as teachers or parents—rather than the client themselves.

How do Neurologic Music Therapists view the role of the therapist and the role of the client?

Many Neurologic Music Therapists view the role of the therapist as the expert or the helper and the role of the client as someone to fix or change. The participants in this study noticed that this attitude was especially prevalent in the NMT training, which may then influence Neurologic Music Therapists coming out of the training to approach their own practice with that same mindset. Consequently, the participants in this study felt that the NMT training could benefit from including more of a focus on inherent biases of the therapist. For instance, participants suggested that the training could be improved by involving discussions about who is setting goals and why the goals are being set—particularly in relation to whether the client truly wants or needs to work towards certain goals or if the therapist is projecting their own beliefs about what is important to the client.

From the perspective of practicing or recently practicing Neurologic Music Therapists, how can The Academy of Neurologic Music Therapy improve its training to become more disability centered?

Participants described significant ableism within the Neurologic Music Therapy training program, and they identified several ways in which the NMT training could be improved to decrease ableist attitudes. One participant explained that they would like to see more of an emphasis on relationship-building in the NMT training. Focusing on this aspect of the therapeutic relationship could encourage Neurologic Music Therapists to take more of a client-centered approach to goal setting and treatment planning, rather than assuming they know best for the client. Other participants spoke about goal setting at length, questioning why therapists select certain goals for their clients. Participants felt as though, often, therapists create goals based on the idea of trying to make the client less disabled or because the therapist is projecting

their own biases onto the client. Participants felt that the Neurologic Music Therapy training could be improved, therefore, by adding discussion about why and how therapists select goals. If the NMT training included discourse about the internal biases which impact people's approach to treatment planning and encouraged people to be mindful of these biases when setting goals, this would be a way to center disability in the training.

### **Implications**

Limited research exists involving a critical analysis of Neurologic Music Therapy and its approach to disability. The findings of this study, therefore, hold potential implications for practicing Neurologic Music Therapists as well as for the Academy of Neurologic Music Therapy. Participants in this study have identified several ways in which harm may be caused to clients due to ableism in practice and ableism within the NMT organization and training program. Consequently, practicing Neurologic Music Therapists may decrease the potential for harm to clients by examining their internal biases, such as their reasons behind the goals being set for treatment and their view of the roles of therapist and client. If possible, Neurologic Music Therapists should include clients in the goal-setting process and should explore with the client in-depth what would most benefit them—whether that be rehabilitative goals or other types of goals. If the client is unable to actively participate in goal-setting, then the Neurologic Music Therapist should consider whether goals are truly benefiting the client or if the goals are simply making things easier for caregivers or other people in positions of authority.

The Academy of Neurologic Music Therapy would also benefit from exploring the ways in which ableism is inherent in NMT as it currently exists. Participants in this study raised concerns regarding the way disability is viewed within NMT and the ways in which NMT contributes to upholding ableist systems in healthcare. In order to counteract these perceived

problems, it may benefit the Academy of Neurologic Music Therapy to make changes to their training program. Participants in this study made several suggestions for inclusions to the training program which may help to counteract ableist attitudes. For instance, participants suggested that it may be beneficial for the NMT training session to include discussions about relationship-building with clients and about how to set goals in ways which center the client rather than the therapist or others.

The Academy of Neurologic Music Therapy could also benefit from maintaining a more open-minded attitude about other methods and models of music therapy. Overall, the participants represented in this study described strong negative feelings towards the attitude of superiority presented by NMT leadership in the training session. Furthermore, most of the participants described their theoretical orientation as being “eclectic” and stated that they do not exclusively use NMT in their practice. Rather, they draw from NMT as a tool when appropriate. It may be important, therefore, for NMT leadership to remember that many of the people going through the training and becoming NMT affiliates will be using NMT alongside other forms of music therapy.

### **Limitations**

Limitations of this study include the limited representation of identities within the group of five participants. The participants who engaged in this study were all young, white cisgender women; therefore, the feelings and opinions reflected in this study have been shaped by this intersection of identities. Additionally, two of the five participants are currently enrolled in or have recently graduated from the same music therapy graduate program—which the researcher is also enrolled in—and two of the five participants work for the same employer. All of the participants live and work in the United States. This homogeneous participant group, therefore,

may not accurately reflect the thoughts and opinions of most Neurologic Music Therapists.

Another potential limitation of this study could be the researcher's own bias based on her own experience and perception of Neurologic Music Therapy. Despite taking steps to diminish bias during the interviews and coding process, there remains the possibility that the researcher's opinions and experiences influenced her responses during the interviews and her reading of the interviews while coding.

### **Suggestions for Future Research**

Due to this limited representation of the participant group, this researcher would recommend repeating this study with a larger group of participants representing a wider range of identities—especially marginalized identities—in order to capture a more accurate reflection of the thoughts and opinions of practicing Neurologic Music Therapists. This researcher would also recommend repeating the study with participants practicing NMT in other countries.

Additionally, this researcher believes that repeating this study specifically with disabled Neurologic Music Therapists would provide crucial information regarding NMT's approach to disability from the perspective of people who experience the effects of ableism in healthcare.

### **Conclusion**

This study provided preliminary information regarding both the strengths of NMT as well as areas of potential improvement from the perspectives of practicing or recently practicing Neurologic Music Therapists. Limited research exists providing a critical analysis of NMT, especially related to its approach to disability. Therefore, this study adds information to gaps in the literature and could act as a starting point for further studies exploring the strengths and limitations of NMT.

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<https://nmtacademy.co/key-elements-of-nmt/>

**Appendix A: IRB Approval**

TO: Dr. Susan Hadley  
Music Therapy

A handwritten signature in black ink, appearing to read "Michael Holmstrup".

FROM: \_\_\_\_\_  
Michael Holmstrup, Ph.D., Chairperson Institutional  
Review Board

DATE: September 27, 2022

RE: Change to Protocol Approved Protocol #:

2022-077-56-A  
Protocol Title: Neurologic Music Therapists' Perspectives of  
Neurologic Music Therapy and Disability: Areas of  
Strength and Areas for Potential Growth

The Institutional Review Board (IRB) of Slippery Rock University has received your Request for Change to Protocol Form on September 27, 2022 for the above-referenced protocol.

The IRB reviewed and approved your requested changes, effective September 27, 2022.

If you have any questions, please contact the IRB Office by phone at (724)738-4846 or via e-mail at [irb@sru.edu](mailto:irb@sru.edu).

## Appendix B: Consent Form



Professor Susan Hadley, PhD, MT-BC  
*Music Therapy Program Director*  
*Graduate Music Therapy Program Coordinator*

**Approved**  
**9/27/2022**  
**Slippery Rock**  
**University Institutional**  
**Review Board**

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**College of Liberal Arts**  
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 Criminology and Criminal Justice  
 Dance  
 English  
 History  
 Homeland and Corporate Security Studies  
 Interdisciplinary Programs  
 Modern Languages and Cultures  
 Music  
 Philanthropy, Nonprofit Leadership, and Public Affairs  
 Philosophy  
 Political Science  
 Theatre

**Programs**  
 Asian Studies  
 Gender Studies  
 OSH Public Humanities  
 Writing Center

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### CONSENT TO PARTICIPATE IN RESEARCH

#### NEUROLOGIC MUSIC THERAPISTS' PERSPECTIVES OF NEUROLOGIC MUSIC THERAPY AND DISABILITY: AREAS OF STRENGTH AND AREAS FOR POTENTIAL GROWTH

Susan Hadley, Ph.D, MT-BC; [susan.hadley@sru.edu](mailto:susan.hadley@sru.edu) Amanda  
 Watson, MT-BC; [axw1061@sru.edu](mailto:axw1061@sru.edu)

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#### **Invitation to be Part of a Research Study**

You are invited to participate in a research study. In order to participate, you must be a board- certified music therapist, 18 years or older, who is a current Neurologic Music Therapy Affiliate or Fellow and who currently utilizes Neurologic Music Therapy techniques in their clinical work, or has utilized Neurologic Music Therapy techniques in the past 5 years. Taking part in this research project is voluntary.

#### **Important Information about the Research Study**

Things you should know:

- The purpose of the study is to explore currently practicing neurologic music therapists' perspectives of Neurologic Music Therapy, specifically pertaining to disability. If you choose to participate, you will be asked to participate in a virtual interview. Participation in the interview will take approximately 30 minutes of your time.
- There is no more than minimal risk anticipated from participation in this research. You may feel discomfort critically discussing this therapeutic approach.
- The study may directly benefit you by encouraging you to reflect on your approach to neurologic music therapy. You may also benefit from reading the results of the study upon completion.
- Taking part in this research project is voluntary. You do not have to participate, and you can stop at any time.

Please take time to read this entire form and ask questions before deciding whether to take part in this research project.

Initials \_\_\_\_\_ \* Every page must be initialed by research participant

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**What is the Study About and Why are We Doing it?**

The purpose of the study is to explore current perspectives of Neurologic Music Therapy and disability, specifically from the viewpoint of board-certified music therapists who have gone through the NMT training and utilize its approaches in their current practice. Neurologic Music Therapy is a music therapy specialization with thousands of affiliates throughout the world. Its techniques are used not only by music therapists but by other health professionals, including physical therapists, speech-language pathologists, and occupational therapists who have undergone the training. NMT techniques can be found being utilized in hospitals, nursing and rehabilitation facilities, schools, and in private practice. Due to the increasing relevance of NMT in medicine, therefore, it is important to explore both its potential for good and its potential for harm.

**What Will Happen if You Take Part in This Study?**

If you agree to take part in this study, you will be asked to participate in a virtual interview. We expect participation in this interview to take about 30 minutes of your time. Participation time may vary based upon depth of the discussion for each question asked during the interview. This interview will be recorded and transcribed; following the completion of the transcription the video will be destroyed. Your participation will remain anonymous.

**How Could You Benefit From This Study?**

Although you may not immediately benefit from being in this study, you and other music therapists may benefit from reading the results of the research if published. This study may provide direct benefit to you by encouraging you to reflexively think about your approach to neurologic music therapy.

**What Risks Might Result From Being in This Study?**

There is not more than minimal risk anticipated as a result of participating in this research study. No identifying information will be asked within the interview. There is a minimal chance you may feel discomfort engaging in critical discussion about the Neurological Music Therapy approach. As therapists, we understand that you have access to therapeutic and supervision resources, and we can provide access to music therapy supervisors, if needed.

**How Will We Protect Your Information?**

To protect your privacy, any information that could directly identify you will not be included in the study results. Your name and any other information that can directly identify you will be stored separately from the data collected as part of the project.

**What Will Happen to the Information We Collect About You After the Study is Over?**

We will not keep the video of the interviews to use for future research or other purposes. Your name and other information that can directly identify you will be kept secure and stored separately from the research data collected as part of the project; this information will be destroyed following completion of the study.

**How Will We Compensate You for Being Part of the Study?**

There is no compensation for this study. It is completely voluntary.

**Your Participation in this Research is Voluntary**

Your decision to participate in this research study is completely voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer. You may end your participation in the interview at any time. If you decide to withdraw before this study is completed, any personal identifying information collected from you will be deleted or destroyed.

**Contact Information for the Study Team and Questions about the Research**

If you have questions about this research, you may contact Amanda Watson by email at [axw1061@sru.edu](mailto:axw1061@sru.edu) or by telephone at (203) 482-5455, or Dr. Susan Hadley at [susan.hadley@sru.edu](mailto:susan.hadley@sru.edu).

**Contact Information for Questions about Your Rights as a Research Participant**

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the following:

Institutional Review Board  
Slippery Rock University 104  
Maltby, Suite 008 Slippery  
Rock, PA 16057 Phone:  
(724)738-4846  
Email: [irb@sru.edu](mailto:irb@sru.edu)

**Your Consent**

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will receive a copy of this document for your records, and I will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the researcher or the IRB board using the information provided above.

*I understand what the study is about and my questions so far have been answered. I agree to take part in this study. I understand that I can withdraw at any time. A copy of this signed Consent Form has been given to me.*

\_\_\_\_\_  
 Printed Participant Name                      Signature of Participant                      Date

By signing below, I indicate that the participant has read and to the best of my knowledge understands the details contained in this document and have been given a copy.

\_\_\_\_\_  
 Printed Name of Investigator                      Signature of Investigator                      Date

**Audiotape/Videotape Release Form:**

We request the use of audiotape/videotape material of you as part of our study. We specifically ask your consent to use this material during the study, as we deem proper. Regarding the use of your likeness in audiotape/videotape, please check one of the following boxes below:

- I do...
- I do not...

give unconditional permission for the investigators to utilize audiotapes/videotapes of me.

\_\_\_\_\_  
 Print Name    Participant Signature    Date

## Appendix C: Interview Transcriptions

### Participant 1

Interviewer: Okay, awesome! So my first question is, how would you describe your theoretical orientation to music therapy, and how do you find that this impacted your practice as a neurologic music therapist?

Participant 1: Well, it's kind of shifted a bit, because when I entered the profession, I went to CSU because I learned about NMT, and I was like, "NMT or death, this is like the only way to do music therapy, this is the only evidence-based...like blah blah blah," so I just was coming in with a really scientific mindset—as far as "scientific" meaning, like, quantitative over qualitative values, stuff like that. But over the years my orientation has really shifted, especially being in the program at SRU. I feel like I'm coming from more of a constructivist idea, more of like a person-centered therapy as far as considering socio-cultural location of clients and how that effects neurology and trauma. I also consider myself to be a trauma-informed therapist as well, since I did a training on that, and so my orientation now is a lot more eclectic. I'm pulling from lots of different places, and NMT is still one of those places, but it's more a complementary than a main modality.

Interviewer: Right, gotcha. So considering all of that, what do you find to be areas of strength for NMT as a model of music therapy?

Participant 1: So I think NMT does a few things really well. I feel like they do speech really well,

attention skills, cognitive skills, stuff like that. So the stuff that's super, super concrete.

Interviewer: Mm-hmm.

Participant 1: Like stroke, they do stroke really well. Physical rehab is another strength. In college, in a practicum, I facilitated an NMT/physical therapy blended group, and so NMT was really good at supporting physical therapy goals. So, I think mostly, if I were to sum up, it would be, like, speech, attention, physiology. I think they do that pretty well.

Interviewer: Yeah, yeah, definitely. Like you said, the concrete stuff.

Participant 1: Yeah.

Interviewer: So then conversely, what do you find to be areas of potential improvement for NMT as a model of music therapy?

Participant 1: [Laughs] Well, I think...[pause] I think anything that would truly improve NMT would break it.

Interviewer: Mmm, interesting.

Participant 1: Yeah [laughs]. If you were to incorporate, like, trauma informed care, you could design... well, I don't know. It's so silly, because NMT doesn't include any acknowledgement of neurodiversity as a good thing. So—and that's something that I think is really important – so if you were to incorporate neurodiversity as something worth celebrating, that would ruin all of what NMT is about, which is getting people to communicate in the way that the rest of the world views as normal, which is really problematic.

Interviewer: Mm-hmm.

Participant 1: Also there are some techniques – I think it's SYCOM, right – that is like emotion-based, but there's pretty much no acknowledgement of the emotional intelligence of humanity [laughs] which is really important.

Interviewer: Mm-hmm, for sure.

Participant 1: So if you were to incorporate that NMT, I feel like it just...doesn't really fit. And then also coming from a more socio-cultural perspective, all of the goals of NMT are written from a politically capitalist, heteronormative view.

Interviewer: Uh-huh.

Participant 1: So, yeah, so I guess I think NMT does a few things really, really well, but it doesn't apply to a huge portion of what reality is. So it pretty much misses the mark for treating the whole person.

Interviewer: That was a really good answer! It was definitely really great food for thought. So, you kind of touched on this already, but in what ways do you think NMT techniques are helpful to clients?

Participant 1: I think they're helpful because they use what we know about neurology to create direct pathways for neurological healing. So like the speech techniques, you're taking something that's possible—singing—and just reaching over and blending it into the speech area. So...can you repeat the question, actually? I lost my train of thought. [laughs]

Interviewer: Yeah, no, problem, let me just pull it up to get the right wording. In what ways do you think NMT techniques are helpful to clients?

Participant 1: Okay, yeah. So it's like, the really concrete neurological reinforcement of change. So I think they can provide immediate gratification, especially in, like, gait training. I think that can be really motivating and empowering, especially for people who are struggling with gait or struggling with speech or, you know, those things that NMT really does provide concrete solutions for.

Interviewer: Yeah, definitely like the...I can definitely see the ways that it could be very motivating, like seeing that instant gratification of progress.

Participant 1: Mm-hmm, yeah.



Interviewer: But then on the other hand from that, in what ways do you think NMT techniques may cause harm to clients?

Participant: [laughs] Yeah, there's a lot of ways it causes harm.

Interviewer: [laughs]

Participant 1: Um, it doesn't...God, in every domain there is harm. Like, in the communicative domain it totally devalues the natural methods of communication that people have, especially autistic persons. It tells them that they're wrong and the way that they communicate is wrong, and you have to do it this way, and if you don't, you're a failure. Same thing with just, like, all of the evaluative criteria of NMT. It's like, pass or fail, which is that binary yes or no, which...hurts people! Like...

Interviewer: Yeah.

Participant 1: And then sometimes it doesn't work, like it doesn't always work, and then it puts that "I'm a failure" thought in someone's head, which is really, really harmful. It doesn't allow for an in-depth understanding of a person's strengths and how they can be used to increase their quality of life.

Interviewer. Mm-hmm. Like that holistic sort of element that you touched on.

Participant 1: Mm-hmm, yeah, it's like the measurements are so specific that they don't allow for any kind of growth in dimensions that are not measurable in the way that NMT decided they're measurable.

Interviewer: Mm. Yeah. So, my last question is kind of like a culmination on everything that you've already brought up just naturally. It is: In your opinion, how does Neurologic Music Therapy approach disability, and in what ways is this approach beneficial and in what ways is this approach harmful? Specifically regarding disability.

Participant 1: Mm-hmm. So NMT regards disability as a negative thing, like you're someone to be fixed. You're someone to be improved. And in some cases I think that people do benefit from the interventions. Like sometimes, yes, it does help people communicate better. Sometimes it does help people move better. Sometimes it does help people grow sustained attention to a task. Which can be really beneficial things in the world in which we live, which values those things. But I also think it's super, super harmful just because of, like, it plays in completely to the narrative that disability is bad. Instead of the notion that disability is diversity.

Interviewer: Mm-hmm.

Participant 1: So yeah, I guess that's how I feel. [laughs]

Interviewer: Yeah, yeah. Super good answers.

Participant 1: Thanks.

Interviewer: Yeah, I definitely really appreciate all of your expertise, as somebody who, you know, has trained in NMT and kind of came from that worldview. And all of your integration with your continued learning and experiences.

Participant 1: Yeah, I mean, this whole education that I've been getting here has been sort of like a giant theoretical midlife crisis in a way [laughs].

Interviewer: [Laughs] Right.

Participant 1: Or like, excuse my language, but a come to Jesus about it a little bit, because just being trapped in the headspace of NMT for so long, it's all about ego. It's all about like shitting on all of the other disciplines and saying that they're not as worthwhile and just, like, the toxicity of that environment is really, really awful. And it's something that I didn't understand until I started learning about really what all of these other perspectives of music therapy are. Like Nordoff-Robbins is awesome!

Interviewer: Mm-hmm.

Participant 1: It shouldn't be, like, berated for its—

Interviewer: Right.

Participant 1: —unscientific quality. Like, I don't know. There's just so much...[sigh]...disheartening emotional environment in the NMT world. Because, like, if you're not doing NMT then you're not doing it right, and that's just not true.

Interviewer: Absolutely. Well, those were pretty much all of the questions that I had planned to ask. And thanks again for your time, I really appreciate it.

Participant 1: Yeah!

Interviewer: Definitely really, really great and thoughtful responses, so thank you so much.

Participant 1: Yeah, of course, this is a really interesting and personal topic to me, too, especially since I've been changing so much of my understanding of this.

Interviewer: Right, yeah! Integrating all of that...

Participant 1: Yeah, I mean all of that negativity to say, NMT is important, and it does have a place in the field, and it is something super important to integrate with other ideologies, but it can't be the only thing, you know?

Interviewer: Right, yeah, absolutely.

Participant 1: Yeah, okay, I can come off of my soapbox now.

Interviewer: [laughs] No, I mean, this is kind of the point, like this is your space to get on your soapbox.

Participant 1: [laughs] Awesome!

Interviewer: Alright, well, thanks again so much, and have a great rest of your day! And I'll be in touch as I keep progressing through the thesis, if you're interested in the results or anything, so I'll be in touch with that.

Participant 1: Yeah, I'm super interested, and if anything else comes up I'm always available. So I'm happy to help.

Interviewer: Absolutely. Thank you!

### **Participant 2:**

Interviewer: Alright, so my first question is, "How would you describe your theoretical orientation to music therapy, and how do you find that this impacts your practice as an NMT?"

Participant 2: I feel like I should have a really good answer to that, because that's literally what my thesis is about [laughter], and I don't have a good answer. I guess, I don't like using this word, but I feel like eclectic. I like to pull from things – different approaches inform my practice, different methods or theories inform my practice. I mean, we've obviously got some person-centered stuff going on, and also anti-oppressive practices and stuff from disability and queer theory, and I also really vibe with the field of play, Carolyn Kenny's thing. So, yeah, I guess eclectic would be the word, although I don't like that word. And then, so the second part was...how does that impact my work as an NMT?

Interviewer: Yes.

Participant 2: I guess I don't really think of myself as a traditional NMT. I do have the specialization and I do keep up with the credits. And I think I conceptualize it less of me as an NMT and that's like my primary method, and it's more like all these other things are my primary method and then every once in a while I'll pull in an NMT thing. If that makes sense.

Interviewer: Yeah, no, that makes perfect sense.

Participant 2: Does that kind of answer your question?

Interviewer: Yeah, that's a perfect answer.

Participant 2: [laughs] Okay.

Interviewer: Alright, and my next question is, "What do you find to be areas of strength for NMT as a model of music therapy?"

Participant 2: I think just...the neuroscience behind it, right, like I think the strength of NMT from maybe an outside of music therapy perspective is that it is so, kind of...clear? You know, it's like you have these techniques, you do these techniques, you immediately see results. And I think as non-music therapists, people see that and are like, "Woah, that's crazy! That's wild! That's exciting!" And so I think that is its strength, in that it is easier to communicate to others. And also, I did do NMT when I was at a pediatric rehabilitation hospital, and it was awesome! I had a great time doing some of those—you know, RAS and then also some of the speech

techniques—and to see from within one session improvement, and then within their six week stay like a total improvement—was cool! It was great to be a part of that.

Interviewer: Yeah, definitely, sort of the ability to literally see and track progress, it sounds like.

Participant 2: Right.

Interviewer: Alright, next question is, “What do you find to be areas of potential improvement for NMT as a model of music therapy?”

Participant 2: Like what do I think?

Interviewer: Yes.

Participant 2: Like a critique of them, kind of?

Interviewer: Yeah, like anything that you think that it could do better at as a general model.

Participant 2: Okay, so, I don't have an issue with NMT as is.

Interviewer: Mm-hmm.

Participant 2: I have an issue with the organization.

Interviewer: Gotcha.

Participant 2: Of—that runs NMT, and when I did the training, I can't tell you how many times I was like, “What the fuck? Like, what is going on right now?” Because, I mean, the stuff works, it's great, but their whole perspective of it is like, this is the only way. Nothing else is valid, nothing else is evidence-based, which we know is not true. And they kind of position themselves as better than all other forms of music therapy, and I just was not into it. I even had someone in that training ask, “Hey, I'm really into improvisational models, like, how would you use improvisation with NMT techniques,” and the guy literally was like – Michael Thought, or Thaut, however you say his name—was literally like, “Why would you ever want to do that?”

Interviewer: Oh, wow.

Participant 2: That's literally what he said, and I was sitting there like, “What!” He was like, “Why would you ever want to do that, that's not evidence-based.”

Interviewer: Wow.

Participant 2: And so that's one issue I have with them, is that rigidity and putting themselves above other forms of music therapy.

[Pause]

Participant 2: I just lost my thought, I had a—I have many things to say about it.

Interviewer: [Laughs]

Participant 2: I also think that the fact that I was able to sit on my couch for three days and get this specialization that's nationally accredited...I don't know, some people could say that that's accessible, which maybe it is—it was accessible to me! And other people could say that that's not enough to have a specialization, so there's both sides of that. The third thing is, I feel like they have basically rebranded things that are widely used in music therapy as this special thing. Like therapeutic singing. It's just singing. You're just singing with a client, like, why are we pretending it's like this—uh, it's different when we call it that, or if it's different from an NMT perspective when it's really just singing with a client to reach a variety of goals, whether it be breath support, whether it be sustained attention, whether it be...you know, trying to get them to stand up longer, for distraction, like...things...it's just...it's just stuff we do all the time that is now being rebranded as something else and then incorporated into this model that's positioning themselves as better than others. And then because I'm also doing my thesis and talking a little bit about NMT, I recently was thinking about this...So I'm doing my thesis, I talk about NMT, and I also mentioned before that I'm really into the field of play and Carolyn Kenny's work, and she discusses this thing where it's like, historically music therapy has clung to medical models to survive and establish itself within systems already, and I think that's where NMT comes from. And that now people are moving away from that, and it also could be the thing that's preventing music therapy from evolving further, cause it wants to keep clinging to medical models, which we know—or we have a lot of research about—many people are unhappy with those models, and they don't feel heard in those models. So, I think that's it? [Laughs] I don't know, that's just off the top of my head.

Interviewer: [Laughs] Super good answer! So like, lots of issues with the organization itself, not so much with the individual techniques, but kind of how they're presented and the attitude surrounding it.

Participant 2: Exactly! And, I think it...Like, I go to these chapter meetings, right? And I do believe NMT works, and I've seen it work. Having done it...When I did do NMT techniques, I actually wasn't an NMT, I wasn't even a music therapist yet, I was in my internship. And I could still do them effectively, right? And I just think it creates this divide, or this like...[Pause] I don't know, I think the whole thing kind of just undermined every other approach to music therapy, and Neurologic Music Therapy isn't universally applicable with all the clients that we work with. If I had a kid that I was like, "Okay, we're gonna tap this along with the metronome," like, they don't care about that, you know what I mean? They're like, "why is this [inaudible]?" Half my students would probably hate the noise. And that's something they do a lot, right? It just isn't always universally applicable, or, like, they don't care about it, so they're not gonna do it. But maybe they care about other things that maybe come from other approaches.

Interviewer: Mm-hmm, you have to find what's motivating.

Participant 2: Right, right.

Interviewer: So, if you're good, I can jump on to the next question?

Participant 2: Keep 'em coming!

Interviewer: Okay! Alright, in what ways do you think NMT techniques are helpful to clients?

Participant 2: I think in rehabilitation it was awesome. And then there's the conversation of, like...I'm gonna talk about this not coherently. I'm gonna try my best. [Laughs]

Interviewer: [Laughs] That's fine!

Participant 2: But there's that conversation, like in rehabilitation, with NMT you're trying to recover skills, and then the question of if that person even wants those skills back, or if that's even something that the person wants comes up. But when it is something the person wants, I've done it, and it was great, and it was really helpful, and, you know, with learning to walk again or learning to speak to communicate your basic needs. I still remember the tune that we taught this kid. And...when I...I don't know if this is an unpopular opinion within the community of NMT, but when I was doing it as an intern, the reason I liked it so much was because I could teach the parents, and then the parents could do it, and then—that—I mean that's...hospital rehabilitation is an environment in which parents are displaced from their role as caregiver, and so that was a fun way to be like, "Okay, I'm gonna tap, and then we're gonna sing this song, and then you're gonna try it and I'm gonna help you out, and then now you have this skill." And some people might have an issue with that, but I also think there's the issue of accessing the skill and having the parents be the person that do that to reestablish those caregiving roles and kind of help with normalizing. So that's one thing. The other thing where I primarily use NMT techniques is with rhythm and self-regulation, so I kind of really focus on that with my students, and keeping beats in our bodies and moving to music and that kind of stuff. So, it's not full NMT, but it incorporates some of those things, and I think that that's a strength.

Interviewer: Yeah, definitely. So kind of on the other side of that, in what ways do you think NMT techniques may cause harm to clients?

Participant 2: I think that...[pause] I guess what I should have waited to say is that if the client doesn't really want this skill, but we're just projecting, you know, "You used to walk, you should walk again!" But maybe that's not what the client wants to work on at the time, or at all, and I think that could be an issue. Can you repeat the question, I'm sorry!

Interviewer: Oh yeah, no problem! In what ways do you think NMT techniques may cause harm to clients?

Participant 2: Oh, okay, yeah. And—yes, I stand by that. And then I also feel like, because NMT is very focused on outcome-oriented things, and, having taken the training, they're not concerned with emotional stuff, and so when you're—I mean, I keep talking about pediatric rehabilitation because that's the only environment in which I've done true NMT, but that's a very emotional environment, and NMTs are...they don't emphasize that, and so I think that you could run into the situation in which you're working on something and something comes up, and if you're solely subscribing to NMT you wouldn't have the skills to then process that with that student—or that person. Sorry, I work at a school so I keep saying student. [Laughs]

Interviewer: [Laughs]

Participant 2: But that client. And I think that could cause harm.

Interviewer: Yeah, yeah, definitely, like, that ability to to look at, rather than just the physical rehabilitation aspects, but the emotional aspects as well.

Participant: Yeah, I mean a lot of times it's like... With TBI patients there's a lot of anger, and that's normal! Like, you expect someone with a TBI, when they're starting to regain their skills, you expect them to be angry and irrational, and that's part of the healing process. Like, I had a girl that was really angry! And had I just done NMT techniques I would have ignored all those other things that were going on for her.

Interviewer: Which I imagine could be very frustrating to the client.

Participant 2: Especially in an environment in which you've already lost your autonomy, your parents' caregiver role is displaced, and now you're having these feelings and no one's acknowledging them or helping you through them? And I just think it's potentially problematic? Potentially harmful? Like, I don't know.

Interviewer: Yeah, yeah, for sure. Yeah, thank you for that. Okay, and then this is my last question—

Participant 2: Woo!

Interviewer: In your opinion, how does Neurologic Music Therapy approach disability? In what ways is its approach beneficial and in what ways is its approach harmful?

Participant 2: That's a big question!

Interviewer: [Laughs] If you want to answer the first part or break it down or anything—

Participant 2: Okay, can you repeat just the first part?

Interviewer: Yes, absolutely. In your opinion, how does Neurologic Music Therapy approach disability?

Participant 2: I mean I think it approaches it from like a "let me fix you" perspective, I think it approaches a lot of people that way. I know that there's some new stuff with autism coming from that lady—I never remember her name, she always talks about autism—But even that, that was still very much like, "I'm gonna fix this." And I think I would like to see more emphasis on building relationships. And maybe there is and I just haven't gone to those chapter meetings and presentations and global meetings, and maybe there wasn't really room for it in the training, but yeah, I just—I think it's more about assimilating the client and not so much about accepting the client. Maybe that's a little harsh, but...

Interviewer: Yeah, no, I definitely see where you're coming from with that, for sure. So then taking that into consideration and that approach to disabilities, in what way could this approach be beneficial and in what ways could it be harmful?

Participant 2: Well, I think it could just be harmful in the fact that if we're approaching disability from the perspective of, "Let me fix you," that's very ableist, it's very harmful, so just in general. But the ways that I think it could be beneficial are that you can teach other people NMT. You know what I mean? You can teach—you can help families have agency and restore roles as caregivers. And then specifically, like in my work, the ways that I bring NMT in is through self-regulation through rhythm, and that honestly has been really beneficial for a lot of my students because they are often so dysregulated from just life and everyday events and unexpected things, and bringing it back to that beat, whatever that beat is, we do a lot of body percussion for grounding, and that's kind of like...they call it something else...it's not progressive muscle relaxation, it's like something else. I think it's like PPA?

Interviewer: Patterned sensory...is that what it's...

Participant 2: No, it's not that one. It's like, basically—it is, again, here we're rebranding something, it's progressive muscle relaxation but in NMT it's called something else and I think the initials are like PPA, but it's not one of the core techniques, it's an additional one I think.

Interviewer: Gotcha.

Participant 2: So like that kind of stuff. So progressive muscle relaxation to music, to rhythm, providing that sensory input to my students with the beat. Those things have been really beneficial, and I've seen students go from crisis to totally chill using some of those techniques. And even just with something like RAS, right, I've used that with one of my autistic students because they like to run and they're also really dysregulated and so we needed some sort of regulation activity so we could do the things that he wanted to do, but he was too dysregulated to do those things. So I'd be like, "Alright, let's run around and try and move our body to the beat!" And it was successful, it's still successful, it's been many years, and so yeah, I think it has a lot of self-regulation stuff, even if that's not what the goal of the techniques are. And like, what's the model? Oh my god, I forget it every time, I am not a good NMT [laughs]. It begins with a 'T.'

Interviewer: Trans...relational? Trans dimensional? [Laughs]

Participant 2: It's something like that, where it's like, "You always need to go back to that."

Interviewer: Yes.

Participant 2: They always say that all the time, and I'm like, "Okay! Okay." But I forgot what I was saying. But yeah, I've seen some really great self-regulation work through some of these techniques, even though I don't really care if my student is walking with proper gait, I just care that they're in beat and in rhythm and starting to show me that their bodies are ready and their minds are ready and they can now do the things that they want to do. I don't know. [Laughs]

Interviewer: [Laughs] No, that was awesome. Thank you! Uh, that was my last question, but thank you so much! Your answers were so thoughtful and I really appreciate your perspective and your experience.



### **Participant 3**

Interviewer: Alright! Sounds good. Alright, so my first question is, “How would you describe your theoretical orientation to music therapy, and how do you find that this impacts your practice as a Neurologic Music Therapist?”

Participant 3: Mm-hmm. Well, my school education and my internship were much more geared towards the humanistic and social-emotional-spiritual kind of side of things.

Interviewer: Mm-hmm.

Participant 3: And my first job as a music therapist was in hospice, where I took more of that approach. And so I feel like that’s where my values and perspective as a therapist still lies at the core. And then I use NMT as kind of just a supplemental tool when I feel it’s appropriate. I wouldn’t identify myself as a strictly NMT practitioner. By any means. So.

[Laughter]

Participant 3: Now I work in inpatient rehab a lot with stroke and brain injury patients, so the NMT techniques are very useful and relevant where I work now, so I kind of go back and forth or use both perspectives at the same time pretty often.

Interviewer: Yeah, definitely. Alright! Thank you. So, the next question is, “What do you find to be areas of strength for Neurologic Music Therapy as a model of music therapy?”

Participant 3: The research. Like, it’s I feel like the most heavily researched and evidence-based approach to music therapy. And working in rehab where it’s all goal-focused and improvement-focused, it is really good to have things that have very, very concrete data that are universally used and have universal expectations for results. That’s very helpful. And I’m growing—trying to grow the program there too, it’s just a little baby program, so having that extra certification, and the fact that it’s recognized by the World Federation of Neuro-Rehabilitation, the WFNR, all of that is very, very helpful in program development.

Interviewer: Oh yeah, I’m sure, to be able to be like, “This is the research, this is how it helps,” and have that concrete—those concrete sort of examples.

Participant 3: Yeah, yeah, for sure.

Interviewer: So, kind of on the other side from that question, what do you find to be areas of potential improvement for Neurologic Music Therapy as a model of music therapy?

Participant 3: I have...yeah. I feel like there’s a lot. I think there were a lot of areas of improvement in the training itself. I think in the actual practice of it, I think...I think that it’s just important to not be close-minded and only do NMT. Like, still having the mind open to the many other approaches to music therapy. I think that would be kind of the main thing. I felt that the...the training was really like, “This is the only way to do music therapy.”

Interviewer: [Laughs] Right.

Participant 3: I don't agree with that, and I think a lot of music therapists don't agree with that. And I think that's an unfair statement. So just like, being generally open-minded would be the main thing. And I know that you were saying that this research is specifically pertaining to disability, and so I also felt like the NMT training was—definitely had some ableism throughout, especially related to disability, and sort of had the perspective of therapist and client fixing or changing who the client is, and not—it was not neurodiversity affirming at all.

Interviewer: Yeah.

Participant 3: So I took issue with that. And maybe that's more of just the actual training than how therapists actually use it in practice, but I definitely saw that in the training.

Interviewer: Yeah. Yeah, so just to make sure I'm clear, it's moreso—not the techniques themselves, you feel like those are pretty strong, but the training that could be improved, and the way that it's presented.

Participant 3: Yeah, and I think, like, how you use the techniques. I think you can use the techniques in a—not an ableist way, or in a neurodiversity-affirming way. But the way it was presented in the training was not supportive of that, so I could see people coming out of the training and using it in somewhat harmful ways.

Interviewer: Yeah, yeah definitely. Really good answer. So, this is kind of building off of that answer. In what ways do you think Neurologic Music Therapy techniques are helpful for clients?

Participant 3: Well I see some of the specific ones that I use often, it is pretty amazing to see how they work. I do Melodic Intonation Therapy, and that's the one that I see the most clear results from. And it is pretty amazing to see how somebody can go from singing to speaking a sentence very quickly. And just having more understanding of how music actually works in the brain, because that wasn't really covered in my undergrad. So, yeah. Using the music and the elements to actually impact areas of the brain and knowing how it actually interacts in the brain.

Interviewer: Right, yeah, for sure. And so then, the opposite side of that question: In what ways do you think Neurologic Music Therapy techniques may cause harm to clients?

Participant 3: I think, I don't—I think that, again, it's not so much the techniques themselves but the way they are used. And if it's being used with the intention of fixing a problem about a disabled person that doesn't necessarily need to be—when, like, their environment could be adapted in a way that supports them better, or something like that.

Interviewer: Yeah, so, again, moreso how the therapist is using it and their perspective rather than the techniques themselves that could cause harm.

Participant 3: I think so, yeah. I also think that—well, no, that's a different—that's a different topic, nevermind. [Laughs]

Interviewer: [Laughs] That's okay, you can go ahead.

Participant 3: I think a lot of the techniques, too, were kind of...like...I don't want to talk too negatively about it, but I did have very mixed feelings about the training. I'm trying to stay professional. But there were a lot that were like...Like therapeutic singing, for example, it's really just a fancy way of saying "singing." Or like rhythmic speech cuing is a fancy way of like, "lyric fill in." Like it's a lot of things that other music therapists do all the time, but with the fancy NMT terminology.

Interviewer: Yeah, like rebranded.

Participant 3: [Laughter] Yeah, exactly. I feel like you can also just get too clinical with it rather than just being in the moment and actually just being expressive with your clients too.

Interviewer: Yeah, yeah, I can definitely see that.

Participant 3: Which could [unintelligible] their creativity and their self-expression and neglecting that side of things. So that could be harmful, too, I guess.

Interviewer: Yeah, yeah, that's a really good point also. So then the last question is, kind of again sort of a summary of a lot of the points that you've already brought up, but in your opinion, how does Neurologic Music Therapy approach disability? In what ways is its approach beneficial and in what ways is its approach harmful?

Participant 3: I think it's beneficial because it understands how music interacts in our brains and our bodies, and we can use that to our advantage, and if there are areas of life that someone with a disability is working on, and things that will improve their quality of life and access to things in life, if there are ways that we can use music to strengthen the brain to support those things, I think that's amazing, but I also think that it is a framework that makes it easy to see your client as "less than" and you are trying to fix them and change them to make them more like yourself. Like that was kind of the general attitude towards disability, I felt, in the training. And I think that as therapists we should be moving towards a more—a less ableist, more neurodiversity and disabled affirming type of approach to practice.

Interviewer: Alright! Well, that's all I have for you. And thank you so much! I really appreciate all of your answers. Definitely added some good perspective.

Participant 3: Cool, I'm glad.

Interviewer: Alright, well, unless you have any other, you know, comments or questions, I'll let you go.

Participant 3: I don't think so. This is an important topic, I feel passionate about this since doing the training, it definitely fired me up a little bit.

[laughter]

Interviewer: Thank you so much! Have a great weekend!

### Participant 4

Interviewer: Yeah, so, my first question is just, how would you describe your theoretical orientation to music therapy, and how do you find that this impacts your practice as a Neurologic Music Therapist?

Participant 4: That's a good question. I'd say that my theoretical practice as a music therapist is really just using the music to lead, to help facilitate, um...man, my words just left me [laughs]. Just, I really think that it's the use of music to help achieve things that are not necessarily musical. That's just always how I've understood it and how I use it in practice, so I really advocate for it, especially when I'm co-treating, like we're not just playing the drum, we're actually working on their bicep flexion and extension, and we can actually...it's proven that you can do more repetitions of it when there's a song playing and you're not just focusing on the bicep curl itself, you're just—you're focusing on playing a drum, things like that. So, I think that that's kind of really helped me, especially when I was first introduced to Neurologic Music Therapy, it's helped me kind of be like, "Oh, this makes sense!" Like, you're using music in a functional sense to help somebody get better, and it's very black-and-white, like, "You're doing this to get this, and here's the goal, here's how it all comes out." [Laughs].

Interviewer: Yeah, very cause and effect.

Participant 4: Yes, yeah.

Interviewer: Yeah, definitely! And so the second question is: What do you find to be areas of strength for NMT as a model of music therapy?

Participant 4: I think the biggest strength is that it's very specific and it's research-based. I think that's probably the most concrete thing, like you can show somebody, "This has happened, and here's the research, and it's backed by science," and I think that is the—having the specific techniques, too, is really helpful because if you're trying to think of a goal then you can think of a technique to use, if that makes sense. I think those two are probably the most—the strengths for NMT.

Interviewer: Yeah, yeah, definitely a lot of good research.

Participant 4: Mm-hmm.

Interviewer: So then kind of on the other side from that question...Sorry, just pulling up my questions again [laughs].

Participant 4: No, you're fine!

Interviewer: What do you find to be areas of potential improvement for NMT as a model of music therapy?

Participant 4: I think—So, I did my internship at a neuro-rehab hospital, and now I work at a pediatric rehab hospital, and when I did the Neurologic Music Therapy training, I kind of realized that—because I did it at the end of my internship—and I realized through the training

how my supervisor has used the techniques and everything, but it seemed like she had to be pretty creative in a rehab hospital sense, where you're only seeing patients for like two to three weeks, and where I am currently I see them for like two to three months, but even still with pediatrics it's kind of difficult to use some of the approaches because it's not as black-and-white with pediatrics. But I've found ways to be creative, if that makes sense. So I feel like it makes sense—Like, one way, when I was taking the training it made total sense through the outpatient and the private practice realm, but, it was—and there were also some people during my training that were asking questions in a hospital setting, too, cause they were like, “I don't really see how this can be applied to where I work.” And then they did a good job of explaining it, but I feel like having that as also a thought, as well as private practice and outpatient settings.

Interviewer: Mm-hmm. Yeah, so in the training, maybe if they explained the adaptations a little bit better...

Participant 4: Yeah! Yeah. I think that would... Cause, I mean, I think... My internship supervisor was very creative in that way of still understanding how she can, like—it is NMT, and the techniques are... Like, she's using the techniques, but I feel like somebody like myself would struggle with that if I didn't have somebody like her to show that... To base that off of, basically. And, yeah, I think that adaptations specifically in the training would help. Maybe also in the textbook? But I'm not... That's kind of a lot to ask [laughs].

Interviewer: [laughs] Alright, so my next question... In what ways do you think that Neurologic Music Therapy techniques are helpful for clients?

Participant 4: I think having the research, I mean, there have been a few patients that I've worked with that have been like, “What you do is not real, blah blah blah,” and then I've printed out articles and shown them specifically—like, there was one patient that I was doing RAS with, and I was like, “Look! Here's like...” I printed out a list of all these sources, and I was like, “This is research-based, it's science.” And then they were kind of like, “Oh, really?” Like, “Wow!” I think also just having the specifics of using the metronome and things like that to kind of make it concrete for them, where they don't—it's not as abstract, if that makes sense. It's pretty much like, “This is how we're doing it, and this is how we're using music to facilitate it.”

Interviewer: Mm-hmm. Yeah, so easier for clients to understand.

Participant 4: Mm-hmm.

Interviewer: And they're more receptive sometimes when they see the research backing it.

Participant 4: Yeah. [Laughs]

Interviewer: Okay! So then on the flip side of that question, in what ways do you think that NMT techniques could cause harm to clients?

Participant 4: Hmm. [Humming]. That's a good question. [Pause] I really can't specifically think of any right now.

Interviewer: Yeah, and that's—

Participant 4: --Maybe it can be limiting at times? But I haven't really experienced that in my practice, but, it could potentially...I'm thinking of, like...Maybe because it is not appropriate in all populations, it could be not as beneficial? [Laughs] That's the only thing I can really think of!

Interviewer: [Laughs] Yeah, no, and it's totally just about your experience and your views, so if you can't really think of anything specific that's totally fine. And so then the last question is kind of a two-part question. The first part of it is: In your opinion, how does Neurologic Music Therapy approach disability?

Participant 4: I think that it approaches disability in a very structured sense, and like a...easy to facilitate and easy to kind of go about, I guess? I think in some ways it can be...hmm...In some ways I feel like there are some people that could benefit, but they're just not there. In my practice, because I am seeing them inpatient, I'm like, "Oh, if they were just one more month out or in outpatient, NMT would benefit them so much," but right now I have—or in this hypothetical sense I'd have to step back, and so I think it's really helpful for the people that it's appropriate for with disability, but I think in some settings it might be just not appropriate for specific disabilities? I think for a lot of disabilities that I've seen it would be really appropriate, but some of them it just—the structure of it might not be appropriate.

Interviewer: Yeah, like too structured for certain people.

Participant 4: Yeah, and the techniques are great when it's appropriate, like it's awesome, you can go step by step, but when it's—somebody is so close, it's like, "Aw, dang, they can't technically use the official technique because they can't do X, Y, and Z."

Interviewer: Yeah. Yeah, that makes sense. Kind of like going back to the adaptations you were kind of—

Participant 4: [Laughs] Yeah!

Interviewer: Not always completely black and white.

Participant 4: Mm-hmm.

Interviewer: The second part of the question was: In what ways is its approach to disability beneficial and in what ways could it be harmful?

Participant 4: So, it's beneficial in the way that it's structured and can be—like, it's pretty easily facilitated I would think, in many populations, but then, like I said, it can be harmful when somebody is not necessarily appropriate for any of the specific techniques. There's good and bad in it—I mean, I don't know if there's necessarily "bad," it just kind of is unfortunate when somebody is not appropriate for these techniques [laughs].

Interviewer: Yeah, yeah! No, that makes sense. So that's...that's all I have for you, and thank you so much for being willing to participate!

Participant 4: Of course!

### Participant 5

Interviewer: Okay, great! Well then, my first question is: How would you describe your theoretical orientation to music therapy, and how do you find that this impacts your practice as a neurologic music therapist?

Participant 5: Hmm, yeah, that's a good question [laughs].

Interviewer: [Laughs]

Participant 5: I guess I would say eclectic? I feel like that's such a cliché sort of answer. I feel like everyone says eclectic [laughs]. But I really feel like I kind of draw from a lot of different areas and approaches. My training was definitely more behavioral. My school was definitely a very behavioral school. But my internship was in hospice, so behaviorism isn't really like...applicable in hospice. [laughs]. So in my internship I'd say I took more of a humanistic approach. Like very much unconditional positive regard and that kind of thing. So I definitely had training in both the behavioral and humanistic sides of things. And so now in my actual career as a music therapist, I'd say I still definitely draw from more of that humanistic side. And sometimes I take certain elements from behaviorism? But not like all that much anymore. And now that I've done the NMT training, I take elements from that as well. So I guess after all that [laughs] I guess I'd say I'm primarily humanistic, but I just kind of draw elements from other approaches and models as well.

Interviewer: Great, yeah! I feel like it's kind of hard to not be eclectic [Laughs]

Participant 5: [Laughs]

Interviewer: And then my second question is: What do you find do be areas of strength for Neurologic Music Therapy as a model of music therapy?

Participant 5: Okay, well, I think the strengths are definitely—well the body of research for sure. And the solidity, I guess, of knowing the approaches are backed by neurological research. So pretty much the fact that it's evidence-based and you can communicate that to other professions who might, I guess, not be as aware of the benefits of music therapy and might need that additional, like, validity? I don't know if that's the right word. [laughs] But it's just, I think, easier to explain NMT to non-music therapists using really concrete language and research and being able to say, "This is how what I'm doing musically effects the brain, and this is why it's going to make a difference for the client."

Interviewer: Yeah, yeah, that makes a lot of sense. It's definitely easier to explain in that way. So then alternately, what do you find to be areas of potential improvement for Neurologic Music Therapy as a model of music therapy?

Participant 5: Hmm, well, how to say this nicely [Laughs]. I'd say just like...the general ableism. I noticed a lot of ableism in the training for sure. I also noticed an attitude of like...elitism, in a sense? Like, "This is the only way to do music therapy, all other methods are inferior, no one



else does research...," all that kind of stuff. And I feel like inherently, NMT kind of functions on a premise of ableism. Like, the techniques are great and they do what they say they do, but sometimes it's like...okay...why are we trying to make those changes? Or like, why are we trying to change our clients in those ways? Um...yeah [laughs]. And kind of like, who is setting those goals? Is it the client setting those goals for themselves or is it the therapist just being like, "This is how I think you should be, this is what I think is important for you, so that's what your goal is going to be."

Interviewer: Mm-hmm, yeah.

Participant 5: Like, I think there's definitely a lot to be said for rehabilitative goals if that's what the client wants. Like, I think it's totally valid and understandable for a client to want to make their lives easier in the sense of being able to communicate more easily or wanting to be able to walk without needing as many accommodations. But it's also totally valid if the client is like, "I don't need to be able to communicate verbally or walk, I just need accommodations and I'm totally fine with that." So I think it has to be—there has to be an understanding of where the goals are coming from and why.

Interviewer: For sure.

Participant 5: Or if the client is someone who maybe can't communicate what they want their goals to be, I think it's important to look at it like, "Okay, who are these goals benefitting?" Like, are the goals benefitting the client or other people, like parents or maybe teachers or other people. So yeah, I think that's something that wasn't really addressed in the training as much as maybe it should be. I feel like the attitude in the training was definitely like, "Of course everyone wants these things, or like, of course everyone wants to be typical or non-disabled. So we should use these techniques because obviously that's what everyone wants." And I feel like that's pretty problematic.

Interviewer: Yeah, yeah, those are some really great points. Like really reflecting on why we're setting the goals we're setting.

Participant 5: Yeah, exactly. I think that's so important.

Interviewer: I completely agree. So then my next question is: In what ways do you think Neurologic Music Therapy techniques are helpful to clients?

Participant : I think, kind of like I mentioned before, if it's a goal that the client wants I think it's really helpful in achieving those goals. Like when I've used NMT techniques with clients I've definitely noticed a really quick...it's like immediate gratification almost. In the sense that you can see the progress really quickly. So I think that can be really...I don't know, like it can give people a sense of satisfaction and motivation seeing their progress so quickly. Because I know personally it can be really hard to be working on something for a long time and not really seeing any progress for a while. Like that can make you lose motivation. So being able to see the progress right away I think can be really motivating for clients.

Interviewer: Yes, definitely.

Participant 5: Also, I think one of the benefits is that you can teach these techniques either to the client or the caregiver. And they can use these techniques on their own, so that can be really empowering. I think as a therapist we shouldn't want to be needed by our clients forever. I think our goal should be for the clients to not need us anymore. So I think NMT does a good job of, I think empowering the clients or caregivers to not need us anymore and to be able to do these things on their own and to keep working towards things without us.

Interviewer: Mm-hmm, yes, that's a really good point. I think that's definitely empowering.

Participant 5: Mmm-hmm.

Interviewer: So, the next question I have for you is: In what ways do you think Neurologic Music Therapy techniques may cause harm to clients?

Participant 5: Okay, so, definitely...the ableism. And, kind of like what we talked about before, when the therapist makes decisions for their clients and sets goals for their clients based on what the therapist thinks is best for the client. Like, "Oh, this client has, I don't know, cerebral palsy, so these are the goals we should be working on, and these are the techniques we're going to use to work on those goals." I feel like NMT can be very [laughs] what's the word I'm looking for? It's like, formulaic. Like "if A then B." And in some circumstances that can be helpful. But sometimes, I don't know...like it's not that simple? Like, you have to figure out what's important to the client. Like not every person with cerebral palsy is going to care about or want to work on the same goals. Also, just because NMT techniques are proven scientifically to work to address certain things, that doesn't mean those are the *only* things that work. And sometimes a client might respond better to a different way of doing things. Also, I feel like the idea in NMT of, "oh, we should only be working on one goal at a time," can potentially be harmful because if you're working specifically on a physical goal and you're rigidly focused on just that one goal, you might miss out on a lot of other things that are going on for that client. Like emotional, social, spiritual kind of stuff. And all of that is important too, so I think it's important to be open to addressing multiple things at once and not being hyperfocused on only one thing. And...[laughs] I don't know, I feel like there's a lot of ways it can be harmful. I feel like I can just keep going on about this. [Laughs] I think the main complaint I have is—it can be summarized by, I feel like sometimes NMT—or the way NMT is presented—isn't entirely client-focused. It's sometimes more focused on the credibility of NMT. And that's not to say it's malicious. Like, I think NMT's really care about their clients, it's just, I think sometimes people don't consider things from a disability-affirming perspective.

Interviewer: So kind of bouncing off of that, in your opinion, how does Neurologic Music Therapy approach disability? In what ways is its approach beneficial and in what ways is its approach harmful?

Participant 5: So I think NMT's approach to disability is like, "I'm the expert, so I know what's best for you." And that's not to say every NMT is like this, or thinks like this. I just think particularly in the training that's sort of how it's presented. So yeah, its approach seems to be very much positioning the therapist as the expert. And I think its approach is also from the perspective of "people with disabilities need to be more neurotypical, or more physically non-disabled." So I also think its approach is also coming from the view of trying to make disabled people less disabled. And I think that's the goal of a lot of NMT techniques. So...sorry, what was the second part of the question?

Interviewer: No problem! In what ways is that approach beneficial and in what ways is that approach harmful?

Participant 5: Okay, yeah, so I think its approach can be harmful because the therapist taking the role of the expert can take away some of the agency of the client. Or it can make it so that the client's needs aren't fully being taken into consideration. I think it can be really easy for the therapist to be like, "Oh, okay, I know exactly what to do in this situation so I'm just going to do it. Like, I know exactly the right NMT technique to use," or whatever. But then they're just kind of going based off of this formula and not fully seeing the client as an individual. So that can definitely be harmful I think. Also just how NMT can contribute to ableism in healthcare and the societal attitude that being disabled is wrong or bad. That's harmful too. And then the next part is how is NMT's approach to disability helpful?

Interviewer: Yes.

Participant 5: Okay, so I think maybe the general approach of NMT isn't really helpful [laughs]. At least not the way it's presented in the training and by NMT leadership. But I think the techniques themselves can be really helpful if they're being used thoughtfully and taking the client's needs into consideration. Like, I think it's really important for the therapist to be aware of what they're doing and why. And I think NMT in general doesn't really talk about this. But I think it's super important. So if the therapist is being really intentional and collaborating with the client or caregiver and being aware of their internalized ableism and all of that, I think the NMT techniques are really beneficial and really helpful. So yeah. To summarize though, I'd say NMT's approach overall to disability is really ableist and that's more harmful than helpful. But I think on their own the techniques have a lot of merit.

Interviewer: Yeah, so it's that attitude towards disability that can be really harmful and there should be more of a focus within NMT on how to use the techniques in less ableist ways.

Participant 5: Yes! Yes, exactly.

Interviewer: Those are all really thoughtful and really great points, thank you so much for taking the time to do this interview.

Participant 5: You're welcome! This is a really interesting topic and it's something that's really important to me, so I really appreciate this research and I appreciated the opportunity to talk about this topic a little.