

Lesley University

DigitalCommons@Lesley

Expressive Therapies Capstone Theses

Graduate School of Arts and Social Sciences
(GSASS)

Spring 5-19-2018

Beyond a Checklist: Development of a music therapy method for use with a population with developmental delays and physical disabilities

Andria Thomas

Lesley University, athoma12@lesley.edu

Follow this and additional works at: https://digitalcommons.lesley.edu/expressive_theses



Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Thomas, Andria, "Beyond a Checklist: Development of a music therapy method for use with a population with developmental delays and physical disabilities" (2018). *Expressive Therapies Capstone Theses*. 92. https://digitalcommons.lesley.edu/expressive_theses/92

This Thesis is brought to you for free and open access by the Graduate School of Arts and Social Sciences (GSASS) at DigitalCommons@Lesley. It has been accepted for inclusion in Expressive Therapies Capstone Theses by an authorized administrator of DigitalCommons@Lesley. For more information, please contact digitalcommons@lesley.edu, cvrattos@lesley.edu.

Beyond a Checklist: Development of a music therapy method for use with a
population with developmental delays and physical disabilities

Capstone Thesis

Lesley University

May 5, 2018

Andria Thomas

Specialization: Music Therapy

Thesis Instructor: Denise Malis, PhD, MFA, LMHC, ATR-BC

Abstract

Music therapy has long been used within school settings, particularly within special needs populations. Until the late 1970s students with special needs were usually institutionalized with the belief that they were incapable of continued learning. Since then, music therapy has become a useful clinical medium to assess and aid in treating speech deficits, various cognitive impairments, and physical rehabilitation. This capstone thesis centered on how individuals with significant cognitive and physical impairment interact, communicate, and participate in everyday situations, specifically within a music therapy group setting. Overall, the observations show the usefulness of assessment as a music therapy tool as well as the importance to step back and observe each person's individual communication clues and style. It reflects on how we, as music therapists, go beyond the assessment checklist, observe and deepen our practice and consider the impact that we can have on severe/profound individuals with physical disabilities. It is proposed that a way we bridge that gap would be to connect with eye movements, head nods, and body language cues in much the same way one would track rhythmic engagement in assessments. This would allow the practice of the music therapist to grow in their understanding and awareness of this population.

Keywords: music therapy, severe/profoundly disabled population, Assessment, physical disabilities, communication

Literature Review

Introduction

Music therapy (MT) has long been used within school settings, particularly within special needs populations. How has the field been informed and changed throughout its history? How does the literature even now influence the professional practice of MT. The concept of this capstone centered on how individuals with significant cognitive and physical impairment interact, communicate, and participate in everyday situations, specifically within a MT group setting.

As someone who is interested in working with and the benefits that music therapy provides to special needs populations, this topic is particularly important. What assessments exist and what are their uses? How is music therapy used with different special needs populations? Hopefully through the research and then the creation of a method, an understanding of working with this specific population will deepen, inform, and benefit the practice of MT. The literature review will critically review the history and context of assessment tools regarding the purpose of MT, and the efficacy and considerations of working within a severe/profound population with physical disabilities.

History and use of assessment tools

The use of assessment tools has developed from the need for more accountability within the therapies (Wheeler, 2013). A greater number of arts therapists began working in the public school system in the late 1970s as a response to legislation to protect individuals with disabilities. As school systems sought out different providers to work with their students data began collection. Formal music therapy assessment was derived from this same time.

Each theoretical framework has its own forms of assessment. Regardless of the framework, the goals of the objectives are similar: is the treatment beneficial, how data is collected, what is there a relationship between, and should anything be adapted to better fit the client (Wheeler, 2013). The function of an evaluation is to: determine the specific focus or problem, attempt to predict further behavior, provide baseline and further observation to collect

data, improve treatment technique, and to gain insight into when it is time to discharge or shift therapy.

One of the main building blocks of creating a client-centered treatment approach is thorough assessment (Parsons, 1986). The assessment should provide a global view of the client's social, emotional, cognitive, and physical needs and limitations. Parsons' noted that progress notes and regular assessment allow a therapist to effectively write treatment plans and evaluate their progress over time. Many music therapy assessments exist for a neuro-normative and non-disabled population as illustrated by the fact that only two published and peer-reviewed assessments exist for the population being discussed (Whitehead-Pleaux, Brink, & Tan, 2017).

Currently, there are only two published and reviewed assessment tools for a non-verbal population with physical disabilities (Whitehead-Pleaux, et al). The Special Education Music Therapy Assessment Process (SEMTAP) assesses the way a student performs set skills based on Individualized Education Plan (IEP) goals. The other is Music Therapy Assessment for Developmental Disabilities (MTADD). These assessments are geared toward providing services and data for the IEP. Both assessments are considered to be intermediate in length but terminating after the first few weeks of MT sessions.

It is common practice for many music therapists to develop their own formal or informal assessments based on the needs of their particular site or clients (Bruscia, 1988). This allows for the therapists to pull from their particular musical and educational strengths as well as meeting the data collection standards of their sites. In many special education settings, a music therapist may work with the same client for a number of years. Through their own assessment tools they are able to plot a client and how they change over a longer period of time.

When considering clients that are in a low or altered mental state due to a neurological disorder, O'Kelly and Magee (2013), utilized neurological music therapy assessments. O'Kelly and Magee found that the majority of the research focused on sensory stimulation and sensory regulation. The elements of sensory stimulation and sensory regulation are difficult to determine for each individual client, making assessment extremely important in potential efficacy of

treatment. Sensory stimulation is a person's interaction with their sense of touch (tactile), sense of balance (vestibular) and sense of placement in space (proprioception). Sensory regulation is how one modifies their level of alertness depending on given stimuli present. Neurological music therapy is a special training that disallows many music therapists to use. Sensory stimulation and regulation are also important in a profound/severe population but since the specialty training limits the ability to apply it is important to determine other beneficial means of MT assessment.

McDermott, Orrell, & Ridder (2014) wanted to determine if there were other assessment options available to their chosen population of adults with dementia. A qualitative narrative synthesis was utilized and reviewed to evaluate what individual clients and their families wanted and appreciated about MT. The researchers established similar results that equated assessment tools for children with pervasive developmental disorders. The study began with a very large number of participants ($N = 629$) and utilized ($n = 53$) for the purposes of their discussion. McDermott et al. used focus groups that included patients ($n = 12$), family caregivers ($n = 15$), care home staff ($n = 14$), day treatment clients with dementia ($n = 4$), and music therapists ($n = 8$). Results determined that anxiety was created in participants with dementia within focus group formats (McDermott et al., 2014). Five key results were determined: interest, response, initiation, involvement, and enjoyment.

Use of music therapy with a special needs population

Until the late 1970s, special needs populations were traditionally removed from their neighborhood schools and placed in institutional settings. Prior to this time, this population was often seen as being unable to learn and grow socially and academically (Darrow, 2007). Music teachers were given very little training on how to adapt music to fit this population. In the 1970s, music therapists were being brought into some special education school settings to provide input and adapt music to fit the needs of students. In the early years, their goals were mostly diagnostic in the areas of speech and hearing, and rehabilitation.

Pavlicevic, O'Neil, Powell, Jones, & Sampathianaki (2014) impressed upon its readers the importance of music therapy going beyond data and progress with a severe/profoundly-

disabled population. This article was the only writing that specifically mentioned MT data collection's importance but then asked the readers to consider what else this population is providing. In the Pavlicevic et al. article, the Creative MT approach from Nordoff and Robbins is discussed. Paul Nordoff and Clive Robbins believed that music was to be played with the client not for them. After videotaped improvisation, data indexes were created to track the musical play. While the authors noted the significance on a data collection approach from Paul Nordoff and Clive Robbins, they wanted to also consider psychosocial importance, personality and curiosity of expression that each student presents within the music therapy setting. Pavlicevic et al. (2014) discovered that the students would provide them with more information on themselves through lessening the focus on data inspired improvisation and more on what the moments of silence or body language provided.

MT is practiced within different theoretical frameworks or mindsets (Wigram, Pedersen, & Bonde, 2002). Educational music therapy takes place within an academic setting. The goals and objectives traditionally are found in the individualized education plans of each student. This approach gives additional opportunities for the music therapist to connect with each individual. Further, the focus in the last few decades is on recognizing the scientific connection between medicine, health psychology and MT (p. 21). This connection is realization that "man is not a machine, but a complex bio-psycho-social being...as seen as mind, body and spirit within social order" (p. 23). Music can provide connection on each level.

There are four specific theories of music therapy with a severe/profound population that consider movement (Meadows, 2002). These are: physiotherapy with music, structured music and movement, improvised music and movement, and music therapist music and movement. These four models take into consideration the complexities of the population. A severe/profound population has a variety of diagnosis from one another but often start from a genetic condition or trauma to the brain during development before or after birth.

Pratt argued (as cited in Hadley et al., 2001), that music therapy was not scientifically corroborated until the 20th century. The early research focused primarily on the physical and

emotional effects of those returning from military combat. More recently, music therapy has been proven to be a primary treatment modality for the populations with special needs. It provides opportunity for academic and personal growth, increased communication, and the ability for those with special needs to connect to the world around them and vice versa.

Ellis (1996), documented a way of communicating with a population that is non-verbal and physically disabled. Vocalizations made and recorded by ten, 11-18 year old children. The recordings then were downloaded into a synthesizer and Soundbeam device. The students could then use any muscle movements to create audio feedback with their own voices. The recordings proved to be useful in motivating the participants to use their own sound. Ellis combed through hundreds of hours of footage to then select clips that had significant value to the improvement or growth of each client. Ellis (1996) began this study in hopes that it would be a therapeutic approach that included the child instead of therapy and assessment done “out of necessity to the child (p. 3).” Ellis creatively met clients on their own terms instead of trying to put them into the standard assessment and growth boxes.

Efficacy and considerations of the expressive therapies and assessments with a special needs population

Thompson and McFerran (2015) followed four young individuals, aged 10 to 15, with profound intellectual and developmental disabilities. The study began by caregivers and teachers filling out an Inventory of Potentially Communicative Acts (IPCA). The researchers determined the students' likes and preferred communication through concretized MT contexts. Data was collected through tracking eye movement, facial expressions (i.e. smiling, eyebrow movements, frowning), vocalizations (giggling, crying, kissing sounds), and leg and arm movements during two different activity times. Participant John had a higher response rate to greetings when the music therapist sang the greeting and hello as opposed to during toy play time when the same therapist spoke to him. Participant Amy responded more consistently with eye gaze when the music therapist sang to her than spoke, similarly to John. While not all results were significantly improved with the use of music therapy, this study provided an improved overall communication

skill with all four participants over the span of six months. The results also showed favor in using music therapy within the school context to strengthen the education and enrichment the children were receiving. Education and care for a profoundly disabled population is lifelong, consistency in music therapy sessions and tracking would most likely benefit from the same lifelong study.

How does one appropriately observe the sessions and track the data? Mills (2006) reminded us that there is a process to providing assessment within the expressive therapy session. Mills believed there is a spectrum in the use of assessment that includes student clinicians that focus on giving assessment and not as much on the reason for giving it. When assessing clients, clinicians can fall into viewing the client as means to collecting information, rather than seeing them as a whole being within the context of their treatment. While it is important to keep the focus of the assessment protocol, it is also important to provide closure of the process as a therapist would do in a therapy session. There is a balance that is needed in introducing an assessment within the session. Mills (2006) believed it was important to know the breakdown of time spent between data collection and sharing or interpretation of data as well as if the data collection would be processed with the client or in the clinician's notes.

Method

Students at a severe/profound special education secondary school in Massachusetts were regularly observed for their progress on various academic and therapeutic assessments. The staff at the school posted each student's achievement along the walls, outside of each classroom. At any observable time, each student may have multiple academic, assessable goals, as well as speech pathology, physical therapy, occupational therapy, and orientation and mobility goals.

These same students ($N = 5$) are also engaged in MT and art therapy services three to four times a week. A part of the beginning of clinical expressive therapy work begins with assessment. The information gained from MT assessments aids in the development and implementation of various interventions. As a part of music therapy groups, observations were

made that some students, those that had significant physical impairment, may not always respond in the desired clinical way.

As part of clinical reflections and peer research, the question of observing minute responses as salient interactions arose. Music therapy assessment examines various music and movement interventions for the purpose of assessing eye contact, gross motor, fine motor, attention span, cognition, social skills, repetition and intentionality. These assessments provided context and data. The purpose of this developed method was to go beyond the observable checklist and recognize what individual students bring to each session. How do they present as multi-dimensional beings? In an attempt to understand and engage with students, in a deeper way, that may not have had significant physical responses, a three-step intervention and assessment tool was created to observe students' minute and personal engagement.

Student Population

This assessment was introduced to five students ($N = 5$) within their classroom group therapy at a severe/profound secondary special education public school in Massachusetts. The age of the students ranged from thirteen through eighteen. Five students, boys ($n = 3$) and two girls ($n = 2$), received one hour of MT twice a week and one hour of art therapy twice a week. The students were of various cultural backgrounds and ethnicities. For the purposes of this observational process, the data was collected from one hour of group music therapy, received once a week. MT services are provided as a part of the class' weekly schedule.

All of the students had visual impairments/blindness of some degree. One student had an unspecified hearing impairment. Two students were with Autism Spectrum Disorder (ASD); all students had significant physical disabilities as well as cognitive impairment. Students had a limited range of movement that included left side hemiplegia, cerebral palsy, muscular atrophy, and arm/leg paralysis. As MT was already a part of their weekly schedule, no additional parental consent was required.

Design

For the purpose of this project and the nature of the site, the observation was an ongoing part of the MT session. The observable period was one 50-60 minute group per week, over five weeks. The implementation included consistent, repeated interventions in the same order each time. This classroom was chosen since it provided the most consistent attendance, but due to health changes and external difficulties absences were normal. One of the most significant challenges from week to week was each student's health, which impacted attendance and degree of participation. Most of the time, the students were sent to school ill but that may have limited or impaired their involvement in any given task.

The intervention consisted of three parts:

- Hello Song (See Appendix A)- assess gross motor skills by asking students to reach out and feel or play the guitar, facial expression change when guitar is placed under their hand to feel the vibrations.
- Communication Switch Song (See Appendix B)- observing the tracking of sound and/or large, red switch with eyes, movement of head, or reaching towards with hands and repetition and intentionality by recognizing how to restart the music, attention span and cause and effect relationship.
- Drumming Song (See Appendix C for lyrics and Appendix D for melodic line)- Similarly to the communication switch there will be a chance to observe eye and/or head movement, attention span will be observed through student's ability to continue eye contact or physical engagement with the drum. The drumming song also creates space for social interaction between staff/therapist providing connection through the drum.

Information from each part of the assessment was observed and then notated at the end of the clinical day. Usually observation recordings and reflection time occurred an hour and a half after the end of the group. In session observations were tracked via a post-it note which was placed on the clinician's guitar. If something particularly salient or notable occurred, a mark was

put by the assessment step to bookmark the memory during reflection. During the reflection, a checklist was reviewed and then written journaling occurred with questions and observations about each session.

Ethical Considerations

In populations similar to the observed site, much of the day the students have things done for them, i.e. feedings, changing, moving. As a music therapist, and the expressive therapies overall, part of the desire of creating an assessment for a group within this specific population is to allow the students to interact and communicate within the music without manipulating their constant engagement. When considering the communication switch song, students were not forced to engage multiple times but were presented with opportunities to engage or show deference to the activity. What would then be monitored for were student expressions that showed engagement on a body or auditory level. If we are able to pick up on minute expression, how will that then influence our engagement within the group? The ultimate purpose in this method was deepening one's understanding of the nuance of each person when working with individuals with significant impairments and what he or she bring to each session.

Results

Within the results section, each of the three interventions of the assessment will be discussed. The results are described from process notes and a session journal. The Hello Song assessed the ability to reach out and experience music through tactile interaction. This allowed observation of bodily or facial cues in regards to awareness of music and/or non-preferred instrument or activity. The Communication Switch Song assessed tracking via sound placement and recognition, attention span, and cause and effect relationship by using a recordable sound switch to engage in music making with the clinician. The Drumming Song similarly assessed tracking, sound placement, and recognition as well as continued eye contact, physical engagement with the drum. For the discussion of results the focus will be on the first, middle, and last week of the observation. This intervention also allowed for social engagement between the therapist, the individual students, and the drum itself.

Intervention One: Hello Song

The students ($n = 5$) had varied responses to the Hello Song. For weeks two and four, two students were absent ($n = 3$). For the purposes of this reflection and discussion, only weeks one, three, and five will be used. The students were situated in a semi-circle arrangement and were traveled to while we sang hello and then attempted to engage them in playing the guitar or feeling the vibrations from resting their hand/arm on the guitar or both. The facial reactions observed were the furrowing of the eyebrows, eyes opening wide, fingers in ears, and slapping or tapping on the guitar or wheelchair tray.

During the hello, Student A engaged with the guitar by placing her hand up to feel/strum and then placed her fingers in her ears and make sounds similar to guttural whining. Student B, who has both visual and auditory impairments, began the five-week observational period pulling his arm back from the guitar during the Hello Song and provided significant resistance to returning to the guitar. During the third week, through supervision consultation, the student's other hand was placed on the supervisor's throat, who was singing and saying hello, while the clinician played guitar and sang hello. The student's eyes widened during this interaction, his other arm would relax, and in his own time, he would return his hand to the guitar. In subsequent weeks, the same student began to explore the physical features of the guitar and on the final week, of five, allowed the clinician to strum the guitar with his hand three times.

Another student, student C, engaged in both feeling the guitar, tapping or slapping on the guitar body. He would allow hand over hand strumming of the guitar 80 percent of the time. When his name was sung within the hello song two or more times in a row, his eyes would open wider, he would squeal and then move his arm and body back and forth rapidly. Which could be interpreted as excitement. Student C would not exhibit the same rapid body movement during the Hello Song if his name was only sung once.

Student D has no significant, voluntary movement in his arms or legs. During the Hello Song, the guitar is placed within his line of sight, as it had been previously reported by on-site music therapist that he will watch someone strumming or picking the strings of the guitar.

During this time, the guitar body was placed near his arm or leg, lightly touching to provide vibro-acoustic engagement. Four of the five weeks, student D turned his head toward the sound of singing and guitar.

Student E has no vision or peripheral vision. When she was approached during the Hello Song, it would be from the same direction, which would then prompt her to reach out and say hello by strumming the guitar. The first two weeks student E was asleep or absent. The final three weeks, she did reach out toward the sound of the guitar and with minimal physical prompting, i.e. hand under hand, would place her hand on the guitar strings and move them in a strumming style.

Intervention Two: Communication Switch Song

For this intervention, a familiar song round was used. This song had been reported as being a preferred song of two of the students in the classroom. The song was recorded onto a communication switch that when the button was pressed the recorded song began to play. The switch was placed on each students' preferred/dominant side based and input from classroom staff. Once the switch was pressed, the clinician would then start singing at the next entrance, and instead of finishing their part would pause and not provide their cadence until the student pressed the switch again. The goal was to see at least three engagements with the switch by each student.

On the first week, only one student engaged three times. This student did so after repeated verbal prompts and physical cues of the switch. Student A pressed the switch the first time with limited prompting, then looked away, placed her hands over her ears, and provided internal humming or vocalizations. When encouraged to press the switch again for more music, she did not return to the switch. When it was verbally expressed by saying, "two more times" or "last time," she responded by pressing the switch. Over the five-week period this continued to be her interaction with this intervention. Although, the last time, she did not need encouragement from clinician to play "two more times" or "last time." She engaged three times and then on the final time covered her ears.

Student C pressed the switch twice during the first week, the second time he squeezed the switch, which prevented the recording from beginning additional times. Once the clinician released the student’s grip on the switch, the student began to tap, repeatedly, on the side of his leg and no longer engaged with the switch. The following weeks, Student C’s engagement increased, but his tracking to the placement of the switch did not. On weeks four and five, the clinician provided lit up wand stimulation when the switch was pressed. With the use of a light up wand, if the switch was pressed the wand would light up, when the lights turned off the student was prompted to “press the switch for more lights and music.” During this time he tracked the sound/switch? 90% and he engaged the switch four or more times.

While the song was reported to be a favorite of Student E, her sleeping or physical well being impinged on her engagement. On the final week, she was alert during the switch song intervention and did engage three times during the session. During the session, space was given to see if she would respond independently. The subsequent engagement did require significant verbal and physical prompting.

Table A

Student attending to communication switch.

Exhibited by pressing switch with hand or tilt of head.

Student	Attention without light up wand support Week 1		Attention with support using light up wand Week 5	
	Achieved	Number of attempts	Achieved	Number of attempts
A	Yes	3	Yes	3
B	No	2	Yes	6
C	No	2	Yes	5
D	No	1	Yes	4
E	No	0	Yes	3

Intervention Three: Drumming Song

The response to the Drumming Song varied. The drum chosen provided significant vibro-acoustic feedback as it was a larger frame drum and provided a larger surface to increase an opportunity for students to find the surface and play. The repeated interactions that were observed were to play and then push away, repeated playing with increased facial movements, and a hand placed on the drum while engaged in coactive play that resulted in widened eyes and the hand pulling away.

Student D had a different response, as his physical impairments prevented significant engagement with the drum. During the first and second week, he was observed to be tracking with his eyes and then when a mallet was placed under his hand and played his brow furrowed and he showed physical signs of discomfort. When the mallet was removed and the song continued I continued to play the drum and the student's leg or lower arm remained in contact with the drum. In subsequent weeks the tracking continued and when the drum remained in contact with his limbs he did not furrow brow.

Student B showed significant tactile tolerance as the weeks moved on. In the first two weeks, when the drum was placed under his hand he would pull his arm up and would not return to the instrument. He also did not track the sound of the drum with his eyes. As his engagement in the other two interventions increased, so did his engagement and tactile tolerance. The last week he even held onto a mallet and when given significant time to respond would place the mallet onto the drum and then pull back.

Student C showed increased engagement as the weeks went on, as well. Student C had a tendency to use his right arm in a repeated up and down movement on his leg, wheelchair tray, divider between his legs, someone's hand etc. The intervention also looked for this engagement, when the drum moved to his midline he only responded once by playing in five weeks. He also was less likely to engage when given a mallet to play instead of his hand. When lights were placed behind the skin of the drum he tracked and played more regularly.

The results suggest that repetition did not always increase engagement. This could relate to the students becoming familiar with the routine and with clinician over the five week time period. Each student however was observed to respond in unique individual ways that related to the therapeutic relationship. The therapeutic relationship included modifications of the intervention that were made to better meet each students' abilities; this in turn may have had a positive effect. This was noted by use of lights in both the switch and drumming songs, removal of direct engagement with Student D during the drumming song, or increased vibro-acoustic engagement with Student B with his hand held up to the person who was singing's neck or even the time given for a response on the drum. Results also suggest that students communicate utilizing whatever faculties they might have be it eye movement, tracking away or toward from a non-preferred/preferred task, facial movements, such as eyebrow raises or furrowing of the brow.

Observations and results were obtained by observing eye movement, facial expression changes, and body language. With each observation, and through journaling and discussion with the clinician's on-site supervisor so that changes could be made. The use of lights provided a drastic visual change for some students that might have led to increased engagement with the intervention. What is unknown is whether the students understood the music as primary or just as the connection to see lights again.

When Student B felt an additional voice singing in the song round and then his hand was removed to show the music had stopped, did that information connect to him needing to press the switch again? Or did he just miss the physical and social connection to someone else? His facial expressions changed when the music and engagement stopped all together, and then he would press the switch, sometimes upwards of seven times. One can only postulate that he might have had understanding between the pause and pressing the switch for more music and social engagement. Another unknown is if he has sensation in the right hand that was being used. He does not have voluntary movement of his right side but could he feel the vibrations?

Student E provided a reminder of how health and physical well-being can effect a client's engagement and success in the therapeutic or academic setting. In the previous semester,

Student E was an energetic and engaged individual that would typically participate in the session. She had medical complications between semesters and had not engaged with the same enthusiasm since.

The results verified the ability of music therapy assessments to collect data on needed skills. It also gave space to step back and observe what was happening during the method as well as ways to modify and adapt to each person within the group. Interesting observations then led to further research, clinical conversation, and internal exploration on ways to reach and engage each individual.

Light became a motivator for most of the students and also fit well within the intervention structure. Tracking either by eye movement/gaze or head turning toward the sound or object was lessened by a multitude of external and internal factors. For example, if a student was hungry and was experiencing discomfort, a drum or communication switch was very little distraction and often could not compete with internal care needs. Similarly, a student that was assumed to be deaf and visually impaired showed tactile acceptance and cause and effect relationship when the guitar or switch was placed in the same place each time and space was given for them to explore the instruments in their own way. Overall, the results show the usefulness of assessment as a music therapy tool as well as the importance to step back and observe each person's own communication clues and style.

Table B.

Summary of Results.

Assessment skills checklist and observations

	Gross Motor	Fine Motor	Tracking by use of eye	Tracking by use of head	Intentionality	Cause and effect	Attention Span	Social Interaction	Beyond the Checklist Observations
Hello Song	X	X			X		X	X	Even when students did not voluntarily or with coactive play, participate, they would choose to leave their hand on the guitar or explore the guitar body/strings Students tracked away from switch when not interested, unwell, upset, or frustrated Surprisingly, students would go back to the drum if light support was connected to the intervention.
Communication Switch	X				X	X	X	X	
Drumming Song	X		X	X	X		X	X	

Discussion

This capstone provided a brief glimpse into working within an informal assessment method. That said, it provided observations that suggest the importance of considering the whole person from physical cues of non-engagement to facial expressions or eye contact that suggest more interaction than originally assessed. Two significant surprises were with students B and D. Each student was reflected on and discussed in-depth with the clinician’s on-site supervisor and based on observations that showed changes in facial expression or body movement, modifications were made that resulted in positive engagement during later interventions.

The results do not disprove the abundant research that stresses the need for assessment. Instead it suggests how rich the assessment time also is for social and relationship building,

opportunity for a clinician to see individual body language and minute expression. This supports Pavlicevic's et al. (2014) assertion that assessment is a useful data collection tool but when given space for silence and observation, clients can show their personality and communication style.

Pavlicevic et al. (2014) recommended the use of music therapy within a severe/profound population as a means of giving clients space to respond and learn what those responses are, moving beyond behaviorally structured interventions, and to look for different personalities in each client. The results of the exploratory method developed for this capstone thesis suggests similar results. The method and process of observing the children and the therapy provided a means of learning how each student interacts with music and others.

These observations could open up opportunities for further work with what clients provide regardless of their physical or cognitive abilities. Even though they might not verbally provide likes and dislikes and suggest songs for an intervention, they still show preference through facial expressions, eye contact, and physical dis/engagement. This also can remind therapists to consider this whole being when measuring a client's improvement, skills within their respective settings or when they don't notice significant improvement.

This thesis topic became more about what the therapist was observing, how each student interacted and how they communicated what they were experiencing with the therapist. Through this intervention improvement was noted from week to week and how each skill was met. Research focuses mainly on music therapy supporting educational goals (Whitehead-Pleaux, et al., 2017). Little peer-reviewed literature was found to date about the growth of the therapist in working with a severe/profound population and recognizing the social relational connections with the clients. While current authors mention the lack of research for this specific population, the few that exist seem to support the results from this exploratory thesis method.

Personally, this exploration into focusing on each client's nuanced interaction created awareness in myself. Each week's reflection gave space for clinical skill growth as my level of client-centered interaction increased. When a client would provide very little facial expression or eye contact, research and improvisation would be done to see if a different approach might

work. The observations inspired innovation or creativity where a less aware therapist might have continued in the same manner hoping for more measurable results. This is where the use of different types of light stimuli came into play.

Ellis (1996) illustrated creativity in the use of soundbeam and recording technology to allow students to express themselves with their own sounds and motor abilities. Of note, since the observation period for the purposes of this capstone, student D has begun using a proximity sensor that relies on his head movement to activate a communication switch. As professionals, if we focus on what the individual can do then they may be more likely to engage in a more meaningful way and in turn we may appreciate the growth or intentionality we do see.

Music always provides a place to collect data, but noticing the nuance of the individual, being okay with smaller amounts of growth, willingness for adaptation from the therapist's approach and providing a social connection might prove to be just as, if not more, important. I propose that a way we bridge that gap would be to connect with eye movements, head nods, and body language cues in much the same way one would track rhythmic engagement in assessments. This would allow the practice of the music therapist to grow in their understanding and awareness of non-verbal individuals with severe/profound disabilities.

References

- Bruscia, K. E. (1988). Standards for clinical assessment in the arts therapies. *Arts in Psychotherapy, 13*, 5-10.
- Darrow, A. (2007). Looking to the past: Thirty years of history worth remembering. *Music Therapy Perspectives, 25*(2), 94-99. doi:10.1093/mtp/25.2.94
- Ellis, P. (1996). Layered analysis: A video-based qualitative research tool to support the development of a new approach for children with special needs. *Bulletin of the Council of Research in Music Education, 130*, 65-74.
- Hadley, R. T., Hadley W. H., Dickens, V., & Jordon, E. G. (2001). Music therapy: A treatment modality for special-needs populations. *International Journal For The Advancement of Counselling, 23*(3), 215-221. doi:10.1023/A:1013107909160
- McDermott, O., Orrell, M., & Ridder, H. M. (2014). The development of Music in Dementia Assessment Scales (MiDAS). *Nordic Journal of Music Therapy, 24*(3), 232-251. DOI: 10.1080/08098131.2014.907333
- Meadows, A. (2002). Approaches to music and movement for children with severe and profound multiple disabilities. *Australian Journal Of Music Therapy, 13*, 17-27.
https://www.austmta.org.au/system/files/3_meadows_approaches_to_music_and_movement.pdf
- Mills, A. (2006). *The assessment attitude*. In Brooke, S. L. (Ed.), *Creative arts therapies manual: A guide to the history, theoretical approaches, assessment, and work with special populations of art, play, dance, music, drama, and poetry therapies* (31-39). Springfield, IL: Charles C Thomas Publisher.
- O'Kelly, J., & Magee, W. L. (2013). Music therapy with disorders of consciousness and neuroscience: the need for dialogue. *Nordic Journal Of Music Therapy, 22*(2), 93-106. doi:10.1080/08098131.2012.709269
- Parsons, P. (1986). Building better treatment plans. *Journal of Psychosocial Nursing & Mental Health Services, 24*(4), 9-14.

- Pavlicevic, M., O'Neil, N., Powell, H., Jones, O., & Sampathianaki, E. (2014). Making music, making friends: Long-term music therapy with young adults with severe learning disabilities. *Journal Of Intellectual Disabilities*, *18*(1), 5-19.
doi:10.1177/1744629513511354
- Thompson, G. A., & McFerran, K. S. (2015). Music therapy with young people who have profound intellectual and developmental disability: Four case studies exploring communication and engagement within musical interactions. *Journal of Intellectual and Developmental Disability*, *40*(1), 1-11. doi:10.3109/13668250.2014.965668
- Wheeler, B. L. (2013). Music therapy assessment. In R. Cruz & B. Feder (Eds.), *Feder's the art and science of evaluation in the arts therapies* (2nd ed.). (pp. 344-382). Springfield, IL: Charles C. Thomas.
- Whitehead-Pleaux, A. & Tan, X., (Eds.) (2017). *Multicultural intersections: Music, health, and the person*. Dallas, TX: Barcelona Publishers.
- Wigram, T., Pedersen, I. N., & Bonde, L. O. (2002). *A comprehensive guide to music therapy: Theory, clinical practice, research and training*. London, UK: Jessica Kingsley.

Appendix A

Hello Song

By Andria Thomas
2016



Hey Hey Hello There



What do you say?



It's going to be a beautiful day.

(Repeat)



We're going to sing.



We're going to Play.



I'm so glad you're here today.



Hey Hey Hello _____.



Hey can you help me play?

(Student and clinician improv guitar playing)

Appendix B

TITLE: Sweetly the Swan Sings	TYPE: Round
SOURCE: MIII, 150 Rounds	CATEGORY: Round/Animal

Sweetly the Swan Sings

1. Sweet - ly the swan sings, 2. Do ah - dee do, 3. Do ah - dee do, 4. Do ah - dee, do.

The musical notation is on a single staff in treble clef with a key signature of one flat (B-flat). It consists of four measures. The first measure contains the lyrics 'Sweet - ly the swan sings,'. The second measure contains 'Do ah - dee do,'. The third measure contains 'Do ah - dee do,'. The fourth measure contains 'Do ah - dee, do.' and ends with a double bar line. Above the staff, the numbers 1, 2, 3, and 4 are placed above the first, second, third, and fourth measures respectively.

Appendix C

Where's the Drum Going to Hide?

(Sung to the adapted tune of Oh! My Darlin' Clementine)

Adaptation Origin Unknown

Where's the drum?

Where's the drum?

Where's the drum going to hide?

Is it up? Is it down? Is it side to side?

(Moves drum up, then down, then side to side)

_____ where's/feels the drum.

(Student's name said)

_____ where's/feels the drum.

(Student's name said)

Is it up? Is it down? Is it side to side?

Now it's going to hide.

Appendix D

Oh My Darling Clementine

USA trad.



In a ca-vern, in a can-yon, ex-ca-va-ting for a mine, dwelt a mi-ner, for-ty
 ni-ner, and his daugh-ter Cle-men-tine. Oh my dar-ling, oh my dar-ling, oh my
 dar-ling Clemen-tine! You are lost and gone for-e-ver. Dreadful sor-ry, Clemen-tine.