INTERPROFESSIONAL COLLABORATION ACROSS THE TREATMENT PROCESS IN MUSIC THERAPY

A THESIS IN MUSIC

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MASTER OF ARTS

by
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ABSTRACT

The purpose of this study was to identify common protocols for music therapists who utilize interprofessional collaboration (IC) in the workplace. Participants were all Board-Certified Music Therapists ($N = 595$). The research sought to determine: 1.What is the profile of the music therapists that are currently utilizing IC in practice?; 2.How is IC utilized across the treatment process in music therapy practice?; and 3.What is the perception of IC among music therapists? Results revealed that the majority of participants are newer music therapists, who primarily collaborate with Occupational, Speech and Physical therapists and mainly utilize collaboration in the Treatment Planning and Treatment Implementation phases of the treatment process. Implications for practice, educational standards and standardized protocols are discussed.

APPROVAL PAGE

The faculty listed below, appointed by the Dean of the Conservatory of Music & Dance, have examined a thesis titled "Interprofessional Collaboration Across the Treatment Process in Music Therapy," presented by Andrea Marie Boswell-Burns, candidate for the Masters of Arts in Music degree, and certify that in their opinion it is worthy of acceptance.

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CHAPTER 1

INTRODUCTION

Interprofessional collaboration occurs when two or more health professionals work in tandem to solve problems, provide treatment and assist clients in the recovery process (Zwarenstein & Reeves, 2006). The concept is not new, but to many practitioners it may seem foreign. This may be due to lack of experience with the collaborative process, staffing limitations, or standard practice limitations, such as budget concerns or third-party reimbursement policies. But, regardless of the cause, interprofessional collaboration has found a place in healthcare practice, and has been acknowledged as effective and valuable to both clients and practitioners alike (D'Amour, Ferrada-Videla, Rodriguez, & Beaulieu, 2005; Farrell, Schmitt, & Heinemann, 2001; Reeves & Lewin, 2004). These benefits should not be overlooked when assessing the value of interprofessional collaboration in practice.

Though interprofessional collaboration can be structured very differently (Cuff, 2013; Leathard, 2003), three models have been noted by researchers in the field of music therapy, including: multidisciplinary, interdisciplinary and transdisciplinary (Davis, Gfeller, & Thaut, 2008; Hobson, 2006a; 2006b). Each model defines the relationship of the practitioners throughout treatment, as well as whether the treatment process will be independent or team oriented. The models aim to establish a common ground between the treatment team and establish a starting point for music therapists who have not yet had the opportunity to participate in interprofessional collaboration.

Current research has demonstrated that professional fields, such as nursing, physical therapy, occupational therapy, speech therapy and physicians, value and utilize

interprofessional collaboration (Bainbridge, Nasmith, Orchard, & Wood, 2010; Clark, Cott, & Drinka, 2007; Drinka & Clark, 2000; Dubouloz, Savard, Burnett, & Guitard, 2010; Jukkala & White, 2014; Leathard, 2001; Marshall, 2011; O'Kelly & Koffman, 2007; Paul & Ramsey, 2000; Richardson et al., 2010; Wainwright, 2010a; 2010b), but some have found that the potential benefits of collaboration in practice have yet to been met (Jukkala & White, 2014; see also Cohen, 2014; Musolino et al., 2010; Strype, Gundhus, Egge, & Odegard, 2014).

Research on interprofessional collaboration in the field of music therapy has been a bit more limited to date, but nonetheless, supportive of the technique. Music therapy literature includes topic areas such as techniques and interventions, survey of pre-professionals and professionals, as well as identifying and establishing protocols for interprofessional collaboration in practice (Darsie, 2009; Geist, McCarthy, Rodgers-Smith, & Porter, 2008; Guerrero, 2014; Hobson, 2006a; 2006b; McCarthy, Geist, Zojwala, & Schock, 2008; Rice & Johnson, 2013). In 2002, Register conducted a survey examining the collaboration practices of board-certified music therapists. Register's results demonstrated that the majority of participants currently participated in collaboration with other professionals. This research clearly identified the frequency of collaboration, the professional titles of fellow collaborators and the primary methods for service delivery. However, the specifics of collaboration timing and how practitioners participated within the whole of the treatment process were not documented. More recently, twelve years after Register's article, Robb's (2014), editor of the Journal of Music Therapy, addressed the topic of collaboration in an editorial from the editor and spoke to the advancement of music therapy practice and music therapists' possessing

knowledge pertaining to a vast array of fields and disciplines. Additionally, Robb described how music therapists are "well-positioned for interdisciplinary, team science" (Robb, 2014, p. 3). Though music therapy may appear to be a professional field that is prepared and willing to participate in interprofessional collaboration, the lack of research and literature to support this topic indicates otherwise. This limited amount of extant literature, especially when completed more than a decade apart, indicates that an increase in education and awareness must occur in order for interprofessional collaboration to become a foundational element to providing best practice and meeting professional competency skills (AMTA, 2013).

As previously noted, three collaborative models have been investigated pertaining to interprofessional collaboration: multidisciplinary, interdisciplinary and transdisciplinary (Davis et al., 2008; Hobson, 2006a; 2006b). These three models demonstrate various levels of interaction between and among the professionals throughout the treatment process. However, current literature has yet to categorize the treatment process when assessing music therapists who participate in interprofessional collaboration. This categorization may assist in revealing existing protocols and could inform the implementation of collaborative strategies throughout the treatment process. Instead, the extant literature on music therapy and interprofessional collaboration has focused on who is collaborating, what the final results are, and the specifics of the populations being addressed (Cappozzoli-Gschwind, 2003; Geist et al., 2008; Guerrero, 2014; Hobson, 2006a; 2006b; Kwak, 2007; Leung, 2008; McCarthy et al., 2008; Register, 2002; Rice & Johnson, 2013; Travaglia, 2010; Twyford, 2008). Currently, no research

exists that speaks to *how* interprofessional collaboration looks in practice, with a focus on the treatment process and a broad overview of client populations.

The purpose of this research study is to identify common protocols and methods used by music therapists who are currently utilizing interprofessional collaboration in the workplace; looking specifically at implementation strategies and techniques in the four different stages of the music therapy treatment process: Assessment, Treatment Planning, Treatment/Intervention, and Documentation/ Data Collection.

CHAPTER 2

REVIEW OF LITERATURE

The Importance of Collaboration

The American Music Therapy Association (AMTA) has assembled a comprehensive list of competency-based standards, which assist in maintaining high-quality education and clinical training in the field. This list is reviewed frequently to ensure that research methods and practice trends are current and relevant to modern practice. In Section C, 18, 18.1-18.4 of the Professional Competencies document, it is required that music therapists possess knowledge of and play an active role in interprofessional collaboration (AMTA, 2013). These standards demonstrate the awareness of the music therapy profession in regards to collaboration and the benefit of various professional perspectives. It also enhances both the research and practice based knowledge necessary to provide clients with measurable outcomes and to establish independence both in and out of the therapeutic setting (Rice & Johnson, 2013).

The idea that interprofessional collaboration is a valuable approach in enhancing client progress and overall outcomes is not new. Models of interprofessional collaboration have been documented in numerous professional fields such as: physical therapy (Dubouloz, Savard, Burnett, & Guitard, 2010), occupational therapy (Paul & Ramsey, 2000), nursing (Jukkala & White, 2014), speech therapy (Geist, McCarthy, Rodgers-Smith, & Porter, 2008) and more (Clark et al., 2007; Farrell et al., 2001; Reeves & Lewin, 2004). Additionally, researchers have identified the following benefits as a result of interprofessional collaboration: maintenance of evidence-based practice,

improved patient outcomes and timelines, and cost-effective and efficient treatment (Bainbridge et al., 2010; D'Amour et al., 2005; Freeth, 2001).

Defining Interprofessional Collaboration

Collaboration, though a common term in music therapy education and practice, is not yet a universal one. Many music therapists utilize the words collaboration, co-treatment and interprofessional collaboration interchangeably to describe "sharing, partnership, power, interdependency and process" (D'Amour et al., 2005, p. 116); but regardless of the term used to describe their practice it is undetermined if the actions and task delegation remain the same. In order to discuss interprofessional collaboration (IC), a common definition must exist. Drinka and Clark (2000) identified this common understanding as useful for both accuracy and efficiency in any collaborative setting.

D'Amour et al. (2005) identified "sharing, partnership, power, interdependency and process" (p. 116) as key elements of IC. Drinka and Clark (2000) specified communication as the most basic, foundational principle for IC, that without knowing who, what, when or how can often be the cause for a breakdown in a team structure. For example, if a music therapist, speech therapist and occupational therapist are all providing treatment to the same client and communication was not of fundamental importance, it could be easy for issues to arise regarding: reimbursement procedures; most effective strategies for client progress; inefficient or unnecessary redundancy; or client personal information, as it relates to services.

Zwarenstein (2006) defined interprofessional collaboration as "an active relationship between two or more health or social care professionals who work together to solve problems or provide services" (p. 48); highlighting the professional relationships

that occur in collaboration, as well as the variation of professions involved. This definition will serve as the foundation for the following research on interprofessional collaboration and one that is not directly linked to the music therapy community, but speaks to IC on a universal level.

Music Therapy Models for Interprofessional Collaboration

The method of defining roles and establishing a team approach is categorized through three different collaborative models has been addressed by both Hobson (2006a; 2006b) and Gfeller et al. (2008). These three models help to categorize the type of collaboration that is being performed; as well as, outline the responsibilities and boundaries that exist between or among different disciplines within a collaborative setting. The Multidisciplinary model approach requires the least amount of interaction from participating professionals and seeks to keep assessment, treatment planning, treatment and data collection somewhat separate (Hobson, 2006a; 2006b). Professionals who treat within the structure of a multidisciplinary setting will report to the treatment team in meetings, but only regarding the goals and objectives that are closest to their own scope of practice (Davis et al., 2008). The only commonality between practitioners in this approach is the client. For a music therapist, this may look similar to treatment in an academic setting. In an elementary school format, it is not unusual to have the physical therapist, speech therapist and music therapist all have an assigned time to remove the child from their classroom for a 30-minute, individual, therapy session. All of these sessions occur at separate times of the day/week and work towards differing goals and objectives, often to be reported at IEP (Individualized Educational Program) meetings at the end of the semester or school year.

The second model, Interdisciplinary, is more of a team approach in the treatment planning process, requiring team discussion and decision-making in the treatment planning stages. Individuals are required to work together to determine goals and objectives and expected to readily share treatment information with the team. Hobson (2006a; 2006b) reported that professionals who collaborate in an interdisciplinary setting should be well educated regarding their colleagues' professions and approaches, as well as maintain strong in-person communication. The common features for practitioners in this approach are the client and the goals and objectives. Outside of the treatment planning stage there is no real overlap, as assessment, treatment and data collection are still completed on an individual basis. For a music therapist, this may look similar to a hospital unit, where goals and objectives may overlap in order to keep hospital stays to a minimum; where weekly, if not more frequent, team meetings occur and information is readily shared; and where it is somewhat rare to see two professionals providing different treatment methods simultaneously.

The Transdisciplinary model has a variety of professionals coming together, at the same time, to treat the same goals and objectives (Adamek, 2002, as cited in Hobson, 2006). It is common in the Transdisciplinary model for there to be a lead therapist, one who directs the team discussions and ensures frequent communication. In this treatment model, all stages of the treatment process are completed in tandem. And according to Twyford (2008), this type of collaboration, the Transdisciplinary approach, continues to enhance open dialogue, teamwork, and heightened awareness of collaborative thinking and, in general, a better understanding of other professions for all of the involved team members.

These three models begin to display the variety of implementation options that exist in the world of interprofessional collaboration, also bringing to light the variety of definitions and responsibilities that may exist when practitioners speak to their own collaborative experiences.

Music Therapy Collaboration

According to Register's (2002) survey of music therapists, Occupational (OT), Speech and Physical (PT) therapists were the most prominently noted related therapies. This research supports that not only is interprofessional collaboration occurring in these settings, but that individual researchers are interested in knowing who does what in the process. Many of the articles reviewed speak to one or more of the following categories: techniques and interventions; survey of pre-professionals and professionals; and the development of protocols for interprofessional collaboration. This research readily demonstrates the need for a more global look at interprofessional collaboration, regardless of the type of therapy being delivered.

Speech Therapy. Speech therapy as a collaborative therapy with music has by far been the most researched of the three main therapies, occupational, physical and speech, as evidenced by the body of literature available in professional journals both in and out of the music therapy community (Cason, Astesano, & Schon, 2014; Geist et al., 2008; Gross, Linden, & Ostermann, 2010; Kotilahti, et al., 2010; Lim, 2010; Lim et al., 2013; North, 2014). The close connection of speech and communication with music is well researched and widely acknowledged by professionals in the speech community. This is often evident in speech pathologists practice techniques, many of whom make regular use of musical components in their day-to-day practice. The current literature on speech and

music therapy has addressed the pros and cons of IC among these disciplines. The results from these studies and research surveys, assist in informing music therapists about current collaborations, techniques and pros and cons regarding the interprofessional relationship, all with a focus on speech related collaborations.

Geist et al., (2008) conducted a case study to examine how the integration of music into speech-language therapy could not only get successful results for the client, but could be a positive collaboration experience for all professionals involved. This study focused on a co-treatment model, where the therapists made use of Augmentative and Alternative Communication (AAC) and incorporated music therapy techniques into speech services that were already being provided. The case study outlined the procedural protocols to use during the assessment of the child's communication abilities, potential benefits from music therapy, team meetings with both parents and investigators, goal and intervention selection and the implementation process of those interventions chosen; all with a focus on identifying best-practices for co-treatment interventions in speech and music. The results demonstrated an increase in classroom engagement post music therapy and speech-language therapy treatment, as well as brought forth the positive attributes of a co-treating relationship between disciplines.

Also McCarthy et al., (2008) completed a survey of music therapists who worked with speech-language pathologists and employed augmentative and alternative communication (AAC) during collaboration. The researchers sought to identify what type of collaboration existed between the music therapist and the speech-language pathologists, pros and cons of that collaboration, as well as question specifically related to knowledge and experience with AAC. The results showed that the majority of the

participants had at some point in their career worked with a Speech-Language Pathologist (SLP). These same participants reported their challenges in co-treating with SLPs, which included, but were not limited to, scheduling, education about music therapy and the perspective of private insurance companies on "interdisciplinary service delivery" (p. 420). A large focus of the discussion and future directions sections was the education of SLPs regarding music therapy.

Hobson (2006a; 2006b) wrote a two-part article that specifically addressed interprofessional collaboration between speech-language pathologists and music therapists in the treatment of neurogenic communication disorders. Hobson spoke directly to some of the larger issues of co-treatment, including a general lack of education regarding other co-treating professions and scope of practice considerations. Hobson warned, that these same issues may lead to difficulty with communication, which could affect optimal service options for clients. Hobson defined three different treatment approaches, which will be discussed later on, as well as pros and cons of collaboration and recommended tools for effective collaboration, including enhancing communication, increasing competency and "minimizing territorialism" (p. 71).

The findings from these articles support the continued need for research, pertaining to the use of co-treatment between professionals. By examining practice protocols, including communication, treatment approaches, education and implementation this body of research reinforces that collaboration in practice does and can continue to occur. However, there is a need for more information regarding actual collaboration between music therapists and speech pathologists, as opposed to just the use of shared techniques, as well as protocols for the shared responsibility in the

collaborative environment. A next step in the process for the field of music therapy may be to establish how that protocol is divided into the various steps of the treatment process.

Physical Therapy. Research in the realm of physical therapy has contributed to the techniques of music therapists for many years and has demonstrated a strong presence in rehabilitation settings. Since the establishment of Neurologic Music Therapy (NMT) in 1999 (de l'Etoile & LaGasse, 2013), physical therapy has become widely accepted in interprofessional collaboration with music therapists. These NMT techniques have been well researched and have started the growing trend of protocol creation. Within the available research on physical therapy methods in interprofessional collaboration there are two major topics: techniques and interventions, and a development of protocol.

Kwak (2007) presented a study on the effect of Rhythmic Auditory Stimulation (RAS), a specific NMT technique that relies on the use of auditory rhythm on the motor system to assist in gait rehabilitation for children with spastic cerebral palsy (Thaut, 2005). The purpose of this study was to identify the level of effectiveness regarding gait training for ambulation. The results from this clinical research demonstrated that the clients that were placed in a therapist led group, a group that provided instruction by both a music therapist and physical therapist in the treatment sessions, showed statistically significant increases in stride length, velocity and symmetry. These results provide support for the concept of interprofessional collaboration, at least between music therapists and physical therapists. These data suggest that collaborating can allow the treatment process to become more effective and efficient; and that music therapists are actively collaborating in the treatment/intervention stage of the music therapy treatment process.

Unlike most research on music therapy and interprofessional collaboration, the work of Rice and Johnson (2013) specifically identifies the techniques and interventions implemented in treatment, as well as developing a co-treatment protocol directly addressing the responsibilities for each discipline involved, making this study unique. As it is most common to identify specific techniques that are utilized to work with clients with physical needs (Baker & Tamplin, 2006; Capozzoli-Gschwind, 2003; Paul & Ramsey, 2000; Thaut, 2005).

A physical therapist and music therapist team, Rice and Johnson (2013), described their interprofessional implementation method, focusing on the clinical collaboration between music therapy and physical therapy services to individuals in sensorimotor rehabilitation. This approach focused on the use of Neurologic Music Therapy (NMT) techniques and clearly outlined implementation procedures for assessment, treatment planning, and treatment/data collection procedures within the treatment process. The purpose of this collaborative approach was to assist clients in reaching functional goals, while encouraging collaboration between all treating therapists. This research supports the need for information of co-treatment as it relates to the various stages in the music therapy treatment process.

Occupational Therapy. Much like the fields of physical and speech therapy, occupational therapy has served as a related discipline and sister profession to music therapy for many years. This being said the research regarding collaboration in this area does not stray far from what has been previously seen in the other related areas.

Capozzoli-Gschwind (2007) completed a survey of occupational therapists on therapists' attitudes towards music therapy as a treatment modality and as effective-

clinical treatment. Results indicated "there is a large number amount of occupational therapists who use music in their therapy… [and] little research and documentation provided by occupational therapists on this topic" (p. 3).

Paul and Ramsey (2000) researched how music therapy can play an effective part in physical medicine, specifically with a rehabilitative purpose. They discussed the effectiveness and therapeutic function of music with a number of rehabilitation related populations, including physical, cardiac, brain injury and Parkinson's disease. Final determinations were that "occupational therapists can use the therapeutic medium of music, and the services of the music therapy discipline, in assisting clients to maximize their functional independence in their daily occupational roles" (p. 111). Additionally, they identified a music therapist's role within the treatment sessions, when collaborating with an occupational therapist, focusing on how the collaboration assists in eliminating treatment obstacles created when either therapist is treating alone and how music can assist with the social and emotional issues that often arise during the rehabilitation process.

This research helps demonstrate that interprofessional collaboration has a place in treatment and emphasizes the need for music therapy research pertaining to the identification of treatment protocols in interprofessional collaboration throughout the four stages of the music therapy treatment process: Assessment, Treatment Planning, Treatment/Intervention, and Documentation/Data Collection.

Interprofessional Collaboration for Music Therapy

After establishing that 1) interprofessional collaboration can be a valuable asset to treatment for both professionals and clients; 2) music therapists are trained and likely adequately situated to participate in interprofessional collaboration; and 3) the majority of music therapists are already reporting that they are currently making use of interprofessional collaboration in treatment, it is important to determine how music therapists currently make use of IC in practice (Register, 2002). Specifically, looking at each of the four steps in the music therapy treatment process: Assessment, Treatment Planning, Treatment/Intervention, and Data Collection/Documentation. At the present time, no research exists that breaks down music therapy collaboration into the treatment process, nor assesses music therapists on a broad spectrum, as opposed to a commonality in populations served.

The purpose of this study was to identify common protocols for music therapists who utilize interprofessional collaboration in the workplace. The research questions were:

1.) What is the profile of the music therapists that are currently utilizing interprofessional collaboration in practice?

2.) How is interprofessional collaboration utilized across the treatment process in music therapy practice?

3.) What is the perception of interprofessional collaboration among music therapists?

CHAPTER 3

METHODOLOGY

Determining how music therapy services are currently implemented in settings that utilize IC is important to the development and advancement of music therapy practice and research. This research sought to identify commonalities between board-certified music therapists who currently participate in interprofessional collaboration.

Participants

All perspective participants *(N = 6,338)* were individuals who have provided contact information for distribution to The Certification Board for Music Therapists (CBMT) and were required to be Board-Certified music therapists and to be actively practicing. Of the perspective participants, 595 individuals responded to the survey, a 9.4% response rate, with each respondent reporting from one of the eight American Music Therapy Association (AMTA) categorized regions.

Study Design & Variables

This investigation utilized a comparative descriptive study design and included three variables including: personal and professional demographics of music therapists; four stages of the treatment process (Assessment, Treatment Planning, Treatment/Intervention, and Data Collection/Documentation.); and perceptions of music therapists who are collaborating.

I. Personal and Professional Demographics. This variable included age, education, geographical placement, facility type, population served and information on who was co-treating and with whom they were co-treating.

II. Stages of the Treatment Process. This variable included each individual's response to how co-treatment is implemented in each of the four stages of the treatment process: Assessment, Treatment Planning, Treatment/Intervention, and Data Collection/Documentation.

III. Perception of Music Therapists Who Collaborate. This variable included each participant's definition of interprofessional collaboration, the highest level of education that has been completed, and what he or she considers to be barriers to co-treatment.

Materials

A researcher-developed survey was disseminated online and consisted of 21 questions regarding interprofessional collaboration among professional music therapists. Survey questions varied in format, including open-ended, multiple choice and drop down menus. Survey time was estimated at 15 minutes or less. The survey was divided into five sections: Section I: Demographic Information; Section II: Collaboration Education & Experience; Section III: Collaboration in Practice; Section IV: Barriers to Collaboration; and Section V: Collaboration in Practice: Responsibilities (see Appendix B for full survey).

Section I. This section consisted of eight demographic questions. These questions helped to identify professional and academic status, age range, client population, geographical information and facility basics.

Section II. This section of the survey consisted of four questions related to personal practice and academic experience with interprofessional collaboration.

Participants were asked to identify related terminology and define co-treatment terms and where they had gained knowledge regarding interprofessional practice and collaboration.

Section III. This section utilized two questions focused on having individuals identify if they currently participated in interprofessional collaboration in the work place and identifying the disciplines they collaborated with**.**

Section IV. This section consisted of one question, which required participants to identify the barriers in the current treatment setting that held them back from collaboration**.**

Section V. This section consisted of five questions, which asked participants to specify, who implemented collaboration procedures in the four stages of treatment, as well as allowed for additional feedback to the investigator.

Procedure

The survey was distributed by email to 6,338 perspective participants, using *SurveyMonkey.* The participant list was acquired through The Certification Board for Music Therapists (CBMT) and was a comprehensive list of all Board-Certified music therapists who had provided contact information for distribution. An informational statement was included in the survey participant request email and provided a brief explanation of the research project, participant qualifications, as well as assurance that participants would remain anonymous and all answers would be confidential. Perspective participants were also given the survey link and a completion deadline.

Along with the email statement, an initial survey participation statement was made at the beginning of the survey clearly articulating that completion of the survey will be indicative of the individual's consent to participate (see Appendix A). Participants were

able to withdraw from the study at any time, by not completing or submitting their survey.

All participants were given two weeks to complete the online survey. Once participants completed the survey, answers were compiled to determine how interprofessional collaboration is utilized across the treatment process in music therapy practice. *SurveyMonkey* was set to send out two emails at seven and three days prior to the due date, in order to remind participants of the upcoming submission deadline. After the survey deadline expired, the primary investigator collected the compiled data from *SurveyMonkey* and use descriptive statistics to analyze the data.

CHAPTER 4
RESULTS

Research Question 1.) What is the profile of the music therapists that are currently utilizing interprofessional collaboration in practice?

Results for this question were calculated using descriptive statistics from participant responses to eight survey questions (see Appendix B for full survey), which pertained to professional demographic information of the music therapist, populations served and job related information. Out of the total responses (n = 595), the majority of participants (86%) reported that they participate in collaboration with other disciplines in the work place.

Professional Demographic Information

Professional demographic information was collected from participants pertaining to their degree title, years of experience as a music therapist, and their age. The majority of collaborating participants reported that the highest degree they had completed was a Bachelor's Degree (50%), with a smaller percentage having a Master's Degree (46%). Other educational credits included a Doctorate Degree (4%) with reported focus in the fields of Psychology, Philosophy, Music Education and Music Therapy. In terms of practice experience, the most commonly selected category was 0-5 years of professional experience (46%). This was more than 27% higher than participants who reported their work related experience to be between 6-10 years. The smallest percentage of participants were in the 21-25 years experience category (4%) (See Table 1). All participants ranged in age from 20 to over 70 years old. The majority of respondent's reported being 20-29 years of age (40%). The next category was 30-39 year olds (30%). And the third category was 40-49 year olds (12%), a 28% difference from the highest

reporting group. The remaining four categories encompassed 50 years or more and a 10% or less reporting total (See Table 2).

Table 1

Years in the Music Therapy Profession. (n = 447)

Years in Practice	Number of Collaborating Participants	Percentage of Respondents
0-5 Years	205	46%
6-10 Years	84	19%
11-15 Years	54	12%
16-20 Years	29	6%
21-25 Years	20	4%
26-30 Years	22	5%
More than 30 Years	33	7%

Table 2

Age Range. (n = 447)

Age	Number of Collaborating Participants	Percentage of Respondents
Under 20 of Age	0	0%
20-29 Years of Age	178	40%
30-39 Years of Age	135	30%
40-49 Years of Age	55	12%
50-59 Years of Age	45	10%
60-69 Years of Age	30	7%
70+ Years of Age	4	1%

Occupational Demographic Information

Results for this question were calculated using descriptive statistics from participant responses to four survey questions (see Appendix B for full survey). Information was collected from participants pertaining to their current job title, the population that they currently serve, the facility type where they provide music therapy services, and what region they currently practice in. which pertained to professional

demographic information of the music therapist, populations served and job related information

Job Title. Job title was divided into 11 categories and showed that the majority of collaborating participants function under the job title of Music Therapist (72%). The second largest category was Other at 7%, a difference of 65% and included titles such as, Registered Therapist, Mental Health Therapist, Music and Arts Specialist, Children's Specialist, Director/Manager/Supervisor status, and occupational titles based on secondary degrees (See Table 3).

Table 3

Job Title. (n = 447)

Job Title	Number of Collaborating Participants	Percentage
Music Therapist	321	72%
Other	30	7%
Music Therapist Plus (Multiple Titles)	23	5%
Rehabilitation Therapist	18	4%
Professional Educator	15	3%
Creative/Expressive Arts Therapist	14	3%
Recreation Therapist	10	2%
Activities Therapist/Director	8	2%
None/Unemployed	3	1%
Student	3	1%
Music Teacher	2	1%

Client Population. Client population was divided into 32 categories (see Table 4) and allowed participants to report all populations that were applicable to their current practice. The majority of collaborating participants indicated that they serve individuals on the Autism Spectrum (49%), with Intellectual and Developmental Disabilities the second largest served by participants (43%). The next three categories,

Emotional/Behavioral Disorders, Alzheimer's/Dementia and Mental Health all reported in the 35-36% range. The top five categories had no more than a 14% difference from population to population. The remaining categories all reported below a 30% response rate.

Facility Type. Facility type was divided into 8 categories and allowed participants to report all facility types that were applicable to their current practice. The majority of collaborating participants reported that they did not work in a specific facility, but were self-employed/private practitioners (28%). The second highest category was children facilities/schools (26%), with medical (22%) and geriatric (21%) settings to follow. The four remaining categories all came in below a 5% response rate.

Region. Participants were obtained from all of the AMTA regions. The majority of collaborating participants currently live in the Mid-Atlantic region (23%). The Great Lakes (22%) had the second highest amount of Board-Certified Music Therapists, followed by the Southeastern region (15%), and the Midwest (12%). The Western, Southwestern, New England and Outside of the U.S. categories all reported below an 11% response rate (See Figure 1).

Profile Summary

Based on the majority of responses to individual questions, a profile of the Board-Certified Music Therapist who collaborates in practice was created. The personal characteristics of the collaborative practitioner include 5 years or less of practice experience, in the age range of 20-29 years old, and possession of a Bachelor's Degree. The occupational characteristics include geographic placement in either, the Mid-Atlantic or Great Lakes region, and a practice population of individuals on the Autism Spectrum.

Most commonly music therapists serve as private practitioners or are employed by a children's facility and provide services under the title of Music Therapist. These demographic results reveal that the majority of music therapists utilizing interprofessional collaboration in practice, are younger individuals in physical age, as well as educational and practice experience.

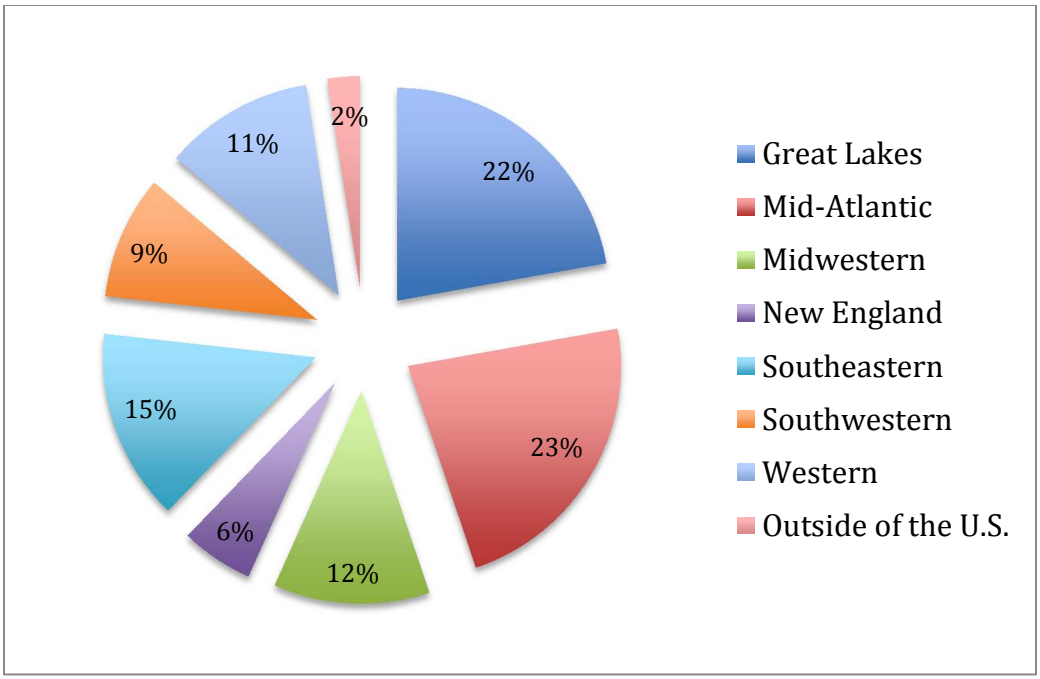

Figure 1. AMTA Region Distribution. This figure displays the results for reported geographical locations, based on AMTA regions. Note all categories have been rounded to the nearest percentage *(n = 447)*.

Table 4. Client Populations. This table displays the percentage variance in all reported client populations (note that participants were instructed to select all populations that they currently serve). *(n = 447)*

Population	Number of Collaborating Participants	Frequency
Autism Spectrum	219	49%
Intellectual & Developmental Disabilities	193	43%
Emotional/Behavioral Disorder	162	36%
Alzheimer's/Dementia	158	35%
Mental Health	157	35%
Multiple Disability	135	30%
Physical Disability	128	29%
Sensory Impairment	121	27%
Hospice/Palliative Care	120	27%
Learning Disability	118	26%
Neurological Impairment	117	26%
Geriatric--Non-Dementia	117	26%
ADD/ADHD	115	26%
Trauma/Abuse	85	18%
Medical	82	18%
Stress Management	72	15%
Terminal Illness	68	15%
Addiction	63	14%
Pain Management	55	12%
Wellness	55	12%
Parkinson's	48	11%
Hematology/Oncology	43	10%
University/College	37	8%
Forensic	34	8%
Neonatal Care	25	5%
Labor & Delivery	7	1%
Other	7	1%
Early Childhood	7	1%
Unemployed	6	1%
TBI/Rehabilitation	5	1%
Military	4	1%
Non-Music Therapy	3	1%

Research Question 2.) How is interprofessional collaboration utilized across the treatment process in music therapy practice?

Results for this question were calculated utilizing descriptive statistics from participant responses to six survey questions (see Appendix B for full survey). All questions pertained to collaboration methods in practice. Survey responses were compiled to establish the most commonly collaborative disciplines and implementation methods in practice.

Collaboration in Practice

Participants were asked to report if they collaborated with other disciplines at work and to indicate all professions that they work with collaboratively. Of the participants, 85% reported that they do collaborate at work and the majority reported collaboration specifically with Occupational Therapists (57%). The next most common responses were Speech Therapists (52%) and Physical Therapists (47%). Other highly reported categories included Medical Staff/Chaplains (34%), Other (31%), and Social Workers/Counselors (30%). The remaining categories include Recreational Therapy, Creative Arts Therapy, Teachers/Educators, Massage Therapists, Child Life Specialists, and Psychologists all of which had response percentages at least 13% lower than the top six categories (See Table 5).

Collaboration Implementation Procedures

Collaboration implementation procedures were divided into four different sections: 1) Assessment; 2) Treatment Planning; 3) Treatment/Intervention; and 4) Documentation/Data Collection. Only 471 of the surveyed participants were allowed to complete this section of the survey, due to the elimination of participants who did not

report currently utilizing collaboration in practice. The majority reported that they do not utilize collaboration in assessment (49%) or documentation/data collection procedures (40%). However, 71% reported utilizing a team effort when treatment planning and when completing treatment/intervention procedures.

Collaboration Summary

Collaboration results, based on majority responses to individual questions, revealed that music therapists who collaborate in practice are collaborating with Occupational Therapists, Speech Therapists and Physical Therapists. Implementation reports showed that collaborating music therapists use IC in treatment planning and treatment/intervention procedures.

Table 5

Collaborating Disciplines. This table displays all response rates for collaborating disciplines. (Note that participants were instructed to select all disciplines that they currently collaborate with). *(n = 464)*

Collaborating Discipline	Number of Participants	Percentage of Respondents
Occupational Therapy	264	57%
Speech	239	52%
Physical Therapy	218	47%
Medical Staff/Chaplain	160	34%
Other	145	31%
Social Worker/Counselor	141	30%
Creative Arts Therapy	77	17%
Psychologist	76	16%
Recreational Therapy	57	12%
Teachers	54	12%
Child Life Specialist	27	6%
Massage	19	4%

Research Question 3.) What is the perception of interprofessional collaboration among music therapists?

Results for this question were calculated utilizing descriptive statistics from participant responses to four survey questions. (See Appendix B for the full survey). All survey questions focused on identifying commonly used collaboration terminology and definitions. Results determined where music therapists are educated on collaboration procedures and other professions, as well as identifying what could be considered a barrier to collaboration.

Collaboration Terminology

Participants were asked to identify the term they most commonly use to describe collaboration in treatment. The majority of participants reported using the term *collaboration* (39%). Popular responses also included *co-treatment* (39%), *interdisciplinary collaboration* (9%) and *interprofessional collaboration* (7%). Other reported terms included *multi-disciplinary*, *team approach* and individuals who used *multiple terms to describe collaboration*, but all reported below the 5% response rate.

Defining Collaboration

Using the terms identified, participants were then asked to provide a definition for their word of choice. A directed content analysis was conducted on the open-ended responses and were compiled and categorized into four word groups: With Others/Professionals; With Others/Clients; With Others/Goals; and With Others/Clients/Goals. The majority of definitions reported by participants included the terms “With Others” and “With Others/Clients,” both reported at 36%. Answers that utilized the phrase “With Others” included: working together with other professionals;

working together with other modalities; and two or more professionals present for a session. Responses that made use of "With Others/Clients" included: Interacting with other professionals, sharing and learning from each other[s] techniques to best serve the client; team approach with other professionals for patient care; and working together to best serve the needs of the client. The third most common category encompassed all of the terms and had a reporting rate of 16%. This all-inclusive category included the following examples: working as part of a team with other professionals to address the goals and objectives of the client; collaborating with other professionals at team meetings to work together to achieve common goals for the patient; and working with other complementary therapies to accomplish client goals. The final category was "With Others/Goals" and reported at 12%. Examples included: working closely with a team of professionals to achieve common goals; when two or more therapists or teacher[s] work together to plan and implement goals during a class/session; and consultation and or integration of at least two modalities to address a related goal or domain area.

Collaboration Education

Two questions asked participants to identify all educational or professional venues where they gained knowledge about other professions and where they learned to collaborate. Responses showed that the majority of individuals learned about other professions through Professional/On-the-job Training (85%) or in their Internship (68%). Education on how to collaborate was similar, with the majority of participants reporting that learning occurred in Professional/On-the-job Training (83%) and in their Internship (70%) (See Table 6 for educational percentages).

Barriers to Collaboration

Though the majority of participants reported that they did utilize collaboration in practice, 15% of respondents reported that they are not active in collaborative practice. Individual participants were asked to identify what barriers may hinder the ability to collaborate in their work place, if any. Of the multiple choice options, time/scheduling constraints (47%) were the number one barrier for day-to-day participation in collaboration, followed by Administrative/Leadership issues (20%) and Financial Limitations (14%). A content analysis of the other category (7%) reported barriers including, Lack of Opportunity/Connections (6%), Unwillingness from Others (4%), and Multiple Reasons (2%).

Collaboration Perception Summary

Overall, the perception of collaboration by music therapists is one that focuses on working with other professionals and providing for clients. The term used by the majority of respondents was *collaboration* and knowledge regarding collaboration methods and other professions occurred in professional/on-the-job experience or in an internship setting. Finally, it is recognized that the majority of survey participants did report that they utilize collaboration in practice, while 15% reported that they did not. Those that do not collaborate in practice reported that the main barrier to collaborative treatment was related to time/scheduling.

Table 6

Collaboration Education. This table displays results of where participants attribute their knowledge regarding collaboration and other occupations (note that participants were instructed to select all venues where education occurred).

	Collaboration Education	Occupational Education
Pre-College	8%	13%
Undergraduate	28%	51%
Graduate	24%	33%
Internship	70%	68%
Professional/On-the-Job Training	83%	85%
Other	5%	6%

CHAPTER 5
DISCUSSION

The purpose of this study was to identify common protocols for music therapists who utilize interprofessional collaboration in the workplace. The information collected was utilized to better understand demographic information, patterns, protocols and implementation procedures in music therapy practice. The results of the study revealed that the majority of the music therapists who participated are utilizing IC in practice. The information collected has been used to establish a profile for the music therapist that collaborates, increase the understanding of protocols throughout the treatment process and created an awareness of educational standards in regards to IC in curriculum.

Relationship to Extant Literature

The current study has revealed that the implementation of collaboration in practice has not been altered since 2002, as the majority of music therapists who participated still report using collaboration methods in practice. This is similar to findings from Register's survey in 2002, which reported that the majority of music therapists reported utilizing collaboration in practice. However, the profile of the music therapist who utilizes IC in practice has been altered, as the current study's participants have reported 5 or less years of professional experience, different from the 10 or more years of experience in music therapy previously reported (Register).

Results from the current study suggest that music therapists who participated demonstrate a clear understanding of what interprofessional collaboration is. Survey responses displayed three common themes in their definitions of collaboration, professionals, clients and treatment, all of which are included in Zwarenstein and Reeves' (2006) definition of the term. Definitions from participant responses in the current study

included: “with others,” focusing on the use of two or more professionals; “goals,” which speaks to solving problems that are clinical in nature; and “client,” identifying the assistance of clients in the recovery process (see Figure 3).

Lastly, these results indicate that occupational therapy is the most commonly collaborative discipline, followed by speech and physical therapies. This is similar to the literature regarding music therapists and their collaboration primarily with occupational, speech and physical therapies. However, the literature shows that speech is the most commonly collaborated with, followed by occupational and physical.

Limitations

One limitation to the study was the small response rate. Contacting over 6,300 Board-Certified Music Therapists, garnered 595 individual responses, a 9% response rate. This small sample size makes it evident that the researcher should generalize with caution, as results may not be indicative of the majority of music therapists in practice. In the future, possibly providing a larger window of time for responses and/or more follow-up or reminder emails in the interim may facilitate a larger response rate.

Secondly, though online surveys can provide an easy method for individual participation over a wide geographical area, it may not be the most effective delivery method. Though email is a common form of communication, it can often go unchecked, overlooked, and/or automatically categorized into unwanted folders (e.g., Clutter, Junk Mail, etc.) . In addition, in an age where people are concerned about the safety and security of their personal information, they can often be reluctant to participate in anything that requires providing personal or identifying information out, even on what may be a secure website. In the future, it may be beneficial to provide participants with

more information about the security of the website, confidentiality of all individual responses, and a method to ensure website credibility.

Applications to Practice

Education. The findings support that music therapists are educated and prepared to participate in IC in practice. However, results from this study may indicate that music therapists are not currently being supplied with the information or hands-on practice of how to implement IC procedures until much later in their careers. These results might start the conversation of how higher education curriculum might be addressed to better inform this competency standard, at a much earlier time in a music therapist's career. Since educational curriculum often takes months, even years, to alter appropriately, it may beneficial for educators to start finding ways to embed collaboration into all music therapy courses and practicum experiences. Music therapists can also play an active role in seeking out and creating their own educational experience, regardless of experience. And, these experiences do not have to be limited to only other disciplines, but could also inform students on how to collaborate with fellow music therapists. Observation is a skill that all music therapists are taught early in their educational process and can be a valuable asset when striving to learn about other professions, their protocols and how they relate and can be useful when paired with music therapy services. These opportunities also provide music therapists with the open-forum to educate other practitioners about the benefit of music therapy as a colleague and for their clients.

Barriers. While the majority of music therapists do report that they are utilizing collaboration in practice. It is essential to note what elements may hinder the opportunity to collaborate in the work place. Survey results revealed that the top three reasons for not

being able to collaborate were: Time/Scheduling; Administrative/Leadership issues; and Financial Limitations. It may be worth noting, that if time/scheduling is the major issue for collaborative treatment, they may also be the main reason for less collaboration in practice. Specifically, barriers to the collaborative processes that are not happening as frequently in the assessment and data/documentation phases of the treatment process. These barriers may be mitigated with education for staff and administrative employees regarding music therapy and the cost-effectiveness of co-treatment for both a client and the facility. It may also create collaborative opportunities, if all staff is informed as to how co-treatment would look in practice and identifying what kind of implementation methods would be used, throughout the treatment process.

Treatment Procedures. As evidenced by the limited participation in interprofessional collaboration in the assessment and documentation/data collection procedures, it brings to the forefront the issue of standardized protocols for music therapists in these treatment stages. Related professions, such as speech, occupational and physical therapies, have been utilizing standardized methods for quite some time and it is a general understanding by the music therapy community that these professions are commonly more accepted as treatment mediums than music therapy. Further research is needed to continue building the music therapy professions understanding and the need for more standardized practices and protocols in these treatment stages. In the interim, it is recommended that music therapist strive to utilize the tools and resources available to them to ensure that assessment and documentation/data collection methods mimic those of the professionals around them. Identifying common traits, testing procedures and

reporting methods may help to establish a common method/protocol with other professions and assist with the understanding of the music therapy treatment process.

Conclusions

In conclusion, music therapists are actively participating in interprofessional collaboration and have a clear understanding of what and how it is defined. Research must continue in order for music therapists to provide the most effective and beneficial treatment to clients through interprofessional collaboration in all stages of the treatment process. In addition, it is essential that the conversation regarding current higher education curriculum address the need for IC training in the time prior to internship and professional experience. This development will ensure that music therapists are not only properly trained, but also more confident in their ability to provide the best, most evidence-based practice to/for their clients. As previously discussed, educational changes are not always easy or timely, making it essential for music therapists to actively create and utilize opportunities to learn and enhance their knowledge regarding new treatment techniques and methods. This may include attending continuing music therapy education (CMTE) events, conference presentations and/or seeking opportunities to better understand other professions and to implement other treatment methods into the music therapy practice. These kind of experiences can occur immediately and may help to ensure that music therapists are providing the best practice and care for their clients and can advocate for interprofessional collaboration in the work place appropriately and knowledgably.

APPENDIX

APPENDIX A

INFORMATIONAL & PARTICIPATION STATEMENTS

Email to Participants

Interprofessional Collaboration in Music Therapy Practice Survey

Dear Music Therapy Colleague,

I am a graduate music therapy student at the University of Missouri-Kansas City, and am currently conducting a research study to examine board-certified music therapists' use of interprofessional collaboration across the treatment process.

I am sending this email as an invitation to participate in an online survey regarding these topics, which will take approximately 15 minutes or less to complete.

Your participation in this study is voluntary and will remain completely anonymous. If you are willing to participate, please complete the survey by November 4, 2015.

Below, please find an additional link to the survey:

https://www.surveymonkey.com/r/RWY6JD5

This link is uniquely tied to this survey and your email address. Please do not forward this message.

If you have any questions concerning the research study, please feel free to call me or email me using the information found below. Thank you for your time and support.

Sincerely,

Andrea Boswell-Burns, MT-BC
Neurologic Music Therapist
Conservatory of Music & Dance
University of Missouri-Kansas City
816.286.9897
aboswellburns@gmail.com

Survey Participation Statement

Thank you for participating in my survey. Your participation in this study is voluntary and will remain completely anonymous. Your completion of this survey, serves as your consent. Please note that you may exit the survey at anytime. If you are willing to participate, please complete the survey by November 4, 2015.

APPENDIX B

SURVEY QUESTIONS

Section I: Demographic Information

1. Are you a Board-Certified Music Therapist?
A: Yes
B: No
C: Other (Please Specify)

2: How many years have you been in the Music Therapy Profession?
A: 0-5
B: 6-10
C: 11-15
D: 16-20
E: 21-25
F: 26-30
G: More than 30

3: What region do you currently work in?
A: Great Lakes,
B: Mid-Atlantic
C: Midwestern
D: New England
E: Southeastern
F: Southwestern
G: Western
H: Outside of the U.S.

4: What age range do you fall in?
A: Under 20
B: 20-29
C: 30-39
D: 40-49
E: 50-59
F: 60-69
G: 70 & Over

5: What population(s) do you currently serve? (Please check all that apply)
A: Addiction
B: ADD/ADHD
C: Alzheimer's/Dementia
D: Autism Spectrum
E: College Students
F: Emotional/Behavioral Disorder

G: Forensic
H: Geriatric-non dementia
I: Hematology/Oncology
J: Hospice/Palliative Care
K: Intellectual & Developmental Disabilities
L: Labor/Delivery
M: Learning Disability
N: Medical
O: Mental Health
P: Multiple Disability
Q: Neonatal Care
R: Neurological Impairment
S: Pain Management
T: Parkinson's
U: Physical Disability
V: Sensory Impairment
W: Stress Management
X: Terminal Illness
Y: Trauma/Abuse
Z: Wellness
AA: Other (Please specify)

6: Where do you provide Music Therapy services? Please select all that apply.
A: Children Facilities/Schools
B: Self-Employed & Private Practice
C: Geriatric Facilities
D: Mental Health Settings
E: Medical Settings
F: Other (Please specify)

7: Please list your current job title

8: What is the highest level of education you have completed?
A: Bachelor's Degree (Please specify below)
B: Master's Degree (Please specify below)
C: Doctorate Degree (Please specify below)

9: Please specify your current credentials, including any specializations.

Section II: Collaboration Education & Experience

10: What term do you most commonly use to describe collaboration in treatment?
A: Interprofessional Collaboration
B: Co-treatment
C: Collaboration

D: Other (Please specify)

11: How do you define the term that you just selected/identified?

12: Where did you gain your knowledge about other professions (i.e. Speech Therapist, Occupational Therapist, Physical Therapist, etc.)?Pre-College
A. Pre-College
B. Undergraduate education
C. Graduate School
D. Internship
E. Professional/On-the-job Experiences/Training
F. Other (Please specify)

13: Where did you learn to collaborate?
A. Pre-College
B. Undergraduate education
C. Graduate School
D. Internship
E. Professional/On-the-job Experiences/Training
F. Other (Please specify)

III. Collaboration in Practice

14: Do you collaborate with other disciplines in your place of work?
A: No
B: Yes (Please specify the client population)

15: What disciplines do you collaborate with?
A: Speech Therapy
B: Occupational Therapy
C: Physical Therapy
D: Other (Please specify)

IV: Barriers to Collaboration

16: What do you consider, if any, as barriers to your collaboration?
A: Time/Scheduling Constraints
B: Financial Limitations
C: Administrative/Leadership Issues
D: Other (Please specify)

V: Collaboration in Practice: Responsibilities

For the following question, "implement" will be defined as: the process of putting something into effect.

17: Who implements collaboration in the Assessment procedures?
A: Team Effort
B: We do not collaborate in assessment
C: You (Music Therapist)
D: Co-Treating Professional

Please describe the procedure:

18: Who implements collaboration in the Treatment Planning procedures?
A: Team Effort
B: We do not collaborate in assessment
C: You (Music Therapist)
D: Co-Treating Professional

Please describe the procedure:

19: Who implements collaboration in the Treatment/Intervention procedures?
A: Team Effort
B: We do not collaborate in assessment
C: You (Music Therapist)
D: Co-Treating Professional

Please describe the procedure:

20: Who implements collaboration in the Documentation/Data Collection procedures?
A: Team Effort
B: We do not collaborate in assessment
C: You (Music Therapist)
D: Co-Treating Professional

Please describe the procedure:

21: Is there any other information that you would like to provide about your collaboration experience that could be helpful to the researcher?

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VITA

Andrea Boswell-Burns is a Board-Certified Music Therapist born and raised in Kansas City, Missouri. Andrea completed her Bachelor of Arts in Music with a focus in Music Therapy at the University of Missouri in Kansas City in 2008. After the completion of her degree, she moved to Michigan in order to complete a 10-month internship with the Detroit Public School District and became a Board-Certified Music Therapist in 2009. Following her internship, Andrea served as the Music Therapist at the University of Michigan's Center for Language & Literacy and eventually made the move to TBI Solutions, where she began to develop her passion and expertise in Traumatic Injury and Neurorehabilitation Methods. Andrea decided to return to the University of Missouri in Kansas City in 2012 to serve as a Graduate Teaching Assistant and complete her Master's Degree. During her graduate work Andrea completed her training to become a Neurologic Music Therapist, as well as completed the Interdisciplinary Leadership in Disability Studies Certificate Program.

Andrea has served on the Kansas City Metro Music Therapist Board and The National Planning Committee for AMTA, as well as presented at national and local conferences and community events for the American Music Therapy Association, AARP, Pilot Clubs of Greater Kansas City and The Brain Injury Association of Michigan. Andrea currently serves as an Adjunct Instructor in the Conservatory of Music & Dance and the lead therapist for summer programming at The Rehabilitation Institute of Kansas City. She is also a professional musical theater performer in the Greater Kansas City Area, as well as the proud mother of two very rambunctious boys.