The Role of Telehealth in Music Therapy Practice During the COVID-19 Global Pandemic Through the Lens of the Music Therapist: A Survey

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THE ROLE OF TELEHEALTH IN MUSIC THERAPY PRACTICE DURING THE COVID-19 GLOBAL PANDEMIC THROUGH THE LENS OF THE MUSIC THERAPIST: A SURVEY

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Abstract

This research study sought to examine the impact of the transition to telehealth music therapy services as the primary delivery mode of treatment during the COVID-19 pandemic. Board-certified music therapists were invited to participate in an online questionnaire-based survey where they were asked to provide responses to questions relating to their and their clients’ demographics, their theoretical orientation, their clinical experience prior to and during COVID-19, and their views on the overall impact of telehealth. Analysis of the raw data from participants’ responses are summarized and integrated into the discussion section to highlight participants’ perspectives in a music therapy context in order to identify trends and implications for the future. Results of the study demonstrate that the majority of respondents experienced a somewhat negative impact to the therapeutic process with respect to the technology, clinical practice, and personal well-being. Participants also reported the need to alter many aspects of their services including approach to treatment and the therapeutic goals. The results indicate that despite these challenges, most respondents anticipate the continuation of telehealth delivery of services both during and post-pandemic.

Keywords: Music Therapy, Telehealth, Telemedicine, COVID-19 Coronavirus, Pandemic, Trauma-informed Care, Therapeutic Alliance.
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Introduction

Personal Encounters & Interest in Topic

In recent decades, telehealth applications have been implemented across a variety of settings for a wide range of health and wellness initiatives. My personal introduction to the world of telecommunications began about 15 years ago as a sales professional for a videoconferencing firm. The manufacturers at the time marveled at the benefits of utilizing videoconferencing technology to enable institutions, such as hospitals and university systems, to expand their reach to geographically diverse patients, trainees, and specialists. Specifically, telehealth conferencing solutions became a viable way to deliver consultative and diagnostic medical care with all the benefits of privacy, and without the burden of travel.

Due to advancements in technology that have enabled a robust growth in popularity and use cases, telecommunication is now leveraged as a service vehicle for everything from consumer transactions to those in need of urgent medical care. While I have come to appreciate the value of telecommunication solutions—predominantly telemedicine—to deliver efficient and effective quality of care between clinicians and patients when it isn’t feasible or advisable for patients to travel to a physical office, the depersonalization of virtualization adversely affects the human experience. I have listened to the lamentation of clients regarding the physical and audio-visual limitations of technology and its impediment to the natural human connection otherwise realized through in-person contact.

When I began my music therapy studies at Molloy College in 2014, I gained a better understanding of the complexities and significance of the client-therapist relationship, and how such depersonalization might translate in a therapeutic context. From a Humanistic theoretical
orientation in music therapy, there is a strong emphasis placed on the role of the therapist’s empathic presence. This has historically been achieved through in-person individual or group music therapy sessions (Aigen, 2014; Bruscia, 1987; Wheeler, 2015). In the words of Rogers (1980), “{Empathy} means entering the private world of the other and becoming thoroughly at home in it…temporarily living in the other’s life, moving about in it delicately without making judgments” (p. 142). Entering the private world of another human being inherently implies an intimacy realized through a physical presence.

As an intern working in Hospice, I came to fully appreciate this phenomenon while sitting with patients and their families—at times in complete silence—where my physical, empathic presence was the primary source of comfort. Being physically present to experience the nuances of an individual’s expressions through facial affect, body language, and other subtle means of communication was an essential component to adapting the music therapy sessions through the manipulation of various musical elements in order to accommodate the individual needs of the patient based upon ongoing assessment in the moment. Further, I believe the success of my therapeutic interventions would have been deeply inhibited without the intimacy of the in-person sessions which afforded me the potential to fully engage with my patients and their families.

**Epistemology and Methodology**

I am a firm believer in holism and my primary approach in my work as a music therapist is person-centered, rooted in humanistic psychology. Due to the inherent complexities of physical, emotional, psychological, social, spiritual, and cultural differences within humanity, I have become increasingly aware of the possibility and the necessity of integral thinking in music
therapy. In a field which emphasizes flexibility, I believe we are obligated to consider all frameworks and delivery models of treatment.

That said, the impact of conducting music therapy services via telehealth during a pandemic is largely unknown, and the exploration of its impact is vital to understanding how and where resources and services can best be deployed. While everyone’s personal responses to shared experiences in life are unique, similarities and parallels can often be drawn by examining the collective experience of a group of individuals—in this case music therapists—in order to inform the broader culture of music therapy practice as a whole. Society has benefited greatly over the course of history through the unity of its aggregate members. This can be demonstrated at a macro level through political or religious affiliations comprised of individuals with related ideals. It can also be evidenced through isolated events such as protests involving individuals with common goals, or ongoing localized efforts such as school committees and advocacy groups.

Given that the therapeutic relationship is of critical importance in the process of music therapy, I feel it is essential that we examine through survey research the collective perspectives of the music therapists who have been required to transition from in-person sessions to telehealth delivery of services amidst the trauma of a global pandemic in order to develop a more comprehensive view of the impact to therapeutic outcomes. Such study designs have historically been executed with the intention to identify best practices, or adjust ethical, legal, and moral guidelines and procedures to accommodate ever-changing circumstances and demands in the industry.

In fact, input from studies on the experiences of music therapists around the world have served as an inspiration in the development of the field of music therapy to date. In a recent
study, survey research was used to examine the role of personal therapy among music therapists (Chikhani, 2015). Based upon the collective perspective of the participants, Chickhani (2015) pointed to the connection between self-awareness that was gained from personal therapy and a positive impact on professional development. In another study, a team of researchers investigated the views and practices of Australian-based music therapists. Findings revealed a gap in the significance of clinical supervision between music therapists and the professional guidelines surrounding the practice of professional supervision (Kennelly et al., 2012).

**Significance of the Study**

The absence of personal contact is concerning as the need for human connection is heightened in times of crisis and trauma. Individuals who suffer trauma typically function at an elevated level of self-protection and preservation making it more challenging, yet critical, to develop a trusting therapeutic alliance (Wheeler, 2015). Personal contact is essential in order for the individual and practitioner to develop a working alliance of collaboration and mutuality in which the ideal path to treatment can be determined. To this end, the Centers for Disease Control and Prevention (CDC) has outlined six principles of trauma which require consideration among healthcare professionals when treating individuals: safety, trustworthiness/transparency, peer support, collaboration & mutuality, empowerment/voice/choice, and cultural/historical/gender issues (Centers for Disease Control and Prevention [CDC], 2020).

The implications of telehealth music therapy services as the primary delivery mode of treatment are of interest to me given my personal experiences, combined with the current trauma resulting from the disconnection experienced by many people during the worldwide pandemic. Furthermore, this topic may be of interest to the broader music therapy community as it may serve to provide critical educational insights for the field moving forward. While I believe every
experience is unique, I also believe we have an opportunity, and an ethical obligation, to understand the collective experiences of others to help identify best practices and develop strategies for providing trauma-informed music therapy services in these unprecedented times.

Need for Study

There are few studies in the available literature that demonstrate the therapeutic impact of the sudden transition from in-person music therapy services to telehealth services as a primary delivery model during a pandemic. Since research is necessary to inform clinical practice, I believe it is essential for the music therapy community to conduct research utilizing a variety of methodologies to account for a range of perspectives, socioeconomic conditions, cultures, and experiences to better understand what, if any, impact has been realized through this atypical treatment delivery platform from the perspective of music therapists who have engaged in virtual music therapy sessions during COVID-19.

Methodology and Research Questions

Given the urgency to provide services to those traumatized by COVID-19 pandemic, the most expedient way in which to collect data in a short period of time is to engage multiple clinicians providing music therapy services via telehealth through descriptive survey research. Polling music therapists engaged in real-world experiences may provide for a generalizability to the entire population and a roadmap for future practice by enabling the voices of many to be heard as one. This design methodology considered the music therapists’ demographic, educational, and professional backgrounds as well as their perceptions of the therapeutic experience through telehealth in terms of its impact and future viability. The primary research questions guiding this study were:
• What, if any, impact to the therapeutic process has been realized by music therapists who were required to transition to conducting music therapy services via virtual platforms during COVID-19?

• What, if any, changes to the music therapists’ orientation, approach, or primary method of treatment occurred as a result of transitioning to conducting music therapy services via virtual platforms during COVID-19?

• How likely are music therapists to continue conducting music therapy through such virtual platforms post-pandemic?

The results are expected to provide guidance for healthcare providers seeking the best ways to address the needs of their patients and clients in times of crisis. Further, the experiences of the music therapists may help to identify and inform the profession of music therapy, its practitioners, and its multidisciplinary colleagues as to what training, education, resources, and support systems need be in place to ensure successful treatment outcomes through telehealth service delivery.
Literature Review

Trauma & Trauma-Informed Care

Trauma

Trauma can be defined as any negative life event or circumstance that places an individual in a position of relative helplessness and compromises their functional ability to cope (Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). The experience of trauma is unique to each individual, and carries a range of biological, psychological, physical, social, and even spiritual consequences (Afari, 2014; Engelbrecht, 2019; SAMHSA, 2014; Wheeler, 2015). These consequences may present as short-term, acute symptoms, or as chronic conditions across the lifespan (Wilson, 2017).

Characteristics. Exposure to traumatic events can lead to debilitating emotional psychological challenges including anxiety, depression, sleep disturbances, feeling on edge, and apathy (Engelbrecht, 2019; National Institutes of Health and Human Services [NIH], 2020; World Health Organization [WHO], 2020). Neurobiological changes in the brain resulting from a traumatic event often manifest into acute post-traumatic symptoms and can develop into Post-Traumatic Stress Disorder (PTSD), depending on the severity and duration of the event (NIH, 2020). Beyond the negative psychological effects, the experience of trauma bears physical repercussions as well. Recent literature suggests that individuals suffering from a traumatic event often have accompanying somatic symptoms such as headaches, irritability, and tremors (Afari, 2014; Englebrecht, 2018). A recent meta-analysis underscores the likelihood of somatic symptoms by revealing that individuals exposed to trauma are more than twice as likely to experience functional somatic symptoms (FSS) than those who haven’t experienced trauma (Afari, 2014).
**Implications.** Acute traumatic stress reactions among children have been demonstrated to interfere with critical functional levels, including ability to sustain attention (Kassam-Adams, 2012). Such disruption to the psyche can lead to “a loss of (self-)integration and, particularly, a loss of the ability to carry out self-caring and self-integrating functions” (Krystal, 1991 p. 1). Further, multiple traumatic events in childhood appear to have a compounding effect with research indicating a higher prevalence of psychiatric comorbidities as a result (Park, 2014).

**Role of Resiliency.** A person’s capacity for resilience is determined by a combination of psychosocial, biological, and environmental factors (Laird, 2019). Individual characteristics and access to supportive resources are key factors in whether a person is able to recover from adversity or hardship (SAMHSA, 2014). In individuals functioning at neurotypical developmental levels, trauma may play a positive role in strengthening cognition in the areas of memory control and resiliency (Hulbert, 2018). However, there is evidence to suggest that individuals with underlying developmental, psychological, and/or emotional challenges may have a harder time recovering from traumatic events (Park, 2014).

**Trauma-Informed Care**

Trauma-informed care is a strengths-based approach to care which considers all factors impacting an individual from a holistic perspective, rather than viewing him/her as simply a patient number or diagnosis (SAMHSA, 2014). It is a framework as opposed to a prescriptive form of treatment and is designed to target the overall well-being of clients, families, staff, and clinicians who are experiencing trauma. The first and most important principle of trauma-informed care is to do no harm (Bremness, 2014). An individual’s sense of safety is compromised in a state of trauma; therefore, the primary treatment goal is to re-establish a sense of safety, validation, and grounding through an empathic and non-threatening approach.
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(Bremness, 2014; NIH, 2020; SAMHSA, 2014). It is only through the establishment of safety that trust can be developed (SAMHSA, 2014). Trust and transparency are vital components in reassuring the individual that they are being viewed with dignity and respect, rather than simply a statistic. This is essential in order for the individual and practitioner to develop a working alliance of collaboration and mutuality in which the ideal path to treatment can be jointly determined (SAMHSA, 2014).

The benefits of trauma-informed care transcend differences in age. However, Steele (2011) asserts that it is particularly critical when working with children and adolescents due to their developing and fragile ego-strength. Through trauma-informed care, posttraumatic growth and resilient characteristics may develop, thereby minimizing their vulnerability in the face of ongoing or future trauma (Steele, 2011).

Role of Therapeutic Alliance. Positive therapeutic alliance in trauma work has been documented as a central force in positive treatment outcomes (Horvath et al., 2011, Ormhaug et al., 2014; Wilson, 2017; Yalom, 2005). Horvath et al. (2011) conducted a research synthesis of over 200 reports to examine the impact of therapeutic alliance on treatment outcomes in individual adult psychotherapy. The results illuminated a correlation between quality of the alliance and positive therapeutic outcomes, noting the inextricable connection between client-therapist-relationship to a successful therapeutic process (Horvath et al., 2011). Similarly, Ormhaug et al. (2014) examined the relationship between therapeutic alliance and therapy outcomes in 156 traumatized youths. Results of the study revealed an increased reduction in post-traumatic symptoms associated with positive therapeutic alliance (Ormhaug et al., 2014).

Cultural Considerations. Understanding the cultural background, life experience, and cultural belief system of an individual is crucial to a trauma-informed care approach (SAMHSA,
2014). Viewing the traumatic experience through the lens of the individual and considering cultural traditions, religious beliefs, familial hierarchy, perspectives on health practices, acculturation, and a wide array of additional socioeconomic and worldview factors are essential points of consideration when formulating a treatment plan to ensure individual needs of the client are being addressed (SAMHSA, 2014).

**Music Therapy and Trauma**

**In Mental Health**

Music therapy has been utilized as an effective intervention to combat the effects of trauma since World War II (Wheeler, 2015). Addressing the immediate psychosocial needs of individuals has historically been the primary aim of music therapy interventions through drumming, improvisation, storytelling, and songwriting (Wheeler, 2015). Research has demonstrated the effectiveness of music therapy in times of crisis and trauma to reduce anxiety and pain, and foster relaxation (Crowe, 2007).

For example, Gooding and Langston (2019) conducted a recent study in which 27 publications were examined in order to synthesize the available data, characteristics, and knowledge gaps in the literature related to music therapy interventions utilized within the military population. PTSD and traumatic brain injury (TBI) were the two most widely reported conditions among both active duty and veteran service members. The review revealed that the most common intervention strategy implemented with the military population involved drumming in individual and group therapy sessions (Gooding & Langston, 2019).

Music therapy was implemented to address the traumatic effects across the country following the attacks of September 11, 2001 (Loewy, 2002; Wheeler, 2017). Drumming circles were organized to enable community members of varying cultures to begin to process their
emotions and foster a sense of universal community (Wheeler, 2017). Beyond the ameliorating benefits that music therapy has been shown to have on patients from a physical and psychological perspective, research has also demonstrated the positive effect music therapy can have on spiritual healing (Potvin et al., 2018). Moreover, Borczon as cited in Eyre (2013) asserts that community music therapy has been utilized in the face of mass trauma to “facilitate a sense of belonging and shared purpose, expressing elements that may have been lost, damaged, or threatened by a traumatic event” (p. 240).

The adherence to trauma-informed practices in the field of music therapy has grown in recent decades. Many of the same principles of trauma-informed-care are built into the American Music Therapy Association (AMTA) code of ethics. In fact, principle #1 reflects the AMTA’s commitment to respecting an individual’s dignity and protection of their rights (American Music Therapy Association [AMTA], 2020). According to the AMTA as cited in Crowe (2007), specifically in trauma work:

The directed use of music and music therapy is highly effective in developing coping strategies, including understanding, and expressing feelings of anxiety and helplessness, supporting feelings of self-confidence and security, and providing a safe or neutral environment for relaxation. (p. 271)

Wheeler (2015) further points out the importance of understanding the neuroscience behind trauma, noting, “The survival mechanisms of trauma often shut down the ability to speak, process, and heal, and the ability to self-regulate is impaired” (Wheeler, 2015, p. 345). This suggests the necessity for the music therapist to consider not just the diagnosis of the individual, but the individual as a holistic being for whom many factors are at play.
Qualities of the Music Therapist in Trauma Work

The desire to promote health by any means necessary—particularly to those in urgent need—is the communal nature of all therapists. From a humanistic perspective and model of working in music therapy, empathy, flexibility, creativity, and intuition are among the most critical qualities of a music therapist (Aigen, 2014). Further, it is deemed essential for the musical therapist “to be a warm, open, and authentic person in the therapeutic encounter” (Aigen, 2014, p. 111). Davis et al. (2008) echoes this sentiment by asserting it is the responsibility of the music therapist to exhibit strong character traits which include reliability, ingenuity, and a sound ethical stance when working with vulnerable populations in order to establish trust. Further, Borczon as cited in Eyre (2013) cautions us about the need for music therapists to be prepared psychologically to remain ever present in the moment to support whatever response arises from the client in session.

Significance of Therapeutic Alliance in Music Therapy. Therapeutic alliance in music therapy practice has been demonstrated to be an essential component in positive treatment outcomes spanning a wide range of theoretical orientations and intervention strategies (Aigen, 2014; Silverman, 2019; Wheeler, 2015). Bolstering this standpoint, in an observational longitudinal design study, Mossler et al. (2019) found the therapeutic relationship to be a predictor of social skills development among children with Autism Spectrum Disorder. Specifically, in trauma work, Wheeler (2015) emphasizes the role of therapeutic alliance by underscoring the importance of the initial consultation or assessment to establish a healthy relationship between therapist and client.

Role of Countertransference. Countertransference can be explained as the music therapist’s unconscious reactions in and outside the music to the client— inappropriate affect,
irrational responses, and/or loss of objectivity due to own triggered conflicts (Pedersen, 2017). A music therapist’s self-awareness of one’s countertransference issues is of particular importance when the therapist has been affected by the same or similar trauma as the client being treated (Wheeler, 2015). Borczon as cited by Eyre (2013) specifically warns that “the music therapist must be able to empathize and yet keep that healthy distance for his own well-being” (p. 241).

**Telehealth Applications**

According to the U.S. Department of Health and Human Resources, telehealth can be defined as “the use of electronic information and telecommunications technologies to support and promote long-distance clinical health care, patient and professional health-related education, and public health and health administration” (U.S. Department of Health and Human Services, 2020). Current literature illustrates many implications for the use of technology in delivering a wide array of health and wellness treatment protocols (Armfield et al., 2015; Gentry et al., 2019; Mahar et al., 2018; New York State Education Department, 2020; Totten et al., 2019). In fact, Gentry et al. (2019) sought to review available literature regarding group-based video teleconference services. Forty published open-label, qualitative, and randomized control trial studies were reviewed to identify feasibility and effect on group dynamics including therapeutic alliance. Analysis suggests that video teleconference groups realize similar benefits to in-person treatment; however, the authors note a need for further research to identify optimal methods in delivery in order to ensure benefits and successful treatment outcomes.

Similarly, Turgoose et al. (2018) sought to identify lessons learned from the delivery of trauma-focused tele-therapies to veterans with a history of PTSD. A systematic review of 41 scientific papers were conducted in order to identify the viability and efficacy of tele-therapy
delivery as compared to in-person therapy. Results demonstrated that tele-therapy provides a promising alternative to in-person treatment, with increased potential for access to various treatment modalities for persons suffering with PTSD (Turgoose et al., 2018).

**Technology Considerations**

The literature further suggests that technology considerations are among the most impactful factors in the likelihood for successful treatment outcomes (Aresti-Bartolome & Garcia-Zapirain, 2014; Armfield et al., 2015; Bommakanti et al., 2020). Armfield et al. (2015) investigated clinical applications of Skype technology in clinical care and clinical education. Of 239 articles researched, 27 articles met the inclusion criteria. The review revealed that Skype was most often used in management of chronic diseases, for educational purposes, and for speech and language pathology applications. While the research pointed to the viability of the platform in telemedicine, the authors noted a lack of evidenced-based studies to support its clinical and economic benefits.

More concerning, Bommakanti et al. (2020) investigated the impact of mobile health (mhealth) applications on health disparities. One hundred fifty-one tuberculosis (TB) participants were monitored by their respective healthcare providers via treatment adherence videos sent using smartphone technology. One third of the participants lacked access to the required technology prior to the study, illuminating a gap in the availability of key technology necessary for access to critical mhealth applications.

**Clinical Considerations**

Beyond technology, key clinical considerations including therapeutic alliance have been shown to affect treatment outcomes (Henry et al., 2016; Khairat, 2019; Turgoose et al., 2018). In a recent study, Aresti-Bartolome and Garcia-Zapirain (2014) analyzed the most effective
supportive therapeutic technologies used in working within the Autism Spectrum Disorder (ASD) population. Specific types of technology inclusive of virtual reality applications, telehealth systems, social robots, and dedicated applications were cross-referenced against areas of clinical focus including communication, social learning and imitation skills, and other conditions. While telehealth systems were found to be productive tools for the purpose of providing psychoeducation and opportunity for early intervention diagnosis, the study revealed a general deficiency in meeting client needs due to the impersonal nature of the tools.

**Music Therapy and Telehealth**

*Applications*

There is a substantial body of evidence which supports the use of telehealth in the delivery of music therapy (Gentry et al., 2019; Lightstone et al., 2015; Spooner et al., 2019; Tamplin et al., 2019). In a recently conducted case review, Lightstone et al. (2015) examined the therapeutic outcomes of a veteran receiving remote music therapy via video teleconference to address symptoms related to PTSD. Twenty-four weekly, 60-minute sessions were co-facilitated by a music therapist and a clinical psychologist over an eleven-month period. Sessions were comprised of various clinical improvisation interventions aimed at promoting the exploration and expression of a range of emotions. The case review revealed self-reported improvement of symptomology with minimal technological detriment to treatment outcome as well as benefits in the areas of inter-personal collaboration and extended geographic treatment reach.

Consistent with these findings, Spooner et al. (2019) reviewed three case studies of veterans receiving creative arts therapies via distance technology to illustrate a model for adapting current face-to-face services in order to reach a broader audience. The three participants in the study received either art, dance/movement, or music therapy respectively, and participated
in an initial assessment and reassessment throughout treatment. The authors noted that although
distance technology introduced challenges relating to connectivity and deficits relating to visual
and auditory communication compared to in-person treatment, distance delivery of creative arts
therapies offer the potential to increase access to healthcare for veterans.

In another related study, Tamplin et al. (2019) evaluated the experience of six
quadriplegia patients receiving music therapist-facilitated therapeutic singing via customized
virtual reality (VR) technology applications in order to develop a low-latency solution for online
group therapy singing. Patient questionnaires and thematic analysis of interview data were used
to identify common areas of feedback. The authors’ findings revealed several themes, including
a reduction in patient inhibition while singing in a group setting. This points to the motivational,
emotionally beneficial, and equitable access potential of VR technology use in group therapy
work among this population.

**Best Practices.** Regardless of the population served, recent research points to the
necessity of identifying and developing best practices to ensure the safety and well-being of
identified key ethical considerations in the use of telehealth technologies in the delivery of music
therapy services. Specific risks, benefits, and guidelines associated with the use of technology
within social media, computer-mediated music therapy, and advertising are discussed. The
author’s aim was to inform and promote ethical thinking in response to the ongoing evolution of
the use of technology in the field of music therapy and rally for the continuation of further
exploration on the matter.
Music Therapy and the COVID-19 Pandemic

Emerging studies point to the significant psychological impact of the pandemic not only on the victims, but also the healthcare professionals treating them (Chew et al., 2020; Gaddy et al., 2020; Kang et al., 2020; Sheraton et al., 2020; Willner et al., 2020). Additional studies have begun to focus on treatment delivery models as a key consideration for treatment outcomes. The findings thus far underscore the need to examine closely the viability of music therapy services delivered via telehealth to address the needs of individuals in the face of the COVID-19 pandemic as practitioners around the globe grapple with not only the severity of the immediate trauma, but also its potential long-term effects (CDC, 2020; Meo et al., 2020; WHO, 2020).

In a recent study, Gaddy et al. (2020) sought to uncover the impact to employment, service delivery, stress, and hope among music therapists as a result of the pandemic. Survey results indicated that although music therapists faced a multitude of challenges in the face of the pandemic relative to service delivery, reduction in hours, and heightened levels of stress, most felt hopeful about the viability of alternate service delivery options such as telehealth to meet the needs of their clients.
Method

Participants

Inclusion criteria for this study required participants to: 1) be at least 18 years old, 2) be a current board-certified music therapist holding the credential of MT-BC, 3) to have practiced music therapy as a credentialed music therapist for a minimum of two years prior to the COVID-19 pandemic, 4) to have administered music therapy via telehealth for a minimum of six weeks during the COVID-19 pandemic, and 5) to be fluent in the English language for their protection and to provide autonomous consent to participate. Only the data involving the participants who met the eligibility requirements were included in the results and the anonymity of participants was preserved throughout the entirety of the study.

Recruitment

Following Molloy College’s Institutional Review Board (IRB) approval (see Appendix A), an email distribution list was purchased through the Certification Board for Music Therapy (CBMT) to identify potential participants. On January 8, 2021, participants were recruited via email invitation/consent form (see Appendix B) containing a Secure Sockets Layer (SSL) encrypted link to participate in the study through the Section 508 certified online survey application Survey Monkey. Two weeks later, a reminder email (see Appendix C) was sent to those participants who had not yet responded to or completed the survey. The survey was closed on January 29, 2021. Participants were under no obligation to complete the survey and were provided the option to withdraw at any point in the study. A thank-you email was distributed following participation in the study. No perceived risks or discomforts were associated with participation in the study.
Data Collection

A survey instrument (see Appendix D) was created by the research team which included a set of predominantly closed-ended questions with a list of response options associated with each to minimize response burden and researcher bias. Questions were designed to be simple to maximize response rate, appropriate for the intended use of the study, and to meet criteria for reliability and validity to support potential longitudinal research in the future. Sections of the survey included demographic information, theoretical orientation, clinical experience, telehealth experience, and perceptions on impact of telehealth. Survey Monkey was configured to keep all participant response data anonymous to the researcher for the duration of the research study. While it’s not possible to validate all response data, the research team has no reason to believe data were corrupted in any way or that participants completed the survey more than once.

Data Protection

The collected data were stored on Survey Monkey’s secure cloud servers and backed-up to a password-protected flash drive to maintain confidentiality and integrity. Raw data were only made accessible to the researcher and to the researcher’s statistician for the purpose of data analysis. Data will be saved for a period of three years following collection in compliance with IRB auditing requirements at which point it will be destroyed.

Data Analysis

A statistician was hired and provided with access to analyze the raw data from participants’ responses to formulate results using SPSS Version 23. Survey responses were analyzed using descriptive and cross-tabulation correlation analyses. The chi-square test, Paired t-test, and Fisher’s exact test were each utilized where applicable. Summary data along with associated statistical significance are presented in narrative and illustrative form in the results.
section and integrated into the discussion section to identify and highlight trends and potential implications for the future.
Results

Participants

Of the 1498 surveys that were sent out, a total of 90 responses were received: yielding a response rate of 6%. While there is no agreed-upon minimum standard of return rate, the music therapy literature suggests that 30% is considered average for online surveys (Wheeler & Murphy, 2016). Of the 90 surveys that were returned, 60 had been fully completed, while an additional 30 were only partially completed. Among the incomplete surveys, 99% of respondents completed Section 1 (Demographic), 79% completed Section 2 (Theoretical Orientation), 78% completed Section 3 (Clinical Practice Prior to COVID-19), 75% completed Section 4 (Clinical Practice During COVID-19), and 68% completed Section 5 (Impact of Telehealth During COVID-19). For questions which provided respondents with the option to select “Other” and manually enter a response, responses were captured and reported as summary data. The responses were not used in analyses and therefore carry no statistical significance in the context of this study. It should be noted that response counts may vary as some questions provided an additional option to “select all that apply.”

Results by Section

Section 1: Demographic

Table 1 (see below) provides a breakout of respondents’ answers to question 1 (How long have you been practicing as a board-certified music therapist?). The majority of the respondents (96.67%) reported practicing as a board-certified music therapist for less than 5 years.
Table 1

*Years Practicing as a Board-Certified Music Therapist*

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>96.67%</td>
<td>87</td>
</tr>
<tr>
<td>5-15 years</td>
<td>2.22%</td>
<td>2</td>
</tr>
<tr>
<td>15-25 years</td>
<td>1.11%</td>
<td>1</td>
</tr>
<tr>
<td>More than 25 years</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90</td>
</tr>
</tbody>
</table>

*Note.* Demographic Information I. *N*=90.

Most (80.90%) reported having a bachelor’s degree as their highest level of education in question 2 while 19.10% reported having a master’s degree, and 2.25% reporting having advanced clinical training in music therapy (see Table 2).

Table 2

*Respondents Highest Level of Education*

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s degree</td>
<td>80.90%</td>
<td>72</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>19.10%</td>
<td>17</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Advanced clinical training</td>
<td>2.25%</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>89</td>
</tr>
</tbody>
</table>

*Note.* Demographic Information II. *N*=89.
However, when asked to specify what, if any, advanced clinical training had been completed, 20.22% of the respondents reported having completed advanced clinical training in either Nordoff-Robbins music therapy (1.12%), Neurologic music therapy (13.48%), or the Bonny Method of guided imagery and music (5.62%; see Table 3).

Table 3
*Advanced Clinical Training by Respondents*

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordoff-Robbins (CMT)</td>
<td>1.12%</td>
<td>1</td>
</tr>
<tr>
<td>Analytical (AMT)</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Neurologic (NMT)</td>
<td>13.48%</td>
<td>12</td>
</tr>
<tr>
<td>Bonny method (GIM)</td>
<td>5.62%</td>
<td>5</td>
</tr>
<tr>
<td>N/A</td>
<td>79.78%</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>89</td>
</tr>
</tbody>
</table>

*Note. Demographic Information III. N=89.*

Figure 1 illustrates how respondents were reasonably well dispersed among the five categories of clinical populations most served comprising of children with developmental issues in early childhood (47.19%), individuals with Autism Spectrum Disorder (55.06%), adolescents/adult mental health (37.08%), medical/oncology/NICU (6.74%), and older adults/hospice & palliative care/bereavement (30.34%). There were 12 respondents who reported serving “other” populations including elementary students at risk, adolescents and adults with intellectual disabilities, adults with traumatic brain injury, disability population-adults, infants, physical and neuro rehabilitation, adults with disabilities, memory care, geriatric behavioral health, bereavement, incarcerated adult mental health, and neuro-rehab.
Figure 1

*(Populations Served by Respondents)*

Note. Demographic information IV (N=89). This figure shows the answers to Q4: Which of the following populations do you most serve?

Section 2: Theoretical Orientation

As illustrated in Figure 2 below, of the 71 respondents, the majority (80.28%) reported alignment with a humanistic/person-centered theoretical orientation, while 15.49% reported alignment with cognitive-behavioral theory, 2.82% reported alignment with psychodynamic theory, and another 1.41% reported alignment with music-centered theory. The remaining 19 respondents skipped this question.
In questions 6 through 10, respondents were asked to indicate what they most considered to be the role of the music therapist, the role of the client, the role of music, the role of verbalizations, and the most critical element of the therapeutic process in music therapy sessions. Most respondents indicated the following: 1) that the role of the music therapist is to provide music experiences to primarily facilitate a client-therapist relationship (56.34%), 2) the role of the client is to explore intra/inter-personal relationships (59.15%), 3) the role of the music is a medium/facilitator for self-expression (61.97%), 4) the role of verbalizations is a medium/facilitator of self-expression (57.75%) and 5) that the most critical element of the
therapeutic process is the therapeutic relationship (87.32%). Table 4 outlines the complete breakdown of all responses for questions 6 through 10.

Table 4

*Theoretical Orientation II*

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer Choices</th>
<th>Responses</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you MOST consider to be the role of the music therapist?</td>
<td>To facilitate client-therapist relationship</td>
<td>56.34%</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>To facilitate the client’s musical expression</td>
<td>19.72%</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>To explore unconscious material</td>
<td>4.23%</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To facilitate behavioral changes</td>
<td>19.72%</td>
<td>14</td>
</tr>
<tr>
<td>What do you MOST consider to be the role of the client?</td>
<td>To explore intra/inter-personal relationships</td>
<td>59.15%</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>To follow the therapist directives</td>
<td>12.68%</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>To explore unconscious material</td>
<td>8.45%</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To discover musical self</td>
<td>19.72%</td>
<td>14</td>
</tr>
<tr>
<td>What do you MOST consider to be the role of the music?</td>
<td>A facilitator of interpersonal relationships</td>
<td>15.49%</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>A medium for self-expression</td>
<td>61.97%</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>A facilitator to change behavior</td>
<td>16.90%</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>To provide access to the unconscious</td>
<td>5.63%</td>
<td>4</td>
</tr>
<tr>
<td>What do you MOST consider to be the role of verbalizations?</td>
<td>To facilitate music-making</td>
<td>12.68%</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>As a medium of self-expression</td>
<td>57.75%</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>To facilitate changes in behavior</td>
<td>16.90%</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>To provide access to the unconscious</td>
<td>12.68%</td>
<td>9</td>
</tr>
<tr>
<td>What do you feel is the MOST critical element of the therapeutic process?</td>
<td>Therapeutic relationship</td>
<td>87.32%</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Verbal processing</td>
<td>1.41%</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Music-making</td>
<td>8.45%</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Goal attainment through metrics</td>
<td>2.82%</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note. N=71.*
Section 3: Clinical Practice Prior to COVID-19

Section 3 examined respondents’ clinical practice routines prior to the COVID-19 pandemic. Figure 3 illustrates the types of clinical settings in which music therapists worked prior to COVID-19 which comprised of school/facility (47.14%), home visits (35.71%), and hospital/treatment center (47.14%), and telehealth (2.86%).

Figure 3

Clinical Practice Prior to COVID-19

<table>
<thead>
<tr>
<th>Settings Prior to COVID-19</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>School/Facility</td>
<td>47.14%</td>
</tr>
<tr>
<td>Home Visits</td>
<td>35.71%</td>
</tr>
<tr>
<td>Hospital/Treatment Center</td>
<td>47.14%</td>
</tr>
<tr>
<td>Telehealth</td>
<td>2.86%</td>
</tr>
</tbody>
</table>

Note. Answers to the question in which setting(s) did you MOST practice prior to COVID-19.

N=70.
Respondents predominantly leveraged in-person (75.71% individual and 62.86% group) service delivery methods as compared to telehealth (7.14% individual and 2.86% group) service delivery methods (see Figure 4).

**Figure 4**

*Clinical Practice Prior to COVID-19 II*

<table>
<thead>
<tr>
<th>Delivery Methods Prior to COVID-19</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Person (Individual)</td>
<td>75.71%</td>
</tr>
<tr>
<td>In-Person (dyad or group)</td>
<td>62.86%</td>
</tr>
<tr>
<td>Telehealth (individual)</td>
<td>7.14%</td>
</tr>
<tr>
<td>Telehealth (dyad or group)</td>
<td>2.86%</td>
</tr>
</tbody>
</table>

*Note.* Answers to the question which delivery methods did you MOST utilize during music therapy sessions prior to COVID-19. N=70.

When asked what types of music experiences were most employed, a wide range of experiences were reported, including receptive (62.86%), composition (54.29%), clinical improvisation (65.71%), and re-creative (77.14%). An additional 8.57% of respondents reported employing “Other” music experiences, including three respondents who cited “NMT
techniques,” and three additional respondents who cited “movement based music experiences,” “therapeutic guitar lesson,” and “end-of-life/legacy work.” Table 5 reflects the breakdown of all responses.

**Table 5**

*Type(s) of Music Experiences Employed Prior to COVID-19*

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptive (music listening)</td>
<td>62.86%</td>
<td>44</td>
</tr>
<tr>
<td>Composition (songwriting)</td>
<td>54.29%</td>
<td>38</td>
</tr>
<tr>
<td>Clinical Improvisation</td>
<td>65.71%</td>
<td>46</td>
</tr>
<tr>
<td>Re-Creative</td>
<td>77.14%</td>
<td>54</td>
</tr>
<tr>
<td>Other</td>
<td>8.57%</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

*Note.* Clinical practice prior to COVID-19 III. N=70.

**Section 4: Clinical Practice During COVID-19**

Section 4 demonstrates the respondents reported change in clinical practice routines during to the COVID-19 pandemic. Figure 5 illustrates the change in the types of clinical settings in which music therapists practiced during COVID-19 which comprised of school/facility (17.65%), home visits (17.65%), and hospital/treatment center (29.41%) as compared to a clinically significant increase in telehealth (66.18%).
Figure 5

Settings During COVID-19

Note. Answers to the question in which setting(s) did you MOST practice during COVID-19.

Similarly, respondents reported a decrease for in-person (40.30% individual and 25.37% group) service delivery methods in favor of telehealth (68.66% individual and 25.37% group) service delivery methods (see Figure 6).
Figure 6

Deliver Methods During COVID-19

*Note.* Answers to the question which delivery methods did you MOST utilize during music therapy sessions during COVID-19.

The types of music experiences most employed remained relatively stable across receptive (72/06%), composition (51.47%), and re-creative (69.12%), but a clinically significant decrease is the employment of clinical improvisation music experiences (29.41%) was noted. Six respondents (8.82%) reported employing “Other” music experiences during COVID-19, including “private lessons,” “NMT techniques,” “song discussion,” “therapeutic guitar lesson,” “guided imagery/relaxation,” and “trying NMT.” Table 6 reflects the breakdown of all responses.
Table 6

Types of Music Experiences Employed During COVID-19

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptive (music listening)</td>
<td>72/06%</td>
<td>49</td>
</tr>
<tr>
<td>Composition (songwriting)</td>
<td>51.47%</td>
<td>35</td>
</tr>
<tr>
<td>Clinical Improvisation</td>
<td>29.41%</td>
<td>20</td>
</tr>
<tr>
<td>Re-Creative</td>
<td>69.12%</td>
<td>47</td>
</tr>
<tr>
<td>Other</td>
<td>8.82%</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>68</td>
</tr>
</tbody>
</table>

Note. Clinical practice during COVID-19 III.

Section 5: Impact of Telehealth During COVID

Questions 17-20 sought to understand the impact on a range of factors attributed to the transition to telehealth during COVID-19 on a Likert scale from “Very Negative” to “Very Positive.” Figure 7 depicts the impact of COVID-19 in the following areas: 1) clarity of audio during sessions (81.67%), 2) clarity of visual interaction during sessions (70.00%), 3) stability of internet connection (56.67%), and 4) the ability to synchronize musically (41.67%) as reported by the respondents.
Figure 7

*Impact of Technical Factors During COVID-19*

![Bar chart showing the impact of technical factors during COVID-19](chart.png)

*Note.* Ratings of the impact on each of the factors that resulted from transitioning to telehealth during COVID-19. *N=60.*

Figure 8 illustrates the relative lack of impact to logistical factors including ability to schedule sessions (31.67%), privacy (41.67%), ability to collect and process paperwork (63.33%), and ability to protect the client’s confidentiality (60.00%) as reported by the respondents.
Figure 8

*Impact of Logistical Factors During COVID-19*

![Bar chart showing impact of logistical factors during COVID-19. The chart illustrates the percentage of respondents rating their experience as very negative, somewhat negative, no impact, somewhat positive, and very positive for various factors like ability to schedule sessions, privacy, collect and process paperwork, and protect client confidentiality.]

*Note.* Ratings of the impact of the logistical factors that resulted from transitioning to telehealth during COVID-19. *N*=60.

Figure 9 demonstrates the somewhat negative impact to clinical factors including types of music experiences offered (71.67%), in-session client engagement (65.00%), and measurable outcomes (48.33%), with relatively no impact to therapeutic relationship (31.67%) as reported by the respondents.
**Figure 9**

*Impact to Clinical Factors During COVID-19*

![Figure 9: Impact to Clinical Factors During COVID-19](image)

*Note.* Ratings of the impact on clinical factors that resulted from transitioning to telehealth during COVID-19. \(N=60\).

Figure 10 highlights the somewhat negative personal impact to the therapist including stress level (53.33%), compassion fatigue (48.33%), physical fatigue (40.00%), and the very negative impact on work/life balance (33.33%) as reported by respondents.
Figure 10

*Personal Impact During COVID-19*

![Bar chart showing personal impact during COVID-19](image)

*Note.* Ratings of the personal impact the therapist on that resulted transitioning to telehealth during COVID-19. N=60.

Question 21 asked participants to identify what, if any, alterations to the therapeutic process were required with the transition to telehealth during COVID-19. Respondents reported alterations were necessary in session format (55.00%), role as a therapist (43.33%), the type of music experiences provided (88.33%), and therapeutic goals (68.33%). An additional three respondents reported the need to make “Other” alterations including, “never used telehealth,”
“no experience with telehealth as MT,” and “to utilize telehealth more often for isolation patients.” Figure 11 illustrates the complete responses.

**Figure 11**

*Alterations Required During COVID-19*

![Graph showing alterations required as a result of the transition to telehealth. N= 60.]

*Note.* Alterations required as a result of the transition to telehealth. *N* = 60.

When asked in Question 22 how likely they were on a Likert scale from “Not Likely” to “Very Likely” to continue providing services exclusively via telehealth as opposed to in-person *during* a pandemic if given the option, 34.43% of respondents reported they were “Not Likely,” 39.34% of respondents reported they were “Somewhat Likely,” and 26.23% of respondents reported they were “Very Likely.” When asked in Question 23 how likely they were on a Likert
scale from “Not Likely” to “Very Likely” to continue providing services via telehealth as opposed to in-person post-pandemic, 36.07% of respondents reported they were “Not Likely,” 54.10% of respondents reported they were “Somewhat Likely,” and a mere 9.84% of respondents reported they were “Very Likely.”
Analysis

Data analysis consisted of a combination of the chi-squared test of independence, Paired t-Test, and Fisher’s Exact test using an alpha of .05 to determine if there was statistical significance between variables. Data were analyzed with the assistance of a statistician using SPSS version 23 software.

Chi-squared Analyses

The chi-squared test is a non-parametric test used for testing the distributional adequacies between group frequencies (NIST/SEMATECH, 2012). Two assumptions must be met for the chi-squared test. The first is that the responses are independent of one another, while the second is that each of the cells of expected data are greater than 5. Comparing Section 3 and Section 4 revealed statistical significance for questions 11-16 as outlined in Tables 7, 8, and 9 below. A chi-square test of independence was performed to examine the relationship between the setting in which music therapy was practiced and the environment before and after COVID. The difference between before and after COVID for these variables was significant, $\chi^2 (3,70) = 56.83, p < .001$ as outlined in Table 7. As per table 7, results indicated that the setting in which music therapy was practiced was significantly impacted by COVID. Most sharply, the difference was seen in the use of Telehealth practice, which shifted from 2.86% before COVID to 64.3% after COVID.

Table 7

| Clinical Practice (Setting) Prior to COVID-19 Compared to Clinical Practice During COVID |
|-------------------------------------|-----------------|-----------------|
| Setting                             | Before COVID ($n=70$) n, (%) | After COVID ($n=70$) n, (%) |
| School/Facility                    | 33 (47.1%)       | 12 (17.1%)      |
| Home Visits                        | 25 (35.7%)       | 12 (17.1%)      |
| Hospital/Treatment Center          | 33 (47.1%)       | 20 (28.6%)      |
| Telehealth                          | 2 (2.86%)        | 45 (64.3%)      |

Note. Q11 vs Q14 Settings in which you practiced before and after COVID? N=70.
A chi-square test of independence was performed to examine the difference between the session format in which music therapy was practiced and the environment before and after COVID. The difference between before and after COVID for these variables was significant, $\chi^2 (3, 70) = 23.81, p < .001$ as outlined in Table 8. The session format in which music therapy was practiced was significantly impacted by COVID. Most sharply, the difference was seen in the use of the telehealth practice, which shifted from 7.1% before COVID to 66.2% after COVID for individuals and from 2.86% before to 24.3% after COVID for dyads and groups.

### Table 8

*Clinical Practice Prior to COVID-19 Compared to Clinical Practice During COVID-19 (Session Format) (N=70)*

<table>
<thead>
<tr>
<th>Session Format</th>
<th>Before COVID (n=70)</th>
<th>After COVID (n=70)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-person (individual)</td>
<td>53 (75.7%)</td>
<td>27 (38.5%)</td>
</tr>
<tr>
<td>In-person (dyad or group)</td>
<td>44 (62.9%)</td>
<td>17 (24.3%)</td>
</tr>
<tr>
<td>Telehealth (individual)</td>
<td>5 (7.1%)</td>
<td>46 (65.7%)</td>
</tr>
<tr>
<td>Telehealth (dyad or group)</td>
<td>2 (2.86%)</td>
<td>17 (24.3%)</td>
</tr>
</tbody>
</table>

*Note. Q12 vs Q 15 Session format in which you practiced before and after COVID? N=70.*

Following a chi-square analysis, outcomes revealed no significance between the type of music experiences employed before and after COVID ($\chi^2 (4, 70) = 8.402, p = .0779$). The greatest change seen was between the use of clinical improvisation before (65.7%) and after (28.6%) COVID (see Table 9).
Table 9

Clinical Practice Prior to COVID-19 Compared to Clinical Practice During COVID-19 (Music Experiences)

<table>
<thead>
<tr>
<th>Music Experiences Offered</th>
<th>Before COVID (n=70) n, (%)</th>
<th>After COVID (n=70) n, (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptive (music listening)</td>
<td>44 (62.9%)</td>
<td>49 (70.0%)</td>
</tr>
<tr>
<td>Compositional (e.g., song writing)</td>
<td>38 (54.3%)</td>
<td>35 (50.0%)</td>
</tr>
<tr>
<td>Clinical improvisation (e.g., impromptu music making)</td>
<td>46 (65.7%)</td>
<td>20 (28.6%)</td>
</tr>
<tr>
<td>Re-creative (working with composed songs.)</td>
<td>54 (77.1%)</td>
<td>47 (67.1%)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (8.57%)</td>
<td>6 (8.57%)</td>
</tr>
</tbody>
</table>

Note. Q13 vs Q16 What type of music experiences did you employ before and after COVID? N=70.

Cross-tabulations

Cross-tabulation analyses were used to determine whether groups have significantly different responses as measured by counts. In all of the cross-tabulation tables, there were at least 50% of the expected data values that are less than 5. Therefore, the second chi-square assumption is not met since each of the cells of expected data were not greater than 5. A more sophisticated test for running a chi-squared test for small size group samples is the Fisher’s exact test since both row and column totals are small (NIST/SEMATECH, 2012).

Section 1 and Section 5

A cross-tabulation analysis (see Table 10) using question 1 and question 22 conducted to examine the correlation between number of years practicing as a board-certified music therapist and the likelihood of continuing to provide services exclusively via telehealth during a pandemic. Following a Fisher’s exact test, the differences between the groups and preference to use telehealth during a pandemic were not found to be statistically significant.
Table 10

Cross-tabulation of Question 1 and Question 22 on Likelihood of Continuing Telehealth During A Pandemic

<table>
<thead>
<tr>
<th>How long have you been practicing as a Board-Certified Music Therapist?</th>
<th>Somewhat</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Likely</td>
<td>Likely</td>
<td>Very Likely</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>20</td>
<td>24</td>
<td>15</td>
<td>59</td>
</tr>
<tr>
<td>5-15 years</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>15-25 years</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>24</td>
<td>16</td>
<td>61</td>
</tr>
</tbody>
</table>

Note. Fisher’s exact test for count data: \( p=0.1272 \) (two-tailed test).

A second cross-tabulation analysis (see Table 11) using question 1 and question 23 was conducted to examine the correlation between number of years practicing as a board-certified music therapist and the likelihood of continuing to provide services via telehealth post-pandemic. Following a Fisher’s exact test, the differences between the groups and preference to use telehealth post-pandemic were not found to be statistically significant.
Table 11

**Cross-tabulation of Question 1 and 23 on Likelihood of Continuing Telehealth Post-Pandemic**

<table>
<thead>
<tr>
<th>How long have you been practicing as a Board-Certified Music Therapist?</th>
<th>Not Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>20</td>
<td>33</td>
<td>6</td>
<td>59</td>
</tr>
<tr>
<td>5-15 years</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>15-25 years</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>33</td>
<td>6</td>
<td>61</td>
</tr>
</tbody>
</table>

*Note. Fisher’s exact test for count data: p=0.3148 (two-tailed test).*

A third cross-tabulation analysis (see Table 12) using question 2 and question 22 was conducted to examine the correlation between the highest level of education and the likelihood of continuing to provide services exclusively via telehealth during a pandemic. Following a Fisher’s exact test, the differences between the groups and preference to use telehealth during a pandemic were not found to be statistically significant.

Table 12

**Cross-tabulation of Question 2 and Question 22 on Likelihood of Providing Services Via Telehealth During A Pandemic by Education Level**

<table>
<thead>
<tr>
<th>What is your highest level of education?</th>
<th>Not Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s</td>
<td>18</td>
<td>21</td>
<td>10</td>
<td>49</td>
</tr>
<tr>
<td>Master’s</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Advanced Clinical Training</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>24</td>
<td>16</td>
<td>61</td>
</tr>
</tbody>
</table>

*Note. Fisher’s exact test for count data: p=0.1925*
A fourth cross-tabulation analysis (see Table 13) using question 2 and question 23 was run to examine the correlation between respondents’ level of education and the likelihood of continuing to provide services via telehealth post-pandemic. Following a Fisher’s exact test, the differences between the groups and preference to use telehealth post-pandemic were not found to be statistically significant.

Table 13

<table>
<thead>
<tr>
<th>What is your highest level of Education</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s</td>
<td>22</td>
</tr>
<tr>
<td>Master’s</td>
<td>33</td>
</tr>
<tr>
<td>Advanced Clinical Training</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Likelihood of Providing Services Via Telehealth POST-pandemic?</th>
<th>Not Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s</td>
<td>20</td>
<td>33</td>
<td>6</td>
<td>59</td>
</tr>
<tr>
<td>Master’s</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Advanced Clinical Training</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Fisher’s exact test for count data: \( p=6157 \) (two-tailed test).

A fifth cross-tabulation analysis (see Table 14) was conducted to examine the correlation between the type of clinical population served and the likelihood of continuing to provide services exclusively via telehealth during a pandemic. Following a Fisher’s exact test, the differences between the groups and preference to use telehealth during a pandemic were found to be very statistically significant.
Table 14

Cross-tabulation of Question 4 and Question 22 on the Likelihood of Providing Services Via Telehealth During a Pandemic by Population Served

<table>
<thead>
<tr>
<th>Population Served</th>
<th>Not Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children with Developmental issues</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Children with ASD</td>
<td>3</td>
<td>9</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Adolescents/Adult mental health</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Medical/Oncology/NICU</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Older adults/Hospice/Bereavement</td>
<td>9</td>
<td>7</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>24</td>
<td>16</td>
<td>61</td>
</tr>
</tbody>
</table>

Note. Fisher’s exact test for count data: $p = 0.000176$ (two-tailed test).

A sixth cross-tabulation analysis was conducted to examine the correlation between the types of clinical population served and the likelihood of continuing to provide services exclusively via telehealth post-pandemic. Following a Fisher’s exact test, the differences between the groups and preference to use telehealth post-pandemic were found to be very statistically significant (see Table 15).
Table 15

Cross-tabulation of Question 4 and Question 23 on Likelihood of Continuing to Provide Services via Telehealth Post-Pandemic by Population Served

<table>
<thead>
<tr>
<th>Population served</th>
<th>Not Likely</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children with Developmental issues</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Children with ASD</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Adolescents/Adult mental health</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Medical/Oncology/NICU</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Older adults/Hospice/Bereavement</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>33</td>
<td>6</td>
<td>61</td>
</tr>
</tbody>
</table>

*Note.* Fisher’s exact test for count data: $p<.0001$ (two-tailed test)

Section 2

Cross-tabulation tables were created to compare question 5 “With which psychological theory do you MOST align” against questions 6-10. Tables 16 - 20 provide a breakdown of responses for each question. Respondents who reported alignment with humanistic/person-centered theory overwhelmingly reported the following: 1) that the role of music therapist is “to provide music experiences to primarily facilitate a client-therapist relationship” (64.91%), 2) the role of the client is “to explore intra/inter-personal relationships” (64.91%), 3) the role of music is “a medium/facilitator for self-expression” (66.67%), 4) the role of verbalizations is “a medium/facilitator of self-expression” (63.18%), and 5) the most critical element of the therapeutic process is “therapeutic relationship” (85.97).
Table 16

Cross-tabulation of Theoretical Framework and Music Therapist Roles

<table>
<thead>
<tr>
<th>With which psychological theory do you MOST align?</th>
<th>To provide music experiences to primarily facilitate a client-therapist relationship</th>
<th>To provide music experiences to primarily facilitate the client’s musical expression</th>
<th>To provide music experiences to primarily explore unconscious material</th>
<th>To provide music experiences to primarily facilitate behavioral changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic/Person-Centered Theory</td>
<td>37</td>
<td>12</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Cognitive-Behavioral Theory</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Psychodynamic Theory</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Music-Centered Theory</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>14</td>
<td>3</td>
<td>14</td>
</tr>
</tbody>
</table>

Note. Fisher’s exact test for count data: $p<.001$ (two-tailed test). The differences between the groups (cognitive-behavioral, humanistic/person-centered, psychodynamic theory) are significant.
### Table 17

**Cross-tabulation of Theoretical Framework and Music Therapist’s Client’s Roles**

<table>
<thead>
<tr>
<th>With which psychological theory do you MOST align?</th>
<th>In music therapy sessions, what do you MOST consider to be the role of the client?</th>
<th>To explore intra/interpersonal relationships</th>
<th>To follow the therapist’s directives</th>
<th>To explore unconscious material</th>
<th>To discover musical self</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic/Person-Centered Theory</td>
<td></td>
<td>37</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>57</td>
</tr>
<tr>
<td>Cognitive-Behavioral Theory</td>
<td></td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Psychodynamic Theory</td>
<td></td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Music-Centered Theory</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>42</td>
<td>9</td>
<td>6</td>
<td>14</td>
<td>71</td>
</tr>
</tbody>
</table>

*Note. Fisher’s exact test for count data: $p=0.01071$ (two-tailed test). The differences between the groups (cognitive-behavioral, humanistic/person-centered, psychodynamic theory) are significant.*
Table 18

**Cross-tabulation of Theoretical Framework and Role of Music**

<table>
<thead>
<tr>
<th>What do you consider to be the role of music?</th>
<th>A facilitator of interpersonal relationships</th>
<th>As a medium/facilitator for (self-expression)</th>
<th>As a facilitator to change behavior</th>
<th>As a facilitator to provide access to the unconscious</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic/Person-Centered Theory</td>
<td>9</td>
<td>38</td>
<td>7</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>Cognitive-Behavioral Theory</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Psychodynamic Theory</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Music-Centered Theory</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>44</td>
<td>12</td>
<td>4</td>
<td>71</td>
</tr>
</tbody>
</table>

Note. Fisher’s exact test for count data: p = 0.03889 (two-tailed test). The differences between the groups (cognitive-behavioral, humanistic/person-centered, psychodynamic theory) are significant.
**Table 19**

*Cross-tabulation of Theoretical Framework and Role of Verbalizations*

<table>
<thead>
<tr>
<th>With which psychological theory do you MOST align?</th>
<th>As a medium/facilitator of self-expression (e.g., music-making (e.g., verbalization to introduce a music experience))</th>
<th>As a facilitator to provide access to the unconscious (e.g., verbal directions/directions following a music experience)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic/Person-Centered Theory</td>
<td>8 36 7 6 57</td>
<td></td>
</tr>
<tr>
<td>Cognitive-Behavioral Theory</td>
<td>1 3 5 2 11</td>
<td></td>
</tr>
<tr>
<td>Psychodynamic Theory</td>
<td>0 1 0 1 2</td>
<td></td>
</tr>
<tr>
<td>Music-Centered Theory</td>
<td>0 1 0 0 1</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9 41 12 9 71</td>
<td></td>
</tr>
</tbody>
</table>

*Note. Fisher’s exact test for count data: \( p = 0.09862 \) (two-tailed test). The differences between the groups (cognitive-behavioral, humanistic/person-centered, psychodynamic theory, music-centered) are not significant.*
Table 20

*Cross-tabulation of Theoretical Framework and Most Critical Element of Therapeutic Process*

<table>
<thead>
<tr>
<th>With which psychological theory do you MOST align?</th>
<th>Therapeutic relationship</th>
<th>Verbal processing</th>
<th>Music-making</th>
<th>Goal attainment through metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic/Person-Centered Theory</td>
<td>49</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Cognitive-Behavioral Theory</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Psychodynamic Theory</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Music-Centered Theory</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>1</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note.* Fisher’s exact test for count data: $p = 0.5700$ (two-tailed test). The differences between the groups (cognitive-behavioral, humanistic/person-centered, psychodynamic theory, music-centered) are not significant.

Section 2 and Section 3

Responses to question 5 “With which psychological theory do you MOST align” were further compared to responses to questions 13 “What type(s) of music experiences did you MOST employ during music therapy sessions prior to COVID-19.” using cross-tabulation. Fisher’s exact test revealed that the differences between the groups and type of music experience before pandemic were not significant (see Table 21).
Table 21

*Differences between psychological theory and type of music experience before the pandemic*

<table>
<thead>
<tr>
<th>With which psychological theory do you MOST align? (Choose 1)</th>
<th>Receptive</th>
<th>Composition</th>
<th>CI</th>
<th>Re-C</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic/Person-Centered Theory</td>
<td>36</td>
<td>31</td>
<td>39</td>
<td>42</td>
<td>5</td>
</tr>
<tr>
<td>Cognitive-Behavioral Theory</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Psychodynamic Theory</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Music-Centered Theory</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>38</strong></td>
<td><strong>46</strong></td>
<td><strong>54</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

*Note.* Fisher’s exact test for count data: $p=0.8213$ (two-tailed test).

**Section 2 and Section 4**

Responses to question 5 “With which psychological theory do you MOST align” was compared to responses to questions 16 “What type(s) of music experiences did you MOST employ during music therapy sessions DURING COVID-19” using cross-tabulation. Fisher’s exact test revealed that the differences between the groups and type of music experience during the pandemic were not statistically significant (see Table 22); however, observational analysis revealed that the choice to employ clinical improvisation was most affected by telehealth, with 46 respondents reporting having employed clinical improvisation prior to the pandemic and only 20 respondents reporting having employed clinical improvisation during the pandemic.
Table 22

*Differences between psychological theory and type of music experience during the pandemic*

<table>
<thead>
<tr>
<th>With which psychological theory do you MOST align? (Choose 1)</th>
<th>Receptive</th>
<th>Composition</th>
<th>CI</th>
<th>Re-C</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanistic/Person-Centered Theory</td>
<td>40</td>
<td>27</td>
<td>18</td>
<td>36</td>
<td>5</td>
</tr>
<tr>
<td>Cognitive-Behavioral Theory</td>
<td>8</td>
<td>7</td>
<td>2</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Psychodynamic Theory</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Music-Centered Theory</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>35</td>
<td>20</td>
<td>47</td>
<td>6</td>
</tr>
</tbody>
</table>

*Note.* Fisher’s exact test for count data: $p=.9891$ (two-tailed test).

**Section 5**

**Paired Samples t-Test**

A paired samples $t$-test was used to compare the amount of “Very likely” and “Likely” responses reported in question 22, “If given the option, how likely are you to continue providing services EXCLUSIVELY via telehealth as opposed to in-person DURING a pandemic?,” with question 23, “If given the option, how likely are you to continue providing services via telehealth POST-pandemic?” This analysis was used to determine whether respondents answered significantly different in the “during” and “after” condition of the pandemic. The results for the paired samples $t$-test for the respondents showed that during the pandemic, respondents were significantly more likely to respond as “very likely” to continue telehealth ($M=2.46, SD=.508$) than after the pandemic ($M=2.18, SD=.390$), $t(27)= 2.828, p = .009$ (see Table 23 and Table 24).
### Table 23

**Paired Samples Statistics for Questions 22 and 23**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Very Likely” in Q22</td>
<td>2.4643</td>
<td>28</td>
<td>.50787</td>
<td>.09589</td>
</tr>
<tr>
<td>“Very Likely” in Q23</td>
<td>2.1786</td>
<td>28</td>
<td>.39002</td>
<td>.07371</td>
</tr>
</tbody>
</table>

### Table 24

**Paired Samples Test Differences for Questions 22 and 23**

<table>
<thead>
<tr>
<th>Paired Differences Mean</th>
<th>Std. Dev.</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair “Very Likely”</td>
<td>.28571</td>
<td>.53452</td>
<td>.10102</td>
<td>.07845</td>
<td>.49298</td>
<td>2.828</td>
<td>27</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

This research study sought to examine the impact of the transition to telehealth music therapy services as the primary delivery mode of treatment during the COVID-19 pandemic. The primary research questions guiding this study were:

- What, if any, impact to the therapeutic process has been realized by music therapists who were required to transition to conducting music therapy services via virtual platforms during COVID-19?
- What, if any, changes to the music therapists’ orientation, approach, or primary method of treatment occurred as a result of transitioning to conducting music therapy services via virtual platforms during COVID-19?
- How likely are music therapists to continue conducting music therapy through such virtual platforms post-pandemic?

Though not all survey responses were complete, there were several insights to be gleaned from the data provided in the incomplete surveys which have been incorporated as part of the complete findings within each section of the survey outlined below.

Demographics

Survey results indicate that the vast majority (96.67%) of music therapists providing services via telehealth have been practicing for fewer than five years. While participant age was not captured as part of this study, one possible explanation might be a correlation to age and the likelihood of newly certified therapists representing a younger demographic that is generally more comfortable with technology. Findings of Gaddy et al. (2020) support this theory as nearly half (47.07%) the respondents reported to fall in the age range of 25-34, indicating newly certified music therapists.
Most of the respondents (80%) reported holding bachelor’s degrees as their highest level of education which is consistent with the numbers of years in practice as most graduate-level and advanced training programs are completed by board certified music therapists already established in the field. While only two respondents reported having advanced clinical training in music therapy, some incongruence was noted as 18 respondents later reported having completed advanced clinical training in Nordoff-Robbins music therapy (CMT), neurologic music therapy (NMT), or the Bonny method of guided imagery and music (GIM), indicating some confusion surrounding the designation of advanced clinical training.

Regardless of training, nearly half (47.19%) reported working with children with developmental issues in early childhood. Again, nearly half (55.06%) reported working with children with Autism Spectrum Disorder suggesting higher demands among these populations given the fragility of ego-strength in children (Steele, 2011).

**Theoretical Orientation**

Most respondents (80.28%) reported alignment with humanistic/person-centered theory, possibly revealing a connection between times of crisis and the empathic principles that guide those who heed the call for help. In line with the tenets of humanistic/person-centered theory, those respondents placed emphasis on the therapist’s need to promote the client-therapist relationship, the client’s role in exploring intra/inter-personal relationships, the roles of music and verbalizations as forms of self-expression, and the therapeutic relationship as the cornerstone of the therapeutic process.

**Impact on the Therapeutic Process**

Addressing research question 1: What, if any, impact to the therapeutic process has been realized by music therapists who were required to transition to conducting music therapy
services via virtual platforms during COVID-19?, multiple insights can be gleaned from the survey results. Music therapists are well-versed at rapid adaption in the moment to address the ever-changing needs of a client (Aigen, 2014; AMTA, 2021); however, with respect to impact, most respondents overall reported a somewhat negative experience across the entire range of technological, clinical, and personal factors with relatively no impact to logistical factors including privacy, confidentiality, and administrative tasks such as scheduling. The somewhat negative reports concerning connectivity and audio/visual deficits when conducting telehealth echoed the findings of Spooner et al. (2019) who argued that even under the best technological conditions, the typical give-and-take dynamics between client and therapist in an in-person setting are compromised by the limitations of telehealth and information is bound to be missed. Interestingly, the technological factor most negatively impacted as reported by respondents (48.33%) was the ability to synchronize musically.

This is of particular interest relative to the types of music experiences reported to be offered by respondents and may account for the significant reduction of those who leveraged clinical improvisation during COVID-19. Supporting this theory as it pertains to clinical factors, the majority of respondents reported somewhat negative impacts to types of music experiences offered (71.67%), in-session client engagement (65%), and measurable outcomes (48.33%). The somewhat negative impact to in-session client engagement may be attributable not only to the experience of telehealth, but also to the negative effects of trauma being experienced by clients during the pandemic. These findings are supported by Wheeler’s (2015) reference to clients’ decreased ability to self-regulate when experiencing trauma.

Contrary to the somewhat negative impact reported among the majority of clinical factors, nearly half (51.67%) reported no impact to the therapeutic relationship. This is of critical
significance since most respondents (87.32%) reported therapeutic alliance to be a major component of therapeutic outcomes. Another possible explanation for the reports of lack of impact to the therapeutic relationship may be related to whether therapeutic alliance had already been established prior to the transition to telehealth, which was not specifically asked in the scope of this survey.

Examining responses to the personal impact on therapists, work/life balance was the factor reported by many (33.33%) to be very negative. This might be explained in part by the upheaval of societal norms due to conditions such as mandatory quarantine orders and the suddenness of the transition to telehealth. This is supported by the Gaddy et al. (2020) who posits that pandemics create “unpredictability, uncertainty, and overload” (p. 164). It may also be that music therapists felt unprepared for such a forced transition to telehealth with little to no prior experience or guidance. Further, more than half (53.33%) of the respondents reported a somewhat negative impact on their personal stress level that is consistent with the findings of Gaddy et al. (2020) who reported a higher than normative score on the 10-item Perceived Stress Scale (PSS-10) among survey respondents. Considering Aigen’s (2014) emphasis on the need for the therapist to be as authentic as possible, it stands to reason that heightened stress levels may have affected the overall clinical experience by interfering with the authenticity of therapeutic interaction.

To the extent that respondents reported the need to alter their approach to sessions, most (88.33%) indicated a need to alter the type of music experiences provided while the majority (68.33%) reported the need to alter therapeutic goals, and more than half (55%) found the need to alter session format. While it can be argued that the driving force behind the respondents’ need to alter a multitude of factors is the result of inexperience, the inherent flexibility of the
trained music therapist suggests the more probable cause lies within the myriad changes in
dynamics between both the music therapists and their clients in times of crisis. This underscores
the importance of therapeutic alliance as a therapeutic anchor in the cacophony of change and the
elusiveness of normalcy thrust upon clients in the upheaval of a pandemic.

**Changes to the Music Therapists’ Orientation, Approach, or Primary Method**

While not specifically asked whether participants’ theoretical orientation had changed as
a result of the transition to telehealth, several patterns emerged from the answers provided for
questions 17-21 which provide insight into research question 2: What, if any, changes to the
music therapists’ orientation, approach, or primary method of treatment occurred as a result of
the transitioning to conducting music therapy services via virtual platforms during COVID-19?

Specifically, the chi-square analyses applied to clinical practice prior to COVID-19 compared
against clinical practice during COVID-19 yielded several key points of significance. Most
notably, only 2% of the respondents reported having practiced telehealth *prior* to COVID-19 as
compared to the majority (64.3%) of respondents who reported practicing *during* COVID-19.

The dramatic shift is likely the result of state mandates which prohibited in-person
services for much of the music therapy community. The exceptions were hospitals and settings
with designated essential workers conditionally approved to continue such services accounting
for a modest (28.6%) number of respondents. A small percentage (17.1%) of respondents
reported a continuation of work in some capacity in school/facility settings and through
conducting home visits; likely through hospital and/or hospice affiliations to care for patients
unable to be safely transferred to a facility. Consistent with these findings was a significant
change in session composition during COVID-19 compared to prior to COVID-19 with in-person
dyad/group sessions dropping from 62.9% prior to COVID-19 down to 24.3% during COVID.
This shift in session composition was also noted in the findings of Gaddy et al. (2020) who reported a decrease from 38.93% to 24.97% in group services provided during the pandemic.

Although no statistical significance was found when comparing the types of music experiences offered prior to and during COVID-19, the data clearly indicates a significant reduction in the use of clinical improvisation with a drop from 65.7% utilization prior to COVID-19 down to a mere 28.6% utilization during COVID-19. There is a strong correlation to respondents’ reports on the very negative impact to their ability to synchronize musically with their clients over telehealth, a known drawback to telehealth service delivery.

**Likelihood of Continuation of Telehealth**

Given that the results clearly demonstrate an overall somewhat negative impact across most technological, clinical, and personal factors, survey findings yielded surprising data to address research question 3: How likely are music therapists to continue conducting music therapy through such virtual platforms post-pandemic?, with 63.9% of respondents reporting they were at least somewhat likely to continue providing telehealth services post-pandemic. This could be explained by the finding that the impact to therapeutic alliance was only minimally negative coupled with respondents’ reported emphasis on the importance of therapeutic alliance in relation to positive therapeutic outcomes. Another possibility is a perception that telehealth may be mandated by some settings even following the pandemic. Despite this surprising likelihood, the paired samples t-test demonstrates a sharp decline in the number of respondents (26.23%) who reported they were very likely to continue providing telehealth services during COVID-19 to only 9.84% post-pandemic. This may directly reflect the overall somewhat negative impact of telehealth reported by respondents. Alternatively, the findings may indicate a concern about exposure to the virus by prematurely returning to in-person service delivery. The
latter theory is supported by both the rapid rate of transmission associated with COVID-19 as well as findings of Gaddy et al. (2020) who note widespread concern among respondents for their personal health and safety.

The cross-tabulation analyses comparing the number of years in practice and the likelihood of continuing to conduct telehealth post-pandemic indicated no statistical significance, but this is likely attributable to the fact that such a high percentage (96.67%) of respondents fell into the same category. On the other hand, cross-tabulation analysis was found to be statistically significant when comparing populations served with likelihood of continuing to provide services via telehealth delivery both during and post-pandemic. Higher percentages of respondents serving children with developmental disabilities in early childhood (100%), individuals with Autism Spectrum Disorder (29.41%), and adolescents/adult mental health (38.46%) reported very likely to continue providing services via telehealth during COVID-19 compared to those serving medical/oncology (0%) and older adults/Hospice & Palliative care (6%) populations. These findings indicate the prevalence of essential workers in hospital settings who have continued to provide in-person care throughout the pandemic. Conversely, higher percentages of respondents serving children with developmental disabilities in early childhood (50%) and medical/oncology (33.33%) reported they were very likely to continue providing services via telehealth post-COVID-19 compared to those serving individuals with Autism Spectrum Disorder (6%), adolescents/adult mental health (8%), and older adults/Hospice & Palliative care (0%) populations.

Combining these findings, one possible explanation for the anticipated shift is that providers are realizing the value of offering telehealth services to extend patient reach despite the inconveniences but the value of in-person service delivery is simultaneously implied and
underscored by the limited percentage of respondents serving the Autism, mental health, and older adult/hospice & palliative care populations who intend to continue telehealth post-pandemic.
Conclusion

Summary

The results of this study provide an overview of the impact realized through the transition to telehealth during the COVID-19 pandemic. It is evident from the data that the majority of respondents experienced a somewhat negative impact to the therapeutic process with respect to the technology, clinical practice, and personal well-being. Participants also reported the need to alter many aspects of their services including approach to treatment and the therapeutic goals. The results indicate that despite these challenges, most respondents anticipate the continuation of telehealth delivery of services both during and post-pandemic.

Implications for Music Therapy Practice

The bevy of therapists willing and eager to adapt at such a rapid speed amidst a pandemic speaks to the flexible nature of music therapists; transcending experience, theoretical orientation, and populations served, giving credence to the field of music therapy as to its unique and indispensable value in times of crisis. Despite its innumerable drawbacks, the results of this study demonstrate that telehealth is a viable option on the continuum of healthcare and provides an opportunity to expand the reach of services to the broader community, particularly to those in need and without access to physical facilities. An essential component of the therapeutic process is ensuring the well-being of both client and therapist. To this end, the findings may enable those in supervisory roles to address the concerns most prevalent among music therapists in an effort to promote self-care and minimize burnout. While far from all encompassing, it is my hope that the findings will contribute to the edification of the music therapy community as it pertains to the benefits, challenges, and limitations of telehealth service delivery.
Limitations

One of the limitations of this study is that it relies on self-reporting with no way to validate participant responses or confirm accuracy of statements. Moreover, although participants were provided with an open comment section for several questions, the predominantly closed-ended question format may have provided unnecessarily limited response selection and may have subsequently neglected to capture statistically significant data such as theoretical orientations, hybrid clinical settings, and populations served. Another limitation is that this study yielded a relatively low response rate potentially impacting its generalizability. Further, the potential participant pool relied solely upon the accuracy of the CBMT distribution list, and no geographic or cultural data were gathered potentially leading to a skewed representation of the music therapy industry. This survey study is the first known of its kind to examine the impact of COVID-19 on therapeutic processes, orientation, and routines of music therapists therefore, additional topical areas may need to be considered in order for the response data to be generalizable across the industry.

Future Research

The full impact of COVID-19 has yet to be fully understood and current research is ongoing but remains limited. This study sampled board certified music therapists currently practicing in the United States but since COVID-19 affected the global community, data from music therapists around the world would likely contribute to the broader needs of the industry. While it was beyond the scope of this study to provide in-depth analysis of technology platforms, programs, and accessories utilized by the respondents during their telehealth sessions, future research is warranted to better define best practices and promote industry standardization. Based upon the results of this study, additional research foci should include the impact over time and
the exploration of specific service delivery platforms utilized during COVID-19. Investigation into the specific music therapy techniques and protocols used when conducting telehealth is needed to aid in the formulation of effective treatment plans. Qualitative research that examines therapists’ own lived experiences with trauma and other negative aspects of their personal lives during the pandemic is also needed to fully appreciate the potential impact on the therapeutic process in the form of transference and/or countertransference.

To better understand the full impact of the transition, it would also be beneficial to glean further insights into the reasons behind respondents’ likelihood of the continuing telehealth delivery of services post-pandemic. A comparison of the results of this study against the results of similar studies conducted among healthcare professionals may also promote an interdisciplinary approach leading to more innovative patient care.
References


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APPENDIX A – IRB APPROVAL

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Kathleen Maurer Smith, Ph.D.
Dean, Graduate Academic Affairs
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DATE: December 1, 2020

TO: Brianne Brunick
FROM: Molloy College IRB

PROJECT TITLE: [1689716-1] The Role of Telehealth in Music Therapy Practice During the COVID-19 Global Pandemic Through the Lens of the Music Therapist: A Survey

REFERENCE #: New Project

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: December 1, 2020

REVIEW CATEGORY: Exemption category # 2

Thank you for your submission of New Project materials for this project. The Molloy College IRB has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations. However, exempt research activities are subject to the same human subject protections and ethical standards as outlined in the Belmont Report. This acknowledgement expires within three years- unless there is a change to the protocol.

Though this protocol does not require annual IRB review, the IRB requires an annual report of your exempt protocol (Expeditd and Exempt Research Protocol Annual Report Form) which is available on the IRB webpage.

If there is a proposed change to the protocol, it is the responsibility of the Principal Investigator to inform the Molloy College IRB of any requested changes before implementation. A change in the research may change the project from EXEMPT status and requires prior communication with the IRB.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact Patricia Eckardt at 516-323-3711 or peckardt@molloy.edu. Please include your project title and reference number in all correspondence with this committee.

Sincerely,

Patricia Eckardt, Ph.D., RN, FAAN
Chair, Molloy College Institutional Review Board

This letter has been issued in accordance with all applicable regulations, and a copy is retained within Molloy College IRB's records.
APPENDIX B – INVITATIONAL EMAIL / CONSENT FORM

Dear Board-Certified Music Therapist,

My name is Brianne Brunick, and I am a Music Therapy Master’s Degree student at Molloy College. As part of my degree requirement, I am conducting a survey study related to music therapy and telehealth during the COVID-19 pandemic in order to identify and inform the profession of music therapy, its practitioners, and its professional coworkers.

This study will be surveying board-certified music therapists to better understand the impact of the transition to telehealth delivery services during the COVID-19 Pandemic. You are eligible to participate if you 1) are at least 18 years old, 2) are a board-certified music therapist, 3) have practiced music therapy as a credentialed music therapist for a minimum of two years prior to the COVID-19 pandemic, 4) have administered music therapy via telehealth for a minimum of six weeks during the COVID-19 pandemic, and 5) are fluent in the English language. You will be asked to provide responses to survey questions related to your and your clients’ demographics, your theoretical orientation, clinical practice prior to and during COVID-19, and your views on the impact of telehealth. It is estimated that the survey will take the average participant no more than 8-10 minutes.

Your participation is completely voluntary. You will be under no obligation to complete the survey and will be provided the option to withdraw at any point in the study. Survey responses will not be associated with names, email addresses, or any other identifying information. There are no perceived risks or discomforts associated with participation in the study.

If you meet eligibility requirements and would like to participate in the study, please answer the first question below to gain access to the complete survey. By completing the survey, you consent to participate in this study.

If you would like to request additional information regarding this study before, during, or after its completion, you may contact me directly by email at bbrunick@lions.molloy.edu

Sincerely,

Brianne Brunick
Principal Investigator
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Department of Music Therapy
1000 Hempstead Turnpike
Rockville Centre, NY
bbrunick@lions.molloy.edu

Dr. John Carpente
Thesis Advisor
Molloy College
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jcarpente@molloy.edu
This is a friendly reminder about a survey in which you were recently invited to participate. If you've already completed the survey, thank you! If not, we'd really appreciate your participation. The survey will be closing January 29th.

Dear Board-Certified Music Therapist,

My name is Brianne Brunick, and I am a Music Therapy Master’s Degree student at Molloy College. As part of my degree requirement, I am conducting a survey study related to music therapy and telehealth during the COVID-19 pandemic in order to identify and inform the profession of music therapy, its practitioners, and its professional coworkers.

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Sincerely,

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APPENDIX D – SURVEY INSTRUMENT

SECTION 1: Demographics
1. How long have you been practicing as a Board-Certified Music Therapist?
   - 5-10 years
   - 10-15 years
   - 15-20 years
   - More than 20 years

2. What is your highest level of education?
   - Bachelor’s degree in MT
   - Master’s degree in MT
   - Doctorate degree in MT
   - Advanced clinical training in MT

3. Have you completed any of the following advanced clinical trainings? (Check all that apply.)
   - Nordoff-Robbins Music Therapy (CMT)
   - Analytical Music Therapy (AMT)
   - Neurologic Music Therapy (NMT)
   - The Bonny Method of Guided Imagery and Music (GIM)
   - N/A

4. Rate the frequency with which you currently serve each of the following populations:
   (On a Likert scale of Never to Very Often)
   - Children with developmental issues in early childhood
   - Children with Autism Spectrum Disorder
   - Adolescents/Adult mental health
   - Medical/Oncology/NICU
   - Older adults/Hospice & Palliative Care/Bereavement
   - Other (please specify)

SECTION 2: Theoretical Orientation
5. Which psychological theory do you MOST align with? (Choose 1)
   - Humanistic/Person-Centered Theory
   - Cognitive-Behavioral Theory
   - Psychodynamic Theory
   - Music-Centered Theory

6. In music therapy sessions, what do you MOST consider to be the role of the music therapist? (Choose 1)
   - To provide music experiences to primarily facilitate a client-therapist relationship.
   - To provide music experiences to primarily facilitate the client’s musical expression.
   - To provide music experiences to primarily explore unconscious material.
• To provide music experiences to primarily facilitate behavioral changes.

7. In music therapy sessions, what do you MOST consider to be the role of the client?
   (Choose 1)
   • To explore intra/inter-personal relationships
   • To follow the therapist’s directives
   • To explore unconscious material
   • To discover musical self

8. In music therapy sessions, what do you MOST consider to be the role of the music?
   (Choose 1)
   • A facilitator of interpersonal relationships
   • As a medium/facilitator for (self-expression)
   • As a facilitator to change behavior
   • As a facilitator to provide access to the unconscious

9. In music therapy sessions, what do you MOST consider to be the role of verbalizations?
   (Choose 1)
   • To facilitate music-making (e.g., to introduce a music experience)
   • As a medium/facilitator of self-expression (e.g., verbalizations as part of a music experience)
   • To facilitate changes in behavior (e.g., verbal directions/directives)
   • As a facilitator to provide access to the unconscious (e.g., verbal processing following a music experience)

10. What do you feel is the MOST critical element of the therapeutic process? (Choose 1)
    • Therapeutic relationship
    • Verbal processing
    • Music-making
    • Goal attainment through metrics

SECTION 3: Clinical Practice PRIOR TO COVID-19

11. In which setting did you MOST practice PRE-COVID? (Choose 1)
    • Private Practice
    • School/Facility
    • Home Visits
    • Hospital

12. Which session format did you MOST utilize for music therapy sessions PRE-COVID?
    (Choose 1)
    • In-person (individual)
    • In-person (dyad or group)
    • Telehealth (individual)
    • Telehealth (dyad or group)

13. What type of music experiences did you MOST employ during music therapy sessions PRE-COVID? (Choose 1)
- Receptive (e.g., music listening)
- Compositional (e.g., songwriting)
- Clinical Improvisation (e.g., spontaneous music-making)
- Re-Creative (e.g., working with pre-composed songs)

SECTION 4: Clinical Practice DURING COVID-19
14. In which setting did you MOST practice DURING COVID? (Choose 1)
   - Private Practice
   - School/Facility
   - Home Visits
   - Hospital
15. Which session format did you MOST utilize for music therapy sessions DURING COVID? (Choose 1)
   - In-person (individual)
   - In-person (dyad or group)
   - Telehealth (individual)
   - Telehealth (dyad or group)
16. What type of music experiences did you MOST employ during music therapy sessions DURING COVID? (Choose 1)
   - Receptive (e.g., music listening)
   - Compositional (e.g., songwriting)
   - Clinical Improvisation (e.g., spontaneous music-making)
   - Re-Creative (e.g., working with pre-composed songs)

SECTION 5: Potential Impact of Telehealth
17. Rate the impact on each of the following factors resulting from the transition to telehealth delivery of services during COVID-19 (On a Likert scale from Very Negative to Very Positive)
   - Clarity of audio interaction during sessions (e.g., ability to hear what client/therapist is saying/singing/vocalizing)
   - Clarity of visual interaction during sessions (e.g., ability to see what client/therapist is doing)
   - Ability to synchronize musically.
   - Stability of internet connection
18. Rate the degree to which each of the following logistical factors has been impacted resulting from the transition to telehealth delivery of services during COVID-19 (On a Likert scale from Very Negative to Very Positive)
   - Your ability to schedule sessions.
   - Your Privacy (e.g., environmental conditions such as interruptions)
   - Your ability to collect and process paperwork (e.g., billing, payment, obtaining consent and release forms)
- Your ability to protect the client’s confidentiality.

19. Rate the impact on each of the following clinical factors resulting from the transition to telehealth delivery of services during COVID-19 (On a Likert scale from *Very Negative* to *Very Positive*)
   - Types of music experiences offered.
   - Therapeutic relationship
   - In-session client engagement
   - Measurable outcomes

20. Rate the personal impact to you as a therapist on each of the following resulting from the transition to telehealth delivery of services during COVID-19 (On a Likert scale from *Very Negative* to *Very Positive*)
   - Stress level
   - Empathy
   - Physical fatigue
   - Work/life balance

21. As a result of the transition to telehealth, have you found the need to alter any of the following? (Check all that apply)
   - Session format (Individual/Dyad/Group)
   - Your role as a therapist
   - The type of music experiences provided.
   - Therapeutic goals (e.g., therapeutic relationship, verbal processing, music-making, goal attainment through metrics)

**SECTION 6: Future of Telehealth**

22. If given the option, how likely are you to continue providing services EXCLUSIVELY via telehealth as opposed to in-person DURING a pandemic (On a Likert scale from *Not Likely* to *Very Likely*)

23. If given the option, how likely are you to continue providing services via telehealth POST-pandemic? (On a Likert scale from *Not Likely* to *Very Likely*)