Music-Centered Music Therapy Interventions with the Viola

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ABSTRACT

This research involved the creation of music therapy interventions making use of the viola within a music-centered music therapy framework. The researcher elaborates on her background and experience using the viola as her primary instrument, which contributes to the design of four separate interventions. The literature review reveals that there are a number of music therapists who have evaluated the use of their primary instrument in a self-reflexive manner; these accounts were used to further examine the importance of using one's own musicality and create a guideline for the use of viola. The music-centered music therapy orientation as conceptualized by Kenneth Aigen is summarized and supports the ideas regarding the aesthetic qualities and how they influence clinical goals. The interventions developed included using the viola for improvisation, receptive listening, conducting, and movement to music. Steps were described within each intervention in order for other music therapists to be able to follow and replicate them as easily as possible. Considerations to be aware of before implementing each intervention are discussed, such as assessment and evaluation information for clients, as well as indications and contraindications that may emerge. While the research served to create the interventions from a music-centered perspective based on past studies on one's primary instrument in music therapy, the interventions were not tested. Future research that could test these interventions would be beneficial for the growth of knowledge within this field, particularly by music therapists who can provide a different viewpoint and perspective.

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Chapter 1. Introduction

When working with clients, music therapists may make use of their skills to provide the best clinical guidance possible, but do they lose their sense of personal musicianship in the process? This may depend on the music therapist's primary instrument. In a survey of 249 music therapists, Angela Voyajolu (2009) found that an orchestral string instrument was the primary instrument of 5.6% of respondents, and 57.1% of those string players had not used their instrument in clinical music therapy work in the past year. One reason for this could be a gap in current music therapy training for students who use orchestral instruments (Oldfield, 2015).

Addressing this gap may have significant implications for practice; a recent music therapy publication entitled, "Flute, Accordion or Clarinet? Using the Characteristics of Our Instruments in Music Therapy" advocates for therapists' use of their primary instruments because of the meaningful relationships they have with them, which could offer therapeutic benefits (Loombe, Rodgers, Tomlinson, & Oldfield, 2015). In one chapter, authors Angela Harrison and Oonagh Jones (2015) share case vignettes involving their use of the viola to achieve clinical goals with clients. In another publication, Jones (2004) argues that the music created from one's primary instrument has a significant impact on the development of trust and connection in the therapeutic relationship because the therapist's use of her/his own musical identity is an authentic sharing and use of self (Jones, 2004).

However, even with this information in mind, there may not be sufficient resources for music therapists to know how to implement their own musical identity in practice. Although several publications, including books, articles, and theses, have been written about how to use such instruments in therapy as voice (Baker & Uhlig, 2011), piano (Gilboa, Zilberberg, & Lavi, 2011), guitar (Soshensky, 2005), and percussion (Bell, 2016), very little has been written to date in terms of the use of viola or other orchestral string instruments. What has been written consists of considerations for clinical practice based on the personal experiences of practitioners, such as resources for improvisation and musical technique (Lee, Berends, & Pun, 2015; Matsumura-McKee, 2010), or descriptions of the use by prominent music therapists such as Helen Bonny, Tony Wigram, and Juliette Alvin of their primary instruments (Odell-Miller, 2011; Stige, 2000;

Vaux, 2010). However, none of these publications describe any specific music therapy interventions that use orchestral string instruments. Nor is there reference to the impact, if any, of instrumentation in clinical practice? One study found that, while listening to recorded music resulted in significant changes in anxiety reduction on university music students, the instrumentation of the piece of music did not affect levels of anxiety (Matney, 2017). From a music-centered theoretical perspective, the viola can be seen to provide a unique aesthetic experience in music therapy, which may resonate with particular clients and thus may have a unique influence on therapeutic processes and outcomes (Aigen, 2008).

An examination of how the viola is used in various performance settings and a re-conceptualization of these techniques to be applied within a music-centered model of music therapy practice could be useful for music therapists who play the viola. It could provide them guidance in expanding their use of the viola (and other orchestral string instruments) in their own practice.

Researcher-Student Stance

My inspiration and passion for the practice of music therapy is largely grounded in my belief that the therapist's use of musical self is an important part of the music therapy process, as noted earlier. This belief aligns with elements of a music-centered approach to music therapy where the therapeutic relationship is conceptualized as a mutual and equal musical relationship between therapist and client, and the relationship is "mediated by musical factors" (Aigen, 2005, p. 71). I believe that my philosophical stance and musical background, in combination with information from the literature, can be combined to develop unique and creative music therapy interventions that can be applied to practice and future research.

As well, by drawing from my own practical experiences as a musician who has focused on viola performance for over 15 years and a music therapy intern who has worked in pre-professional and advanced internship settings, I may be able to conduct a study that through its process and/or results, could contain elements of transferability that other music therapists may use to develop their own interventions with "nontraditional"

music therapy instruments (i.e., instruments other than piano, voice, guitar, and percussion).

Assumptions

I assume that the music therapist's musical identity and primary instrument are important tools for achieving clinical goals; that potential clients in the future might be open to receiving these interventions; and that music therapists might be interested in incorporating these interventions and/or the concepts underlying the development of these interventions into their practices.

Purpose Statement

The purpose of this research was to design music therapy interventions that utilize the viola within a music-centered theoretical framework. This focus on the use of the viola in a music therapy context arose out of the significant role this instrument played in my emerging identity as a new music therapist. The intent was also to provide a model to support other music therapists in considering ways they could use their own primary instrument in clinical work.

Key Terms

Music-Centered Music Therapy is defined as an approach to music therapy practice in which music plays a necessary role in the therapeutic experience, rather than one that is auxiliary to non-musical concepts (Aigen, 2014). *Intervention* is defined as the "explicit practice [of] principles, goals, and activities" (Fraser & Galinsky, 2010, p. 459). *Music Therapy Interventions* are defined as intentional musical experiences that elicit responses from the client in order to achieve therapeutic goals (Aigen, 2014).

Chapter Outline

Chapter 1 identifies the purpose of this research and summarizes the intent of the research, along with identifying key terms, the researcher's stance, and assumptions that are inherent in the research. Chapter 2 examines the relevant literature used to provide the data for integration into the research process, and establishes the research questions based

on the literature review. Chapter 3 describes the intervention design methodology used to answer the research question. Chapter 4 details the results, including the development of the interventions and steps for their potential implementation. Chapter 5 discusses the research findings, limitations, and potential implications for future research and practice.

Chapter 2. Literature Review

This literature review looks at music therapy literature related to the use of the therapist's primary instrument in music therapy practice, with a particular focus on the viola. Main areas include an overview of the theoretical foundation used for this research, prominent music therapists and their primary instruments, and the use of the viola as well as other string, wind, keyboard, and percussion instruments in music therapy.

Music-Centered Music Therapy

To better understand why it is important for music therapists to use their primary instruments, this research uses the framework of music-centered music therapy, which puts the therapist's musicianship front and centre. The idea of music as the main component in the therapeutic process, which can be seen in opposition to a primary focus on clinical goals, is seen across time and across many different approaches, including such early models as Nordoff-Robbins Creative music therapy and The Bonny Method Guided Imagery and Music (GIM); this is further elaborated on within Bruscia's concept of *music as therapy* (Aigen, 2005).

However, Kenneth Aigen, with his 2005 book *Music-Centered Music Therapy,* became the champion for a new model where music therapists consider the music used in interventions with even greater detail, and where the music is far more than simply complementary to other therapeutic techniques (Aigen, 2005). A music therapist working within this standpoint may allow the musical process to speak for itself, rather than elaborating on it with verbal discussion; however, this does not mean that the client's personal or sociocultural context should not also be taken into consideration (Aigen, 2005). In addition, what makes this framework particularly unique is its stance on the music therapist's use of musical self, acknowledging, "… Some music therapists are musicians who work in therapeutic contexts to bring the inherent benefits of musical and musically-based experiences, rather than therapists who use music as a tool to achieve goals that are not specific or unique to music" (Aigen, 2005, pp. 107-108). With this in mind, the literature can be reviewed with an eye to how each instrument's inherent benefits contribute to the client's journey through music therapy.

Prominent Music Therapists and Their Primary Instruments

While music therapy training in general tends to focus more on instruments such as guitar, piano, and percussion, there are prominent practitioners who entered the field of music therapy with a different primary instrument. It is known that, before contributing to music therapy work and research at Anglia Ruskin University, Tony Wigram (1953-2011) played piano and viola skillfully, even acting as a member in the Apollo Symphony Orchestra (Odell-Miller, 2011).

Another noteworthy music therapist is Helen Bonny (1921-2010), who attended Oberlin Conservatory majoring in violin performance before developing her pivotal GIM; she remained a performing musician throughout her career and life (Vaux, 2010). Juliette Alvin's primary instrument was the cello. She notably did have many other instruments at her disposal, such as the piano, guitar, and flute, and chose which was most appropriate in the moment (Stige, 2000). More recently, Amelia Oldfield has been known for her use of the clarinet in sessions with children to achieve clinical goals, such as improvement of communication skills (Oldfield, 2011).

While these music therapists do serve as models for what is possible for music therapists with non-traditional primary instruments, they have not written specifically about their personal experiences with these instruments. Making this information available to others may help them benefit from guidance to know how their practice could be adjusted accordingly. The following section explores/discusses examples of research that has done so.

Use of the Viola in Music Therapy

Research concerning the use of the therapist's primary instrument in music therapy has been limited to a degree, with a few notable publications. A recent collaboration between practitioners within the United Kingdom (UK) showcases a collection of personal accounts and case vignettes that detail how each instrument can be used for unique purposes (Loombe, Rodgers, Tomlinson, & Oldfield, 2015). Another recent publication includes chapters by Canadian music therapists addressing the use of their primary instrument in practice, including improvisational resources and repertoire

for practicing (Lee, Berends, & Pun, 2015). Others have written about techniques and resources for using the voice as a primary instrument in music therapy practice (Baker & Uhlig, 2011), and how the human voice can convey emotion and behaviour when manipulated with proper awareness and training (Uhlig, 2009).

While all these accounts describe positive interactions when using a variety of instruments, one study of 249 music therapists in the United States (U.S.) shows that the majority of those therapists who play orchestral instruments such as strings, woodwinds, and brass had not used their instrument in their practice in the past year (Voyajolu, 2009). This might indicate that professionals need more resources to allow them to use their primary instruments more effectively. By contrast, an online survey of 107 music therapists working in Israel was recently conducted by Wiess, Dassa, & Gilboa (2017). They found that 4.2% of music therapists who had been working for more than 8 years considered a string instrument their secondary instrument compared to 5.2% of music therapists who had been working for less than 8 years and considered a string instrument their primary instrument (Wiess, Dassa, & Gilboa, 2017). A possible interpretation of this data is that within the context of Israel, newer professionals might be more open to using instruments other than the conventional piano, guitar, and voice as their primary instrument.

Bonnie Brittain (2013), in an analysis of music recordings from her own music therapy sessions playing the viola, observes how different playing techniques and musical styles might evoke a wide range of feelings. She also details in a further publication how to use and practice different styles on the viola, such as using Baroque and Folk music (Brittain, 2015). Additionally, Oonagh Jones (2004) addresses this topic in her master's dissertation, arguing that the music created from one's primary instrument has a significant impact on the development of trust and connection in the therapeutic relationship. Jones and her colleague, Angela Harrison, also describe how the viola evokes qualities of the human voice, like the violin, but describe its sound as more melancholic; they note that its role as an accompanying instrument in orchestral music makes it suitable for weaving in and out of melodies to provide depth and support (Harrison & Jones, 2015). While these findings provide intriguing insight into how the

viola may be used, there appears to be no research that expands or builds on these findings.

When focusing on my own primary instrument, I found only a few music therapists who have written on their use of the viola in music therapy. In light of this paucity of viola-specific literature and with the intention of getting a larger picture of music therapists' understanding of the importance of their instruments, what follows is a broader review of the literature which addresses the use of other string, wind, keyboard, and percussion instruments.

String Instruments

While there has been little research specifically focused on the use of string instruments in music therapy, there have been more music therapists describing their personal experiences with these instruments in recent years. One paper details the process of analyzing listeners' interpretation of techniques played on the violin, which informed the researcher's understanding of the listeners' experiences and influenced her use of her own instrument (Matsumura-McKee, 2010a). The same researcher also pursues a process of critical self-reflection concerning the violin and its representation of power and privilege; she encourages other music therapists to utilize this same process of critical self-reflection through a sociocultural lens (Matsumura-McKee, 2010b). Matsumura-McKee further details the use of articulation, textural changes, and accompanying figures with the violin in clinical work (Matsumura-McKee, 2015). Other music therapists who have written about the use of the violin emphasize the instrument's potential as a tool for encouraging movement, eliciting vocalizations, and representing vulnerability (Bell, Haire, Montague, & Warnes, 2015). These researchers make a strong case that the violin is an instrument with unique features that can have significant implications when used clinically.

Building on these ideas, similar points are seen with lower strings. Sarah Kroeker (2015) notes that the cello is an ideal instrument for utilizing grounding structure through basso continuo or ostinato (Kroeker, 2015). Elaborating on other uses for the cello in music therapy, Hughes, Tyhurst, Warner, and Watson (2015) identify the wide range and

quality of sounds on the cello, but cite challenges related to portability when considering whether to use it in sessions (Hughes, Tyhurst, Warner, & Watson, 2015).

As with the grounding qualities of the cello, the double bass in music therapy can provide a strong pulse when used in Jazz or Latin walking basslines and grooves (Wan, 2015). Speaking from their experiences, Joseph Piccinnini, Paolo Pizziolo, and John Preston (2015) note that clients and therapists can be drawn to the vibrations and low notes produced by the double bass and bass guitar. Their perception as "cool" instruments can also be motivating. Coming from another string family, the harp is a clearly soothing and relaxing instrument for clients; it may also be overpowering due to its size and range (Gottlieb, Lockett, & Mentzer, 2015). Contrasting the grounding grooves of the cello and bass with the more vocal qualities of the violin, as well as the calming qualities of the harp, it is apparent that corresponding interventions could be different with these instruments and thus used to achieve different goals.

Having explored those string instruments that may be more nonconventional, it is important next to discuss the use of some more commonly-used instruments in music therapy. Guitar seems to be a popular choice for music therapists to use because of the client's preference for this instrument, as seen particularly with adults (Krout, 2007). In a case study, one researcher describes use the guitar's unique characteristics in Nordoff-Robbins music therapy, an approach known for being primarily piano-based (Soshensky, 2005). This provides an example that music therapists might use to adapt approaches to better suit the needs of their primary instrument. Others who use the guitar in their work credit the acoustic guitar's resiliency, portability, versatility, and flexibility in terms of different tunings as qualities that make it an ideal accompanying instrument for singing; they also highlight the calming effect of the classical guitar (Lyons, Poole, Long, Street, & Stylianou, 2015). While these string instruments may have some similar characteristics, such as ease of accompanying clients, they clearly have their own unique uses, as seen in the literature.

Wind Instruments

While there is even less research on the use of wind instruments in music therapy than with string instruments, what is available seems to demonstrate a wide range of

possibilities. Schenstead (2009) makes use of a heuristic arts-based approach to identify personal experiences of improvisation on the flute. In identifying specific qualities of the flute for use in music therapy, its extension of the voice and use of breath is emphasized by other flutists (Anderson, Austin, Corke, Fearn, Mitchell, & Tomlinson, 2015). However, some practical considerations should be noted such as the importance and difficulty of maintaining evenness of tone when breathing and switching registers (Lepnik, 2015). Such factors should be considered by therapists in choosing to use their primary instrument.

In a detailed case study analysis, Berends (2014) concludes that the use of oboe and English horn in sessions can be powerful, but practitioners must always use a critical listening ear. While Berends observes that the oboe has a much focused sound that can bring considerable energy to sessions, the volume level and quality of the reed are important to keep in mind (Berends, 2015). However, others note that when used appropriately, the oboe can easily express and reflect feelings of sorrow or anxiety (Bettany, Dickinson, & Knoll, 2015).

Although in a similar family to the oboe, the clarinet is more able to evoke feelings related to reminiscence, relaxation, and safety (Lee & Cheung, 2015). Researchers also reference the clarinet's playfulness, as seen in its ability to elicit responses through such special effects as glissandi, note bends, and squeaks (Dunn, Oldfield, Piears-Banton, & Salkeld, 2015).

Another reed instrument that can produce breathy sounds and a range of tone colours, the bassoon can enhance the therapeutic relationship through its warmth and richness (Birnstingl, Margetts, Burley, & Watts, 2015). While these woodwind instruments may evoke memories or feelings within Western art music, they may also be used with a variety of musical styles. Those who use the saxophone also reference elements of "coolness" when using Jazz improvisation techniques and versatility of sounds, but go further in describing its sensory nature due to the bell and keys, and elaborating on issues related to reeds and hygiene (Annesley, Crociani, Davidson, & Vaz, 2015). Hence, the structural similarities of woodwind instruments are juxtaposed against their practical and timbral differences.

Within the family of brass instruments, the trumpet and flugelhorn also have vocal qualities, versatility, and visual appeal, but further represent self-assurance through a powerful sound and stance when played (Derrington, Gilroy, Hason, & Tomaino, 2015). With its loud presence and chromatic slide, the trombone can bring humour to sessions like the clarinet, but can also bring warmth to clients when played melodically and legato (Allen, 2015). Other lower brass instruments, such as the euphonium, can provide stimulation through vibrations, and also reflect feelings of anger through very full and loud sounds (Aasgaard, Murray, & Mottram, 2015). While the reviewed literature identifies challenges for the use of wind instruments in music therapy, especially related to portability or hygiene, it is clear that the novelty of each one and the intentional use of breath could be quite meaningful for clients.

Keyboard and Percussion Instruments

While piano and a variety of percussion instruments are widely used in music therapy today, it is important to note why we do so and how we can use them to their best advantage. One study took a phenomenological perspective to examine music therapists' perceptions of the "musical personality" (Gilboa, Zilberberg, & Lavi, 2011, p. 138) of the piano, taking their personal and clinical experiences into account, and found that there were mixed feelings, including strong positive or negative reactions as well as ambivalent reactions (Gilboa, Zilberberg, & Lavi, 2011). This could indicate that one's relationship with a musical instrument may be indicative of or dependent on previous experiences, an important consideration for music therapists.

In terms of the accordion family, the bellows can mimic breath and produce strong vibrations similar to wind instruments, but the mechanisms can also be quite percussive while providing dynamic range and full harmonic accompaniment (Greenhalgh, Loombe, Powell, Santilly, & Ward-Bergeman, 2015). Even having played an instrument for an extended period of time, one's relationship may change with it as their musical identity evolves. A music therapist who also is an orchestral marimba player consulted the literature to determine possible clinical implications and how to draw from experiences as a performer, and found that the marimba's distinctive resonant qualities can be very effective in a therapeutic context (Sun, 2012). In other writings, Sun

also described her use of keyboard percussion like the marimba and xylophone to produce a large variety of sounds, depending on the register and mallets (Sun, 2015). Although these instruments may have similarities in technique and theory, their aesthetic qualities are widely varied, opening up a number of possibilities for interventions.

When using percussion instruments, it is important to also acknowledge instruments outside of the Western music framework. Loth (2006) notes that Gamelan music can be significant for those involved in a number of ways, such as communicating within a group, learning to play together without a conductor, and understanding the role of each instrument. Sumrongthong and Aksaranukraw (2004) adapted a Japanese Akaboshi method of music therapy that targets hand moving, breathing, and rhythmic skills, instead using Thai musical instruments to address rehabilitation, which proved to be difficult due to their size and weight. It appears that when using keyboard or percussion instruments, physical limitations of the instruments used are especially important to keep in mind when working with clients.

Summary

As the literature review highlights, musical instruments that are used in music therapy should be critically considered based on such factors as their portability, versatility, range, tone colours, and ability to accompany clients. Similarities to the human voice, use of breath, and sensory elements such as vibrations also seem to be important. Most importantly, much of the research reviewed discussed the impact of music therapists using their primary instrument and how it enabled better musical mastery, use of self, and ease of connection with clients, encouraging others to do the same when appropriate (Berends, 2014; Brittain, 2013; Jones, 2004; Lee et al., 2015; Loombe et al., 2015; Schenstead, 2009; Soshensky, 2005; Sun, 2012; Voyajolu, 2009).

Since music therapists often enter the profession as a result of a strong belief in the power of music as a motivator, it seems that they should heed their own advice and allow themselves to bring their unique musicianship to sessions and use it as a tool for clinical work. In addition, when using instruments with which they are not most comfortable, it may be beneficial to have music therapy literature available to consult in order to determine how each can best be used. This way, they can provide the best

experiences possible for their clients. Furthermore, the implementation of in-depth research regarding ways that interventions can be developed related to orchestral and non-traditional primary instruments may help professionals to deepen their practice.

In relation to this research, by looking at how other music therapists have used their primary instrument most effectively, I can find parallels to using my own primary instrument and apply them to developing music therapy interventions using the viola. Because the case is made for using one's own musicality and applying the aesthetic qualities of one's primary instrument to clinical goals, particularly within a music-centered music therapy framework, I can take my own unique experiences with the viola and use them to expand on past research to create a specific set of guidelines that other music therapists can follow.

Research Questions

In light of the findings of the literature review, the following questions were established:

Primary research question. What music therapy interventions using the viola can be developed for use within a music-centered theoretical approach to music therapy?

Subsidiary research question. What population(s) might be appropriate for use of these viola-based music therapy interventions?

Chapter 3. Methodology

Intervention Research Design

This study used a modified version of intervention design research (Fraser & Galinsky, 2010). Intervention research is the study and implementation of strategies to change practice (Fraser & Galinsky, 2010). The Fraser and Galinsky 5-step model of intervention research involves: 1) developing problem and program theories; 2) designing program materials and measures; 3) refining program components through testing; 4) testing the effectiveness in practice; and 5) disseminating program findings and materials (Fraser & Galinsky, 2010, p. 459). These steps allow for continuous refinement of a treatment manual that is reliable (Fraser & Galinsky). This design was deemed to be an appropriate choice for this study because it provides an established and tested framework to create thoughtfully-designed interventions that build upon existing research about music-centered use of instruments. There are examples in the research literature of music therapists who have used this design for similar means, in order to create practical resources that future music therapists could utilize or adapt to address clinical needs (Adout, 2016; Barbieri, 2015; Goldscheid, 2016). Similar to these previous studies, this current research used only the first two steps of this intervention model. The identification of problems and development of a program theory was accomplished through examination and analysis of related literature. This involved the setting, population, and the function of the viola in the music therapy environment. Following this step, interventions were defined in terms of criteria, goals, protective factors, and risks. Sufficient information about how to implement interventions was detailed so that other professionals in the field would be able to pilot test them should they so choose. However, testing in practice settings was not included in this research given the limitations in scope and time of a master's thesis. Materials used included relevant literature and the researcher's own experiences of using her viola in performance and clinical contexts. Because of the methodology chosen, there were no participants in this study. However, the researcher did refer to and draw from her own clinical knowledge and experience.

Data Collection Procedures

Relevant sources of data were gathered using online databases through the Concordia University Library system. Databases include Google Scholar, Discovery Search, EBSCO, Colombo Inter-Library Loans, and Spectrum Research Repository. Literature used included articles from peer-reviewed journals, published books, theses, and dissertations. Literature was found by searching key terms, including "music therapy", "viola", "orchestral instruments", and "primary instrument". Once relevant literature was identified using these key terms, other related literature was found by looking through the bibliographies, reference lists, and other works by the same authors. Data was delimited to literature only in English, and from January 2000 to December 2016. Ideas about my own performance and clinical experiences of using the viola were also documented throughout the research process in journals and memos.

Data Analysis Procedures

Once the data was collected, relevant information from the literature was identified in relation to the primary and subsidiary research questions. Aspects of Fraser and Galinsky's (2010) intervention methodology were used to develop interventions using the viola in a music-centered music therapy context, and then identify the problem and needs these interventions might address. Problems that contribute to the development of program theories were categorized into themes through open and axial coding (Neuman, 2006). The program measures were then developed based on these themes. The structure and processes of the interventions were specified based on what was found in the literature and using the researcher's reflections on her clinical and musical experiences.

Possible ethical issues that may arise in this type of research methodology could be related to the researcher's bias that could influence the results, and investment in overextending the potential benefits of the use of the viola in music therapy. These issues were addressed through ongoing self-reflection and feedback from the academic supervisor.

Delimitations

In light of time and scope constraints inherent in a master's thesis, a number of delimitations were set. Only the first two steps of Fraser and Galinsky's (2010) intervention design research method were used, a limited number of interventions were developed (4), and sources of data were delimited to relevant literature in English from 2000 to 2016. The design was not delimited to a particular client population, in order to allow ideas about how the interventions were used to emerge through the research process. However, once the literature was reviewed, the program detailed what population, age, and context were best suited for the chosen interventions.

Chapter 4. Results

When constructing these music therapy interventions, there were a number of components at play that needed to be considered to ensure the greatest chance of success and efficacy. The following chapter will describe the process of this intervention creation and the rationale behind their conception.

Risk Factors, Protective Factors and Promotive Factors

Within the intervention design framework outlined by Fraser & Galinsky (2010), risk, protective, and promotive factors related to a problem must be recognized before introducing a change strategy (Fraser & Galinsky, 2010, pg. 460). This section will discuss the prerequisites for developing and realizing these interventions, in addition to providing context for the music therapist who may want to implement them.

Practical Considerations

The first category of these factors to explore is the feasibility of using the viola itself in practice. This includes the physical and musical features of the instrument that may influence its usage, in addition to convenience and safety.

Physical Characteristics of the Viola

One of the first aspects of the viola that is important to consider is its material construction in comparison with other instruments. The viola has a larger body, lower range, and thicker strings than the violin, in addition to a heavier bow to produce sound, all of which can make it more difficult to maneuver (Boyden & Woodward, 2017). However, violas can be made within a wide range of sizes and shapes, and they can even be custom-made to fit the owner's needs (Boyden & Woodward, 2017). Most are constructed with a wooden body and steel strings, and bows typically use synthetic horse hair, although more modern violas can be made with a variety of materials such as carbon fibre and can produce sound electronically rather than acoustically (Boyden & Woodward, 2017). Music therapists may need to keep in mind additional equipment to complement the viola in a clinical environment or for personal convenience, such as chin rests, shoulder rests, rosin for the bow hair, and pickup devices or speakers for amplification.

Musical Characteristics of the Viola

Aside from the physiology that makes up the viola, its musical qualities are another important consideration to keep in mind. The viola is often described as having "darker, warmer, richer tone qualities" than the violin (Boyden & Woodward, 2017). The range of pitch is also more similar to that of the alto voice (Boyden & Woodward, 2017). These timbral qualities of the viola can be considered more palatable than the violin's, which some may consider to be shrill or piercing. Because the viola's sound production is controlled by using a bow to vibrate the strings, like all bowed string instruments, it can sustain sound for virtually unlimited periods of time compared to wind, keyboard, percussion, and plucked string instruments. The viola's sound may also be altered with a mute in order to be more suitable for quieter environments (Shoemark, 2009). However, because there are no frets on the fingerboard, intonation can be more difficult than with fretted string instruments (Stowell, 2001, p. 177). While there are almost endless factors to consider when it comes to the sound of the viola, these are some of the most pertinent and fundamental for the development of interventions.

Portability and Safety

Perhaps some of the first thoughts a music therapist may have before choosing which instruments to use in practice involve transportation and sharing between clients. Violas are best transported in sturdy protective cases equipped with a humidifier, in order to shield the instrument from environmental dangers to sound quality (Chapman, 2006). In terms of the therapist's continued and prolonged use of the viola, therapists should be aware of orofacial disorders and trauma that can occur due to playing for extended periods of time, exploring treatment options if any such issues arise (Yeo, Pham, Baker, & Porter, 2002). If allowing clients to use the viola, music therapists should clean parts of the instrument that come into direct contact with skin before and after use to avoid transmission of bacteria and other microbes.

Musical Background

Knowing now the unique features that the instrument brings to music therapy, we can delve into the effects its music may have on both the therapist and client.

The Therapist's Relationship with the Viola

Within a music-centered framework, we can ascertain that the close relationship a music therapist may have with the viola and its aesthetic qualities could enhance their practice and experiences with a client (Aigen, 2005, pg. 100). However, as with any instrument used within music therapy practice, the reason for its use should be intentional and measures should be taken to ensure that the music therapist does not have personal bias that influences their ability to think about the client's best interests.

The Client's Musical Experience

In the context of the music-centered music therapy setting, the client's musical process is central to their therapeutic growth and development, and their involvement is equally important (Aigen, 2005, pg. 94). With this in mind, the client's responses to the viola are crucial to assess and consider in terms of clinical goals. Although the viola may be particularly significant for the music therapist, it is important to acknowledge that the client may come from an entirely different background than that of the therapist, and therefore may have a very different relationship with the viola or other kinds of music.

Abilities and Challenges

With practical and musical factors now in mind, this section will discuss some considerations regarding what the therapist can hope to realistically achieve with these interventions.

Self-Awareness of the Therapist

As addressed above, the music therapist should only carry out interventions using the viola if they can adequately justify that they are suited for their client's particular goals and needs. This may be furthered by clinical supervision, process notes, and continuing education.

Transference and Countertransference

While the music in a clinical setting may have intrinsic therapeutic value, there are also transpersonal elements to consider that influence how the therapist and client may connect with each other (Aigen, 2005). The added element of having a close personal relationship with the viola could give the music therapist more complex situations surrounding transference and countertransference, but could also potentially provide a useful tool for processing these issues.

Malleable Mediators

In order to conceive a suitable program theory, components of the intervention that can be manipulated by the music therapist based on risk factors presented in clinical work must be identified to work towards positive change (Fraser & Galinsky, 2010).

Aesthetic qualities.

Bowed strokes (legato, staccato, marcato).

The use of bows with string instruments traces back to the 10th century in the Byzantine empire, and this usage has since evolved along with a variety of musical techniques (Bachmann et al., 2017). One way to play a bowed stroke is *legato,* which is defined by connected or slurred notes and often depicts a more "singing" quality (Chew, 2017). Opposite to a *legato* bow stroke is *staccato*, where notes are played sharply with emphasis on each note, hence the English translation meaning "detached" (Chew & Brown, 2017). Similar to *staccato* but more common in Romantic and Contemporary music, a *marcato* bow stroke indicates "stressed" or "accented" notes in a manner that highlights a particular melody or subject more strongly (Fuller-Maitland & Fallows, 2017).

Pizzicato.

Although the use of bowed strokes is the most common method of producing sound from a viola, pizzicato can be an effective tool for creating a particular atmosphere, such as when desiring to imitate a guitar-like sound or imagery such as a "cannon shot" (Monosoff, 2017).

Extended technique.

Using the viola in ways unconventional to its Western Classical music origins to create a wider array of sounds has been documented since the early 20th century (Strange & Strange, 2001). Some popular ways to do this are to use the bow on different contact points of the strings, make percussive sounds on the body of the instrument, create harmonic overtones, and to change the tuning (Strange & Strange, 2001).

Client-therapist relationship.

If the music therapist uses the viola intentionally in practice, the instrument choice could contribute to or influence the nature of their relationship to the client (Harrison & Jones, 2015).

Developing therapeutic rapport.

By introducing an instrument of personal significance to the music therapist, and one which they feel most comfortable with expressing themselves musically, the client may allow themselves to explore a wider range of emotions within a musical context (Bettany, Dickinson, & Knoll, 2015).

Goals.

The use of one's primary instrument in clinical work may contribute to music therapy goals in a wide range of domains (Piccinnini, Pizziolo, & Preston, 2015). This research will focus on a select few domains that may have particular pertinence when related to interventions that utilize the viola.

Communication.

Using the viola as a supporting instrument to the client's music and allowing them to explore the viola's sounds could provide a method to encourage communication within a safe and comfortable framework (Greenhalgh, Loombe, Powell, Santilly, & Ward-Bergeman, 2015). In addition, mirroring the client's vocalizations, sounds, or movements and incorporating them into the music may allow them to grow their levels of communication over time (Gottlieb, Lockett, & Mentzer, 2015).

Creative expression.

Due to the versatility and flexibility the music therapist may have with the viola, demonstrating these skills could open the client's eyes to the creative possibilities in making music (Derrington, Gilroy, Hason, & Tomaino, 2015). The viola can also be used to create non-verbal dialogue, in which the client can more creatively express themselves in ways they may have felt limited to do previously (Dunn, Oldfield, Piears-Banton, & Salkeld, 2015).

Emotional exploration.

The viola may lend itself to being an emotional extension of the music therapist, and so the music used with the viola in sessions may convey a wider range of emotions to the

client that they could respond strongly to (Anderson, Austin, Corke, Fearn, Mitchell, & Tomlinson, 2015). However, because the viola's sound is often described as melancholic, the music therapist should be aware of the intense effect it may have (Harrison & Jones, 2015).

Action Strategies

The following section will outline details on how to use these interventions.

Population.

Research on the use of the viola in music therapy has been conducted by Harrison & Jones (2015) with such clients as adults with visual and hearing impairments, as well as children and adolescents diagnosed with Autism Spectrum Disorder (ASD). Brittain (2013) explored her relationship with a client base of non-verbal adults with special needs while conducting research on her use of the viola. While these interventions may be used for a variety of populations according to the goals previously addressed, the researcher is most experienced with using similar interventions with adults in palliative care, as well as older adults.

Setting.

Research on the use of the viola in music therapy has been done in such settings as a psychiatric hospital (Harrison & Jones, 2015) and a private music therapy studio (Brittain, 2013). While these interventions may be used for a variety of settings according to the goals previously addressed, the researcher is most experienced with using similar interventions in hospice, long-term care, and nursing home settings.

Duration.

While collecting data on her own relationship with the viola, Brittain (2013) spent seven research sessions with each participant in order to adequately study musical responses within a clinical relationship. However, these interventions may be used until the goals previously addressed have been sufficiently met within a clinical context at the discretion of the therapist.

Suggested Interventions

Improvisation

Assessment and evaluation.

Before using this improvisation, the music therapist should establish a comfortable therapeutic space for the client and understand what they would like to achieve within the setting. Risk, protective, and promotive factors should be considered using any background information and context available regarding the client, as well as thinking about the therapist's reasoning for including the viola.

Steps for implementation.

1. The music therapist should discuss with the client the rules and expectations for the improvisation, and establish the musical framework for the client's expression.
2. The music therapist and client should together decide whether the viola will accompany the client's instrument playing or vocalizations, and choose a relevant theme or idea, unless deciding to allow one to emerge through the process.
3. The viola should first play a supporting role to the client's musical choices by mirroring and validating their sounds, but the music therapist may elaborate on them as the music progresses naturally.
4. The improvisation may have a pre-determined ending depending on the amount of time available, or the music therapist and client may allow the music to continue as long as necessary.
5. Once the improvisation comes to an end, the music therapist and client may discuss feelings and thoughts surrounding the music created.

Indications and contraindications.

Indications may include the need for furthering the client's creative and emotional self-expression, as understood through the assessment process. Contraindications may include any mental health concerns surrounding lack of structure or "getting lost" in a moment. If verbal processing is not possible with the client, the music therapist may adjust this intervention to communicate instead using visual, auditory, or tactile cues. Any clinical observations during the intervention in early sessions may lead the therapist to change aspects of the activity to encourage further engagement and deepening of progress towards goals in later sessions.

Receptive listening.

Assessment and evaluation.

Before using this improvisation, the music therapist should establish a comfortable therapeutic space for the client and understand what they would like to achieve within the setting. Risk, protective, and promotive factors should be considered using any background information and context available regarding the client, as well as thinking about the therapist's reasoning for including the viola.

Steps for implementation.

1. Before approaching the client with this intervention, the music therapist should establish a collection of viola repertoire that includes a diversity of music to represent different emotional states, energies, and cultures. This repertoire will naturally grow as the therapist uses this type of intervention more often and adjusts their selection to a wider base of clients.
2. The music therapist should discuss with the client the rules and expectations for the receptive listening experience, which could include evoking imagery or pinpointing an idea. The music therapist may initiate conversation about the client's preferred music.
3. After allowing the client to choose from a selection of pre-composed works, the music therapist will then play a piece of music appropriate for addressing the client's goals.
4. While playing, the music therapist should observe how the client is responding to the music based on their body language and emotional affect, and may need to adjust their musicality appropriately. This could include the dynamics, phrasing, or length of the piece.
5. Once the receptive listening experience comes to an end, the music therapist and client may discuss feelings and thoughts surrounding the music. If verbal communication is not possible, the music therapist may also allow time for the client to express their thoughts and feelings afterwards through drawing.

Indications and contraindications.

Indications may include the need for furthering the client's communication and emotional self-expression, as understood through the assessment process. Contraindications may

include challenges around the client's ability to keep attention for an extended period of time. If verbal processing is not possible with the client, the music therapist may adjust this intervention to communicate instead using visual, auditory, or tactile cues. Any clinical observations during the intervention in early sessions may lead the therapist to change aspects of the activity to encourage further engagement and deepening of progress towards goals in later sessions.

Conducting.

Assessment and evaluation.

Before using this improvisation, the music therapist should establish a comfortable therapeutic space for the client and understand what they would like to achieve within the setting. Risk, protective, and promotive factors should be considered using any background information and context available regarding the client, as well as thinking about the therapist's reasoning for including the viola. Earlier sessions may include introducing the viola and Classical music, in order to discover the client's relationship with or feelings towards them.

Steps for implementation.

1. The music therapist will introduce the concept of conducting and explain its purpose within a musical context, initiating a conversation with the client if possible to gain a greater understanding of their knowledge.
2. The music therapist and client may together choose a pre-composed piece to conduct, or it could also be a spontaneous creation.
3. The music therapist will ask the client to conduct the viola music, with the purpose of influencing choices such as tempo, dynamics, and phrasing. The therapist will change their performance of the piece based on the client's conducting.
4. The exercise may be repeated multiple times in order for the client to feel comfortable and confident in their execution of the conducting, and the music therapist may provide feedback if needed.
5. Once the conducting experience comes to an end, the music therapist and client may discuss feelings and thoughts surrounding the music created.

Indications and contraindications.

Indications may include the need for furthering the client's creative self-expression and to give them more power within the therapeutic relationship. Contraindications may include concerns around the client's preoccupation with controlling their external environment. If verbal processing is not possible with the client, the music therapist may adjust this intervention to communicate instead using visual, auditory, or tactile cues. Any clinical observations during the intervention in early sessions may lead the therapist to change aspects of the activity to encourage further engagement and deepening of progress towards goals in later sessions.

Movement to music.

Assessment and evaluation.

Before using this improvisation, the music therapist should establish a comfortable therapeutic space for the client and understand what they would like to achieve within the setting. Risk, protective, and promotive factors should be considered using any background information and context available regarding the client, as well as thinking about the therapist's reasoning for including the viola. The music therapist should assess the motor capabilities of the client and adapt the activity as needed.

Steps for implementation.

1. The music therapist and client will choose a genre or style of music to move to and choose a suitable ostinato within this musical framework to be played on the viola. The music therapist will demonstrate possible movements for the client to follow that are appropriate to the client's range of motion. However, the client should also feel free to express any movements that emerge based on their reaction to the music, as long as they can be done safely.
2. The music therapist will play the ostinato and allow the client to move to the music. While playing, the music therapist should observe how the client is responding to the music based on their body language and emotional affect, and may need to adjust their musicality appropriately. This could include the dynamics, phrasing, or length of the piece.

3. This intervention may have a pre-determined ending depending on the amount of time available, or the music therapist and client may allow the music to continue as long as necessary.
4. Once the experience comes to an end, the music therapist and client may discuss feelings and thoughts surrounding the music. If verbal communication is not possible, the music therapist may also allow time for the client to express their thoughts and feelings afterwards through drawing.
5. One possible adaptation for this intervention if the client does not have wide range of motion is for the music therapist to put the viola on the client's lap while plucking the ostinato and moving to the rhythm of the music, in order for the client to feel the vibration of the instrument.

Indications and contraindications.

Indications may include the need to allow the client to creatively and emotionally express themselves through motor movement, as understood through the assessment process. Another indication may be the need to develop trust within the therapeutic relationship, or to incorporate the client's cultural and personal preferences. Contraindications may include concerns around the client's safety in their ability to move freely within the space. If verbal processing is not possible with the client, the music therapist may adjust this intervention to communicate instead using visual, auditory, or tactile cues. Any clinical observations during the intervention in early sessions may lead the therapist to change aspects of the activity to encourage further engagement and deepening of progress towards goals in later sessions.

Chapter 5. Discussion

Findings Summarized

After reviewing the relevant research conducted on using one's primary instrument in music therapy and on the viola itself, I was able to create an outline for interventions to be used within a music therapy setting with the viola. These interventions were realized with attention paid to the goals, population, setting, and amount of time the therapist-client relationship may be addressing. Within the frameworks of improvisational, receptive, conducting, and movement interventions, the viola's role in furthering clinical progress was highlighted.

What the researcher has learned.

Perhaps what was most enlightening throughout this research process was realizing the full scope and extent of this topic, which required more restrictions in the creation of these interventions than previously thought. While this realization may be quite humbling in some ways, it also provides context and reverence for past research that has been done.

Limitations.

Scope of research.

As this research only executed the first two step of Fraser and Galinsky's intervention research model, there was no opportunity to test the efficacy of these interventions in clinical work. However, the initial process of intervention design allowed me to further the existing research beyond the scope of what had previously been covered.

Researcher's stance.

As the researcher, I was only able to approach the interventions from my own viewpoint and within the confines of a music-centered lens, which influences their creation and potential clinical application. On the other hand, being positioned as a researcher who has extensive experience using the viola in a variety of musical and clinical settings, this allowed me to have in-depth knowledge into how these interventions could be used and created.

Cultural implications.

This research was written from a Western Canadian perspective with an instrument that has come from the Western European music practices, and therefore the interventions may need to be adapted to be suitable in other cultural contexts. While I have attempted

to be self-reflective of my cultural bias throughout this research process, there was no opportunity to consult those with differing cultural perspectives firsthand.

What the researcher would have done differently.

Knowing now the scope of this type of research, perhaps it would have been useful to narrow the parameters even further to create a more focused look at how the interventions could be used, such as by narrowing down to a specific population or setting.

Implications for Future Research.

Testing interventions.

With the interventions developed, there are now opportunities for other music therapists to test them and report on their results, which could be done through their own research or via my own follow-up to this thesis. There is also the possibility to spend more time refining the initial steps, or to apply them to particular populations, settings, and goals.

Gathering multiple viewpoints.

If possible, it would be beneficial and educational to dialogue with other violists in the field to explore their experiences of using their instruments and incorporate this information into the interventions. This would be particularly useful for those with very different viewpoints from my own, such as researchers of other ages, genders, cultural backgrounds, and years of experience.

Implementation on other instruments.

These interventions could potentially be adapted to be used on instruments other than the viola, in order to take advantage of different aesthetic qualities or to serve the client in different ways. The clearest link from this research in that regard would be to study other string or orchestral instruments, but this could also be expanded to instruments outside of the Western Classical framework.

Implications for clinical practice.

As research on interventions using one's primary instrument increases and becomes more refined, music therapy education may also be affected, either at a basic or more advanced level. This diversification of music therapy practice could greatly affect how the field is viewed by other professionals and by the general public. Hopefully, greater attention paid

to how instruments and musicality are used will serve to better benefit clients and allow the music therapy profession to grow for the better.

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