Listening and Decision-Making in Music Therapy Clinical Improvisation

Marie-Fatima Rudolf

A Thesis

in

The Department

of

Creative Arts Therapies

Presented in Partial Fulfillment of the Requirements

for the Degree of Master of Arts (Creative Arts Therapies, Music Therapy Option)

Concordia University

Montreal, Quebec, Canada

April 2018

CONCORDIA UNIVERSITY

School of Graduate Studies

This is to certify that the thesis prepared

By: Marie-Fatima Rudolf

Entitled: Listening and Decision-Making in Music Therapy Clinical Improvisation

and submitted in partial fulfillment of the requirements for the degree of

Master of Arts (Creative Arts Therapies, Music Therapy Option)

complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Signed by the final Examining Committee:

_____ Chair
Sandi Curtis

_____ Examiner
Guylaine Vaillancourt

_____ Examiner
Kristen Corey

_____ Supervisor
Guylaine Vaillancourt

Approved by _____
Yehudit Silverman, Department of Creative Arts Therapies

2018 YEAR _____
Rebecca Taylor Duclos, Dean, Faculty of Fine Arts

ABSTRACT

Listening and Decision-making in Music Therapy Clinical Improvisation

Marie-Fatima Rudolf

This first-person arts-based research aims to explore the student-researcher's personal decision-making process during clinical improvisation in music therapy. In music therapy practice, clinical improvisation is a widely used intervention, and can have a significant impact on the client as well as the therapeutic development. Greater insight into this process could therefore be beneficial. Music therapy literature often highlights self-awareness and reflexivity as important factors for career success and longevity for music therapists. Awareness of how they experience their engagement in music therapy interventions is important and has been the focus of several recent studies. Through recorded improvisations in both mock clinical and mock performance settings, the student-researcher sought answers as to what informs her listening and decision-making procedures. Participants were recruited to participate in these mock improvisations, which were recorded; the recordings were then analyzed for similarities and differences pertaining to listening and decision-making. The study revealed that decisions were influenced by aural cues (elements heard in the music) visual cues, intuition, as well as knowledge and learned skills. Further recommendations and research are presented.

ACKNOWLEDGEMENTS

I am very grateful to the many people who supported me throughout this endeavour: To my teachers, Dr. Laurel Young, Dr. Sandi Curtis, and supervisor Dr. Guylaine Vaillancourt, thank you for your guidance, support, and knowledge.

To my precious classmates, Andy MacDonald, Shalini Persaud, Daniel Bevan-Baker, Andrew Dudley, Daniel Kruger, Kimi Suzuki, Bing Yi Pan, Marie-Pierre Labelle, Nadia Delisle, Liz French, and Cordon Purcell, thank you for the love, laughter, and unforgettable dinner parties!

Thank you to my family, especially Marie-Jo and Brian Rudolf, Caro Leman and Yves Roy, Marie-Jo Ouimet, and Dominique Leman.

And to all my musical friends and colleagues, thank you for the music.

Table of Contents

List of Tables

List of Figures

Chapter 1. Introduction

Improvisation is the act of spontaneous creation, without a script, using whatever resources are available. Many styles of music incorporate improvising, such as jazz, free jazz, Indian ragas, blues, and early Classical music. In music therapy, the term "clinical improvisation" is defined as a spontaneous musical interaction occurring between the therapist and the client(s), based on responses to rhythmic, melodic, and harmonic nuances, as well as non-verbal and perceptual information (Brown & Pavlicevic, 1997). Clinical improvisation is one of four main overarching categories of music experiences utilized by music therapists (Bruscia, 2014).

Improvisation is a complex process of self-expression and spontaneous interaction, requiring continual in-the-moment decision making by those involved. Though there is ample literature on the improvisational process (e.g. styles, techniques, analysis; Aigen, 2009; Brown & Pavlicevic, 1997; Bruscia, 1987; Lee, 2000; Lee & Houde, 2011; Pavlicevic, 1990), there is only a limited amount of research available concerning the music therapist's experience during clinical improvisation (Cooper, 2010; Forinash, 1992; McCaffrey, 2013; Proctor, 1999), and even less on what informs the therapist's decision-making processes during clinical improvisations.

Many skills are called upon when a music therapist engages in clinical improvisation. Music therapists must have basic knowledge of music theory and harmony, and of the instruments being played; they must be able to engage in active listening, both to musical content and emotional content; they must keep the objectives of therapy at the forefront of the interaction with the client. All these elements are factored into the instantaneous decision-making that occurs during clinical improvisation.

Listening is a quintessential part of the improvisational process (Bruscia, 2014), and informs how the music therapist will respond to the client's music. By listening and responding to musical cues, music therapists engage in creative and emotional exchange with their client. Music therapists must be simultaneously listening to the music, to their clients, and to their inner voice. The improvisational process inevitably has an impact on the development of the therapeutic rapport.

Every decision within a music therapy context influences and guides the course of the therapeutic process; therefore it is imperative for music therapists to be purposeful,

intentional, and self-aware in their decision-making, as these decisions can have a significant impact on the clients. Developing a clearer understanding of the guiding factors in the decision-making processes during improvisation can contribute to practicing with greater awareness and deeper intention. Active listening and decision-making in clinical improvisation are the focus of this research.

Personal Relationship to the Topic

I have dedicated the past 15 years to the study of jazz improvisation. I have obtained a bachelor's and a master's degree in jazz performance and have performed in a variety of improvisational settings including numerous ensembles. I have studied the art of listening, understanding, anticipating, and supporting an improviser's dialogue, mostly in reference to musical (harmonic) content. I have learned that "active listening" requires a certain type of intense concentration, as well as an ability to surrender to the music, while remaining intent and present. Going forward, as I learn about models of clinical improvisation as they relate to music therapy clinical improvisation, I am challenged to consider improvisation in a new way: How can one support emotional expression through music?; What does the music say about emotional expression, and how does this affect the decision-making process and the ways I react?; and why and/or how do these two types of almost instantaneous musical decision-making processes differ? These questions have subsequently led me to wonder about my personal decision-making processes during improvisation, both in clinical and performance settings.

Assumptions

I assume that clinical improvisation and music improvisation are different, but also share certain similarities. I assume that my jazz training inevitably influences, and enhances my clinical improvisation skills, all the while influencing how I listen and respond during clinical improvisations. I also assume that the many improvisation experiences in various settings (performance, recording studio, teaching) as well as my jazz training have afforded me a certain amount of insight into my improvisational process as a performing musician. I expect that my newly acquired skills as a clinical music therapist, though less honed than my skills as a performer have an increasing impact on my skills as a jazz improviser.

Delimitations

For the purposes of this master's thesis, certain delimitations were imposed. The number of recordings was limited to two mock music therapy improvisations and two mock performance improvisations for practical and ethical reasons. Recording improvisations in real clinical contexts would have involved obtaining informed consent from clients, which could inadvertently affect their reactions as well as the therapeutic processes. It was also easier to control for extraneous factors in mock rather than real performance environments. Each participant performed only one improvisation (either mock clinical or mock performance). Recordings were between 4 and 8 minutes in length.

Definition of Key Terms

Bruscia defines *improvisation* as making up music "while playing or singing, extemporaneously creating a melody, rhythm, song or instrumental piece" (Bruscia, 2014, p. 130). *Clinical improvisation* is defined as free or guided extemporaneous use of music to help clients improve or maintain health (Bruscia, 1987). *Music performance* is the act of playing music "for others to hear, formally or informally, for a small or large audience" (Bruscia, 2014, p. 133), and involves playing the right notes at the right time while also varying the loudness, timing, pitch, and timbre of notes in a way that sounds expressive and meaningful. *Decision-making* is defined as a cognitive process seeking to calculate which action will yield the most positive outcomes (Thompson, 2013).

Research Questions

The research question was: What musical decisions does the student-researcher make in improvisations that take place in mock performance versus those that take place in mock music therapy clinical contexts? Several subsidiary questions also emerged: (a) What elements of these improvisations are similar?; (b) What elements of these improvisations are different ?; (c) What other insights emerge from listening back and reflecting upon these improvisations ?

Chapter Outline

In Chapter 2, a review of the literature exposes findings from research done from music therapy literature on improvisation, the client-therapist relationship, and listening,

as well as research on jazz improvisation, and social research on communication. Topics reviewed include improvisation as a conversation, self-examination, listening, insight through self-listening, and decision-making**.** Chapter 3 outlines the methodology used and the theoretical stance under which this research was conducted. This third chapter describes the research design, the materials used, the participant recruitment, the data collection, the data analysis, the data storage, as well as the ethical considerations. Chapter 4 summarizes the results from the collected data and includes direct quotes from journal notes and musical excerpts from the transcribed improvisations. Chapter 5 includes conclusions, limitations of the research, and implications for future studies.

Chapter 2. Literature Review

Improvisation is present in almost all musical genres (Rogers, 2013). Improvisation is a complex process involving listening, interacting, responding, creating, and spontaneous decision-making (Bruscia, 2014; Meadows & Wimpenny, 2017; Ruud, 1995). Improvisation is also a widely used intervention in music therapy, across a wide array of settings and populations, and is often considered by many to be the locus of the therapeutic rapport. In music therapy literature, research on improvisation focuses mainly on styles and techniques (Bruscia, 1987; Lee & Houde, 2015), musical analysis (Lee, 2000, 2003), the therapeutic relationship and impact of improvisation on the therapeutic development (Pavlicevic, 1990, 1992), and the meaning contained within the music (Lee, 2003; Gilbertson, 2013; Meadows & Wimpenny, 2016), including case studies and qualitative research on the client's lived experience during improvisation. It is recognized that the music therapist's music can have an immense impact on the therapeutic relationship and the course of therapy (Cooper, 2010; Pavlicevic, 1990; Proctor, 1999), and is therefore meritorious of investigation. With the understanding that music therapists can benefit from greater awareness of their individual clinical improvisation process, there has been a trend towards examining the thoughts, reactions, and musical contributions of therapists during improvisation.

Defining Clinical Improvisation

Improvisation is a complex concept to define for several reasons. Firstly, the experience may be perceived and described differently by each person because there are so many facets involved in improvisation such as what one hears, how one reacts, how one interprets the other's music and reactions, how comfortable one feels, and so on (Bruscia, 2014). Secondly, because improvisation happens in the moment, being 'engaged in' improvising while simultaneously examining the process 'from the outside' can be difficult (Cooper, 2010). Thirdly, describing a non-verbal experience in words is challenging (Forinash, 1992). Fourthly, empirical study of improvisation is difficult because it is a phenomenon consisting of interaction between mind and body, and is highly influenced by cultural factors (Anderson, 2013; Nachmanovich, 1990).

There are many current definitions of improvisation. Bruscia (2014) describes improvisation as "making up music while playing or singing, extemporaneously creating

a melody, rhythm, song or instrumental piece" (p. 130). Berliner (1994), in his influential book called *Thinking in Jazz*, defines improvising as "engaging in effective musical discourse by interpreting the various preferences of other players for interaction and conveying their own personal preferences" (p. 363). Improvisation is sometimes often described as a social phenomenon that fosters change and reflection through non-verbal exchange. Ruud (1995) describes improvisation "to change in relation to other human beings, phenomena, situations" (p. 93). Proctor (1999) describes improvisation as a form of bi-directional communication, a balance between listening and responding, and asserts that contributions from all participants are significant to this interaction.

From these various perspectives, one can distill that improvising is a form of self-expression and non-verbal communication, an artistic release, and must be seen as more than merely making music. In music therapy, improvisation is used to foster emotional exploration and self-expression within the context of a therapeutic relationship to improve or maintain health (Beer, 2011; Brown & Pavlicevic, 1997; Bruscia, 2014; Cooper, 2010; McCaffrey, 2013; Pavlicevic, 1990). This is especially important when music therapists wish to engage in non-verbal communication with a client (McCaffrey, 2013). Music therapists use improvisation to reach a variety of therapeutic goals, such as providing a channel for non-verbal communication; providing a means of self-expression; exploring relationships with others and developing interpersonal skills; stimulating and developing creativity, spontaneity, and perceptual skills (Bruscia, 2014).

Clinical improvisation is considered to be notably effective when music therapists successfully create a safe, contained space that allows for deep emotional creativity and expression, where the client can "hear themselves in sound" (Brown & Pavlicevic, 1997, p. 399). Improvisation provides an opportunity to express many facets of life, some of which may be too difficult to articulate otherwise (Lee, 1996). Such profound expression can lead to transformation and growth (Lee, 1996; Ruud, 1995).

Communication and Conversation in Improvisation

The concept of improvisation as a form of conversation is seen in both music therapy literature and jazz literature. Conversation is understood to be an exchange of thoughts, opinions, experiences, and feelings; this action implies listening, processing, understanding, and responding (Aigen, 2013). While spontaneously creating music

together, jazz musicians listen to each other, and rely on each other for ideas and cues, while engaging in an ongoing interactive process, a constant call and response (Aigen, 2013; Hodson, 2007; Rogers, 2013). Jazz musicians inevitably draw from stylistic knowledge and practiced repertoire, but use this knowledge differently every time they play, creating novel common language through spontaneous dialogue (Aigen, 2013; Pavlicevic, 2000; Rogers, 2013). In much the same way, when people engage in verbal conversation, they use words, idioms, and expressions from their repertoire, and combine and adapt them accordingly. However, in verbal conversation, the listening and responding is done separately (one person speaks while the other listens, then responds, and so on) while in musical conversation (improvisation) these happen collectively, simultaneously, requiring that participants react while listening and receiving feedback. In fact, everything in improvisation happens simultaneously: inspiration, realization, communication, reception, and reaction, all happen concurrently (Bruscia, 2014; Nachmanovitch, 1990).

Reflexivity, Self-awareness, and Self-observation

Reflexivity in therapy is defined as the ability to question, evaluate, and adapt one's actions and choices (Bruscia, 2014). According to Bruscia, self-observation is one of five ways to develop reflexivity, and entails being able to examine oneself from a meta-perspective: to step out of an ongoing process while simultaneously observing it (2014). Music therapists are highly encouraged to reflect upon their conscious experience in music therapy, as the results of such explorations could yield important insight into job satisfaction and professional burnout (Wheeler, 1999). Reflexivity during improvisation can provide insight into where one's attention goes while making music. Yet, relatively few research studies focus on the experience of the therapist (Brescia, 2005; Forinash, 1992; Cooper, 2010; McCaffrey, 2013; Proctor, 1999). Cooper (2010) suggests that because music therapists are trained to leave their self in the background they focus more on the client and the client's music, and less on their own lived experience. While the client's music is highly relevant, Bruscia (2014) and Proctor (1999) insist that the therapist's music plays an equally important role in improvisation. The music therapist's decisions and musical choices impact the course of therapy, and music therapists are encouraged to constantly engage in reflexivity and self-questioning (Bruscia, 2014).

Another facet of reflexivity is self-awareness. Music therapists bring much of themselves into their work: their personality, musical background, personal and professional experiences, beliefs, and values (Brescia, 2005; Bruscia, 2014). Music therapists report that being aware of their personal beliefs, perceptions, and preferences helps them determine their strengths and limitations (Amir, 1993; Cooper, 2010; McCaffrey, 2013). Awareness of musical biography is also important: musical biography encompasses history, relationship to music, personal preferences and biases, strengths and limits. These elements inevitably influence our intuitions, inclinations, and musical choices (Amir, 1993; Cooper, 2010; McCaffrey, 2013). One's musical biography can be seen as a building block that contributes to each therapist's uniqueness in the field.

Facing the Unknown

Music therapists often describe improvising as entering undiscovered territory: like beginning to tell a story for which the ending is unknown. They have no idea where the music will go, nor what will be required of them, nor what will come of the experience. Facing the unknown requires music therapists to let go of expectations and inhibitions, and be open and in the moment (Cooper, 2010; McCaffrey, 2013). Being open and letting go can lead to feelings of vulnerability and insecurity during improvisation (Brown & Pavlicevic. 1997; Cooper, 2010; Forinash, 1992; Meadows & Wimpenny, 2017; McCaffrey, 2013). Though this vulnerability can be uncomfortable, it must be acknowledged and welcomed in order to successfully participate in the improvisation (Cooper, 2013) and can even propel the therapeutic process further (Meadows & Wimpenny, 2017). The therapist's courage to be vulnerable can also encourage the client to be vulnerable. Surrender to the unknown and the acceptance of vulnerability require courage, trust in one's self, and trust that the music will guide and inspire (Forinash, 1992; Meadows & Wimpenny, 2017; Nachmanovitch, 1990).

Skill and Knowledge

Engaging in improvisation means being facing new, unfamiliar territory. To help navigate the unknown, music therapists highlight the importance of musical skill and knowledge (Cooper, 2010; McCaffrey, 2013). The ability to compose in the moment and react instantaneously to emerging cues requires an in-depth knowledge of the fundamentals of music (McCaffrey, 2013). Bruscia lists improvisation, composition, and

musical skills as essential foundations for every music therapist. These rudiments are needed to assume the responsibilities of a therapist, offer expertise to the client (Bruscia, 2015), evoke responses and offer support (Meadows & Wimpenny, 2017). Being comfortable with musical concepts of form, harmony, and melody, can help music therapists guide and support the client, and can also increase a sense of freedom within improvisation. According to Cooper (2010), every therapist strives for this freedom and experiences it in different ways. Freedom allows a clinician to take musical risks, try new things, and open new doors for the client (Cooper, 2010). By abandoning inhibitions, plans, and structure, the therapist can let the client dictate the course of the session (McCaffrey, 2013). Knowledge combined with freedom equips the music therapist to spontaneously respond to their clients, to develop and expand the clients' and their own ideas and intuitions (Cooper, 2013; Forinash, 1992). Given that improvisation is ever-changing, and no two improvisations are the same, the therapist must be open, flexible, and ready to adapt to what is going on in any given moment (Bruscia, 2014; McCaffrey, 2013).

Recognition of Feelings and Empathy

Empathy for the client is a key feature of clinical improvisation (Brown & Pavlicevic, 1997; McCaffrey, 2013; Gilbertson, 2013). Many music therapists report experiencing heightened empathy and awareness of the client's feelings when they engage in clinical improvisation, describing a unique sensitivity to their client's emotions, to their capacities and limitations, and an unconditional loving regard (Amir, 1993; Cooper, 2010; Forinash, 1992; McCaffrey, 2013; Priestly, 1994). An empathic presence tells the client that he/she is supported, and that he/she is being heard (Cooper, 2010; Forinash, 1992; McCaffrey, 2013; Priestly, 1994). Through focusing on the client with sensitivity and empathy, the music therapist can determine what the client needs and where to bring the music to meet those needs (Cooper, 2010; Langdon, 1995). During improvisation, empathy can be expressed musically through reflecting, imitating, synchronizing, incorporating the client's musical offerings (Buchholz, 2014; Bruscia, 1987).

Listening

In music therapy, listening is a quintessential part of the improvisational process (Bruscia, 2014), and is almost as important as the making of the music (Cooper, 2010). Scheiby (1999) writes: "The fundamental function of the music therapist is that of a highly skilled listener" (p. 208). In order to respond to a client's cues, clinicians must be engaged in active listening, and be attuned to the harmonic, melodic, dynamic and emotional content of the music. They listen to breathing, phrasing, intensity, and contour, much like a parent trying to decipher their baby's needs by listening intently to its cry (Pavlicevic, 2002). Thus, listening provides valuable insight, and informs how the music therapist will react to the client's music. Most of all, listening helps in the development of the therapeutic rapport, and allows for a true connection to be formed between client and clinician (Cooper, 2010).

Rogers (2013) describes two types of listening: analytical listening, which focuses on melodic and harmonic material, and interactive listening, which focuses on emotional content. Interactive listening involves a musician listening intuitively to another musician and trying to decode what emotions that person is trying to communicate. Heightened listening is key to becoming a highly regarded improviser, and ideally musicians engage in both interactive and analytical listening (Monk in Anderson, 2013; Rogers, 2013).

Similarly, Amir (1995) also describes two types of listening. The first type is external listening, when a person allows the music to penetrate the body (Amir, 1992; 1995), which requires the listener to focus fully on the music and be entirely with the music. The second type of listening, called internal, is "tuning into one's own inner sounds and rhythms" (Amir, 1995, p. 53). This internal listening is closely related to intuition. When one develops the ability to be with one's self, to let the mind be still, one can hear the messages that emerge from within. According to Amir (1995), music therapists should strive to achieve both types of listening, simultaneously, being attuned to both their inner intuition and their client's cues (Amir, 1995).

In a 2013 article, Aigen, speaks of the ability to listen simultaneously to one's individual part within a larger ensemble. Lee (2003) describes six levels of listening: surface listening, instinctive, critical, complex, integrated, and listening beyond. He maintains that the therapist has a responsibility to listen as a musician, a therapist, and a

human being; to listen to the notes, the space between the notes, and the feeling behind the notes. Thus, there is an important balance to strike when listening: one must simultaneously listen to the individual parts within the whole portrait; to intuition and reality; to musical elements and emotional content. Intentional listening requires focus, dedication, empathy, and insight.

Intuition

Intuition in music therapy literature is spoken of both directly and indirectly, and often highlighted as an integral part of music therapy work (Amir, 1992; Brescia, 2005; Forinash, 1990). Recognizing and understanding one's intuition are useful skills that can be developed with time, experience and intentionality (Amir, 1992; Brescia, 2005; Bruscia, 2014; Langdon, 1995). Intuition, instinct and inspiration emerge from an unknown source, deep within us (Amir, 1992; Forinash, 1990), often during moments of silence (Langdon, 1995). Music therapists recognize the importance of intuition during improvisation, especially when working with clients with communicative limitations (Amir, 1992; Cooper, 2010). Intuition, creativity and inspiration converge to guide the improviser in a certain musical direction, sometimes without any apparent external reason (Cooper, 2013; Forinash, 1992; Gilbertson, 2013).

In a 2005 study, Brescia explores how music therapists use intuition in sessions. She discovered that music therapists receive intuition in various ways: through the music, through visual messages, through emotions, or through physical sensations in their body. Some receive their intuitive instincts during music-making, while others receive them during silences, or while the client is speaking. When thinking about or listening to a past improvisation, music therapists concluded that intuition played an important role when the music flowed effortlessly throughout a session, when the inspiration and creativity emerged spontaneously, when instincts led their clients to insights (Amir, 1993; Brescia, 2005; Cooper, 2013; Forinash, 1992; Pavlicevic, 2002). These are valuable findings for other music therapists to consider in their own practice, as understanding and trusting one's intuition makes it stronger (Brescia, 2005).

Inner Voice

Closely related to intuition is the concept of an internal voice. This voice 'speaks' during clinical improvisation, and can be a response to musical elements, to the client, to

transference or countertransference, to feeling stuck, or to the relationship between client and therapist. This inner voice may be critical, benevolent, or neutral (Cooper, 2010). Because this inner dialogue can help or hinder the therapeutic process (Cooper, 2010), it is critical that therapists be aware of their inner voice and differentiate it from intuition. Amir (1995) suggests that if the therapist pays too much attention to the inner voice, the therapy can become ineffective. Rather, Amir encourages music therapists to set aside their thoughts and have a clear mind in order to be fully present for the clients.

Decision-making

Improvisation is a balance of many elements: skill, theoretical knowledge, musical freedom, listening, intuition, and rationality, are all at play when engaging in improvisation. Improvisation calls upon all the resources and skills of a music therapist (Meadows & Wimpenny, 2017). With all these elements interacting simultaneously, how does one decide how to react?

Decision-making, one of 37 essential cognitive functions of the brain, consists of selecting the best option amongst a set of choices in order to reach a desired outcome in the most advantageous way (Thompson, 2013; Wang & Ruhe, 2007). Music therapists are constantly making decisions on how to proceed clinically (Forinash, 1992; Langdon, 1995; Thompson, 2014). During clinical improvisation, music therapists must make decisions in the moment, through a combination of elements-intuition, skill, knowledge, listening. Thompson (2013), in considering her experiences in group music therapy with women with breast cancer, describes three sources that inform her decision-making process: language, body language, and conversation topics. She also identifies energy and mood as important guides to determine the direction of therapy. Thompson suggests the decision tree, a graphical representation of choices to assess options and possible outcomes, to be an "effective model for making coherent and consistent decisions" (2013, p. 49). Several other music therapists have incorporated the use of decision-trees to inform their clinical decision making (Thompson, 2013). However, in improvisation, a decision tree is not an advisable option as decisions must be made in the moment.

In considering the different strategies and criteria for decision-making, Wang and Ruhe (2007) describe three types of intuitive decisions: arbitrary, based on preference, or based on common sense. In other words, intuitive decisions are made either based on the

most easy or familiar option, on expectation, tendency, or on judgment (Wang & Ruhe, 2007). Furthermore, intuitive decisions cannot always be explained by a rational model or specific process (Gilbertson, 2013; Wang & Ruhe, 2007), but rather are innate, instinctive, spontaneous.

Examples from the jazz literature support of the idea that intuitive decisions are sometimes based on preference, previous experiences, or falling back on familiar repertoire. In jazz improvisation, improvisers often rely on learned material, personal vocabulary, stringing together old ideas in new and creative ways; not everything that is played is pure improvisation (Rogers, 2013). Sometimes improvisers throw in passages to buy time, while they wait for inspiration (Rogers, 2013).

While some of the decisions made by music therapists during improvisation are intuitive, others are more rational and intellectual (Cooper, 2010; Forinash, 1992). They make conscious choices of notes, tempi, and decide whether to play with the client or offer new musical ideas (Cooper, 2010). These are often termed musical intentions and are based on what they know of the client, and the established set of goals and objectives (Cooper, 2010). This rational thought process has an impact on the therapeutic alliance as well as on the direction of the therapy (Amir, 1993; Cooper, 2010; Forinash, 1992; Proctor, 1999).

Self-listening and Musical Analysis

Many therapists support the idea of listening back to recorded sessions, especially as a means of gaining greater insight into the improvisational process (Cooper, 2010; Trondalen, 2003). For some therapists, the experience of improvisation extends beyond the session, and much insight can be gained through analyzing the music from sessions (Lee, 2000). This process may reveal important musical moments, significant exchanges between client and therapist, developments in musical and rhythmic vocabulary, and other elements the clinician may have missed during the music-making (Lee, 2000). It can also be helpful in explaining developments in the therapeutic process (Aigen, 2009). It also affords the clinician an analytical interpretation from a more distanced, less involved perspective (Cooper, 2010; Trondalen, 2003). However, it is important to bear in mind that an improvisation can never be removed from its context, and the details of that context define the musical interaction (Rogers, 2013; Trondalen, 2003).

There are several different methods for analyzing improvised music. Bonde (2015) suggests that more music therapy research should include musical analysis, as the musical elements music therapy uniquely effective. Also, evidence of progress or change can be difficult to verbalize, but may be contained within the music (Bonde, 2015). Musical analysis is a complex process, consisting of three basis components: description, analysis and interpretation (Bonde, 2015). Such a process is time consuming and requires dedication and rigor (Lee, 2000). Among the many available methods for analyzing improvised music, Lee's method of indexing offers a "critical balance between musicology and clinical rigor" (2009, p. 148) by identifying and understanding the salient musical elements within an improvisation while considering the context in which they occurred.

Jazz Improvisation and Clinical Improvisation

Many similarities have been drawn between jazz (or musical) improvisation and clinical improvisation. Both forms of improvisation involve social interaction, heightened listening to both musical and emotional content, instantaneous reactions, and two-way communication. Yet music therapists assert that there are differences as well, arguing that the primary aims of each improvisational setting are divergent (Brown & Pavlicevic, 1990).

One of the main differences between musical and clinical improvisation is that in clinical improvisation, the client does not need to be a musician. It is the role of the music therapist to create and support a musical environment that will foster the client's creativity and exploration (Brown & Pavlicevic, 1997), regardless of the musical abilities of the client. In musical improvisation, though participants may be at different levels of musicianship, it is generally accepted that they all involved have some musical background.

Brown & Pavlicevic (1997) found that there are audible differences between therapeutic improvisations and musical improvisations. Listeners said they could 'hear' equality between improvisers, or one improviser supporting the other, and were able to distinguish between the two types of improvisation based on listening only. Ruud (1995), in comparing jazz and clinical improvisation, observes that the latter involves less rules,

conventions and structures; frameworks in music therapy improvisations tend to be constructed during the music-making.

Summary

The use of improvisation in music therapy clinical settings as a means of fostering creativity, self-expression and well-being is supported by the literature. Acknowledging the complexity of the improvisational process, many authors encourage reflexivity and highlight the importance of music therapist's self-awareness during clinical improvisation. The literature also encourages music therapists to examine the actual music for answers.

This research therefore is a personal examination of my own improvisational process. As a professional jazz improviser and a beginning music therapist, I wish to gain greater insight into my listening mode, and what influences my decision-making process. I also wish to understand the differences and similarities between how I improvise in clinical settings and performance settings.

Chapter 3. Methodology

Methodology

First person arts-based research was deemed an appropriate design for the study because the main goal was to acquire first-hand insight into the artistic process of music improvisation. Arts-based research "emerged out of the natural affinity between research practice and artistic practice" (Leavy, 2000, preface ix) and is often used when the object of research is an artistic process. The results are synthesized and disseminated through creative means, which can be an effective way to reach wider audiences and raise awareness. Several music therapists have noted that greater reflexivity and insight into the process of improvisation could be beneficial for the field (Aigen, 2013; Brown & Pavlicevic, 1997; Bruscia, 2014; Cooper, 2010). This is considered a first-person study because the researcher is mainly concerned with her own experiences and reactions within improvisation.

Epistemological Stance

This inquiry is built on the premise that knowledge gained through experience can be different for each person. Through an interpretivist constructivist lens, it is assumed that knowledge is constructed as experiences are lived and interpreted, and that findings are created and understood throughout the investigation. In this study, the student-researcher seeks to better understand the process of improvisation through her own experience. It is understood that her experience is shaped by training and education, beliefs about music, improvisation, and communication, and that these will necessarily influence the way she interprets and gives meaning to the findings.

Participants

I (the researcher) was the primary participant in this first-person arts-based research. Four other participants were recruited to engage with me in mock clinical improvisation and mock music performance experiences.

Criteria. All participants were unknown to the researcher and able to sign the appropriate informed consent documents that were approved by Concordia's University Human Research Ethics Committee (UHREC). These participants were between the ages

of 18 and 70, they did not present physical or cognitive disabilities, and were autonomous. Participants were in Montreal and available for participation in September and October 2017. They did not need to have any particular skills, musical abilities, or special criteria. The only exclusion criteria was a previous relationship with student-researcher, myself, as a pre-existing relationship with participants might influence procedure and results.

Recruitment. Three participants were recruited through the use of recruitment posters describing the research project posted at Concordia University (Webster Library, EV Building, John Molson Building and cafeteria) and McGill University (Strathcona Music Building). The fourth was recruited through word of mouth. Participants met with the student-researcher prior to participation in order to confirm eligibility.

Materials. Musical instruments were used for the improvisations: my own primary instrument, piano, and the instruments chosen by the participant (guitar, xylophone, djembe). To facilitate data analysis (indexing) of the recordings, participants were not allowed to play piano, and were asked to choose a different instrument. These instruments were graciously lent by the Music Therapy Department at Concordia University. Four recordings were collected with a ZOOM Q3HD Handy Video Recorder (the student-researcher's personal device): two of mock performance improvisations with two participants, and two of mock clinical improvisations with two different participants. These recordings were saved on an external hard drive.

Procedures. The student-researcher and participants read the consent form together and participants were given detailed information about the research project, procedures, confidentiality, and data storage. They were informed that at any time they could retract their participation without penalty. When they accepted, each participant was invited to Concordia University's Visual Arts Building for a 30-minute individual session. Prior to beginning the session, participants were reminded of their rights in the study, and asked to sign a consent form. Once the consent form was signed, the participant was invited choose an instrument from the selection provided by the Music Therapy Department, such as djembe, xylophone, tamboa, congas, bongos, hand chimes and other percussion instruments. They were given some time to play the instrument to be certain of their choice, and they were invited to sit down comfortably in a chair near the researcher, who

was seated at the piano. The only verbal instruction given was to play the selected instrument, to engage in musical conversation with the student-researcher, while being recorded. The improvisations lasted between three and eight minutes.

Data Collection. The data collection design was informed by that of a 1997 study by Brown and Pavlicevic, *Clinical improvisation in creative music therapy: musical aesthetic and the interpersonal dimension*. Some aspects of their methodology were retained while others were modified to better suit the inquiry of the present study. The purpose of Brown's and Pavlicevic's study was to examine their personal experiences as improvisers in clinical settings and musical settings, and to uncover similarities and differences in each setting, for each of the two researchers. In their method, they performed three improvisations together, taking turns as clinician, client, and musician, and immediately taking notes afterwards. They listened back to the recordings independently and made timed written analyses; they also had a third 'blind' assessor evaluate the recordings. All data, written and musical, was analyzed to shed light on the different experiences of each music therapist when engaging in improvisation.

In the present study, however, I was the sole researcher, and the main goal was to gain insight into what affects my decision-making in both performance and clinical settings. I recorded and analyzed four improvisations, each with a different participant: two mock clinical improvisations, and two mock performance improvisations. Each recording was between 3-8 minutes in duration. Immediately after each recording I wrote my thoughts and reactions in a journal: What did I hear? What did I think? What was I reacting to? How did I decide what to play? When and why did I leave silence?

I then proceeded to transcribe the music, writing out each note played by both the researcher and the participant, to the best of my ability, by hand at first for speed and efficacy, then transferring the information to a music notation software (Sibelius) for clarity. This process gave me insight into how my thoughts and intuitions were manifested in my music, as well as the interaction between myself and the participant. This musical analysis was a modified version of Lee's Method of Analyzing improvisations in Music Therapy (2000) and is described in detail below. The goal was to expose the structure and patterns of the improvisation and shed light on the musical interaction that took place between myself and the participant; additionally, it allowed me

to target the moments in each improvisation that I thought were important and worthy of further exploration. In addition, the improvisations were assessed using Lee's indexing method, as described in *The Architecture of Aesthetic Music Therapy* (2003, p. 137-145). Some modifications were made to Lee's nine-stage analytical process in order to reduce the amount of data generated.

Data Analysis

For each recorded improvisation, after the participant had left the room, I proceeded to write notes on the session. These notes included: feelings of comfort or discomfort; whether I felt the participant was at ease or not; if my mind drifted away from the music, and when; whether I felt I had successfully supported the participant in their music; what I heard, what I reacted to, and my overall comments about the improvisation.

I waited two days before listening before listening back to the recorded improvisations. I did not want to leave too much time in between the recording and the listening as I did not want to forget any details. I listened to them all in one day, in the same order they were recorded (Stage 1). At this time, I wrote any new thoughts or observations that emerged.

I then proceeded to transcribe each improvisation. In this study, I focus on a method called indexing, developed by Lee (2003), in which significant moments in the music are identified, described, and linked to therapeutic development. Each improvisation was analyzed in the order they were recorded. For the purpose of this study, I adapted Lee's method, yielding the following six-step method for analyzing the four improvisations.

Stage 1. As suggested in by Lee (2000), I listened to each improvisation in its entirety, three times. The first time I listened without trying to analyze, as one might listen to a piece of music, to glean the overall energy and affect of the improvisation, without stopping to take notes. The second time I listened, I paid attention to the shapes and structural components, to the ebb and flow of the improvisation, again without stopping the tape or taking notes. I tried to remember being in the improvisation, and to remember any thoughts and reactions I had at that time. For the third listening, I took more detailed notes on things I heard. I stopped the tape occasionally to examine ideas

that I played, and whether or not they were in reaction to ideas the participant played. This helped me gain insight into why I made certain choices. I noted elements, both musical (dynamics, chromatic passages, register, key changes, pauses) and non-musical (thoughts, feelings), that stood out. I listened to the interaction between myself and the participant. I listened to all 4 sessions in the same day (in the same order they were recorded), with a 30-minute break between each session (to allow for greater clarity and fresher ears).

Stage 2. The notes taken directly after each improvisation were combined to those taken in Stage 1, using different colors to differentiate the two writing installments. Then I proceeded to index each improvisation, creating a verbal description of what happened: who began and ended the improvisations, any recurring musical ideas, interactions, and pauses, including the exact times at which they occurred (for example, lower-register tremolo at 2:11), using both musical and non-musical terminology. These descriptions were a way to identify musical or emotional themes and patterns within each improvisation, and to create a repertory of musical and non-musical elements for each improvisation. Lee stresses the importance of being concise, as this is to be "an inventory of musical constructs" (p. 157).

Stage 3. In this stage, I made a musical notation of each improvisation in its entirety, to the best of my ability, using only my ears and the piano (i.e without the help of MIDI music software). For this stage I was allowed to stop the tape as often and for as long as necessary. I then entered the information into a computer notation program (Sibelius); these electronic transcriptions remained on my computer under password protection, while the original hand-written parts were stored in a locked portfolio.

Stage 4. This stage consisted of examining each item on the repertory list created in Stage 2 and asking myself: Why did that happen, why did I go there, why did I play that? Was it a reaction to something I heard, something I felt, something I thought? I attempted to make primary connections between salient musical and non-musical events and any thoughts and feelings; I was looking to find the source of each musical event. This stage shed light on my personal process during improvisation: what I listen to and what influences my decision making.

Stage 5. In this stage, I compared all the material from Stages 2, 3 and 4 of the two mock clinical improvisations, to find any overlapping themes. The same comparison was done between the material from Stages 2, 3, and 4 from the two mock performance improvisations. Two new lists of themes were created from the data generated through this stage.

Stage 6. I compared the data from the two mock clinical improvisations to the data from the two mock performance improvisations: this was the culmination of the research. By examining the data from both situations, I was able to highlight any differences and similarities between my decision-making in both situations.

After this indexing procedure, I proceeded to create a painting in response to each improvisation. This artistic response is a key component of arts-based research and will be described in greater detail.

Data storage

In order to maintain confidentiality, each participant was assigned a code identifier, number, and recordings with each participant were labeled according to this code (1, 2, 3 or 4). No identifying personal information remained on the files. Recordings were done with the student-researcher's personal HD-Q3 recording device. Files were transferred to a password-protected external hard-drive, given a code identifier, and immediately deleted from the HD device. The password-protected external hard-drive was stored in a locked filing cabinet for the duration of the study. Recordings were analyzed using the student-researcher's personal laptop computer, which was password protected, and equipped with adequate antivirus protection to ensure no unauthorized person could have access to the files. Prior to participation, all participants were informed of the use of the recordings as well as the data storage procedures before signing the consent forms.

Ethical Considerations

In arts-based research, especially when the researcher's experience is the focus of the study, researchers must be sensitive to self-disclosure. In this particular study, the concern was of disclosing personal information about the researcher's thoughts about herself and her musicianship, that may have transpired into the data. There was little

concern for revealing personal information about the participants, and no concern for disclosing any personal information of family members or friends.

Another consideration is the presentation of the results to a wider audience. When arts-based research results are presented, some audience members may have emotional reactions to the presentation. Therefore, one must consider providing a means for the public to communicate back to the student-researcher if the artistic presentation of the results elicited a reaction and if they need to debrief. In this particular case, I did not feel the results would elicit any such negative reaction. I did however leave my email address in order to be available for any post-presentation discussion.

Chapter 4: Results

The primary research question was ‘What do I listen to when I improvise, and what influences the decisions I make?’. To answer this question, I recorded improvisations with four participants, took notes, and transcribed the improvisations. The notes were coded, the transcriptions analyzed, and the following themes emerged in answer to the research question.

Themes from Improvisations #1 & #2 (from the stance of a music therapist) were combined, and themes from the improvisations #3 & #4 (from the stance of a musician) were combined to establish similarities. The two sets of themes were then compared to each other to find similarities and differences, to answer the subsidiary questions: ‘How does my decision-making process differ from clinical improvisation to musical improvisation?’. The results of this process are presented below, including additional comments from my notes that were deemed significant. Direct quotes from the personal notes are included in italics; musical excerpts from the improvisations are included to ground the results in collected data.

Improvisation #1: From the stance of a music therapist

Participant #1 had no previous musical experience and seemed very nervous. Participant asked questions and insisted that the student-researcher should begin. Participant dropped mallets after student-researcher had started. Student-researcher avoided making eye contact throughout the improvisation in order to avoid talking. This being the first improvisation, student-researcher felt a little nervous and preoccupied, with making sure the recording devices were placed in the right spot and were recording properly. Duration of improvisation was 3:58.

Figure 1:Artistic Response to Improvisation #1

Improvisation #2: From the stance of a music therapist

Participant #2 had taken a few music lessons many years ago but didn't consider themselves a musician. Participant #2 seemed quite comfortable, even excited at the idea of improvising. Participant #2 played marimba with two mallets, djembe with two mallets, and chimes. Though the student-researcher began the improvisation, participant #2 ended it by playing the last note. Duration of improvisation was 8:00.

Figure 2: Artistic Response to Improvisation #2

Themes from improvisations #1 + #2: from the stance of a music therapist

Relevant themes extracted from the mock improvisations as a music therapist were:

Theme 1: Inspired musical intuition. I was the initiator for both improvisations, likely because the participants assumed I should begin because I was the researcher. Each one began quite differently, but I could not identify why I played what I did. My notes read: '*I started with open fifths, though I have no idea why*'; '*I intuitively decided to start in the style of French Impressionist music, though I don't quite know why'*. This inspiration, I conclude, must stem from intuition: somehow the music emerged from within and guided my hands.

Theme 2: Responding to musical content.

Category A: *Reflecting melodic/rhythmic/harmonic material*. Much of what I played in these improvisations was in reaction to something-a rhythm, a pattern, a note, a melody-that I heard the participant play. For example, in improvisation #1, every time the participant played the chimes, I would respond by playing a cluster of notes in the upper register '*to tell [the participant] I was with [them], having fun with [them] in music*'; when the participant played an ascending C major arpeggio, I responded by playing ascending C major triads; when the participant played a 3-note pattern, I quickly incorporated the participant's rhythmic figure into what I was playing. In the second improvisation, I responded to every splash of the chimes, but in a different manner than in the first improvisation; when the participant introduced a new rhythmic figure I immediately integrated it into what I was playing; when the participant went to a minor key, I also played minor.

Category B: *Modeling new musical ideas*. At times I noticed I was trying to encourage the participant to try something different. In improvisation #1, when I noticed the participant was playing in the same restricted range, I played on either ends of the piano, hoping to encourage exploration of the range of the instrument. '*I was trying to model different sounds, different ideas*', I wrote in my reflexive journal. At one point in improvisation #2, when the participant was repeating the same rhythm, I responded by playing something slower, to break the pattern by modeling tempo variations. Later in the same improvisation, I elaborated on a 3-note cell that the participant played, by elongating it, then adding some chords. (This is closely related to Category D.)

*Category C: Using idioms and learned techniques***.** Some of the decisions I made stemmed from idiomatic material, or techniques that I had learned during my studies, both in jazz and music therapy. I often played ostinato figures or vamps, hoping that the safety of a predictable pattern would help the participant would feel free to play, which is a common music therapy technique. During improvisation #1, I wrote: *'I thought of the techniques we practiced in class'.*

Category D: Creating a musically rich experience. During these improvisations I (often) consciously thought about making music that would be inspiring, enriching; I envisioned filling the room with beautiful music that would be fulfilling and uplifting: I

played lush harmonies; '*I went to minor, no idea why….perhaps to inspire? to provide a rich musical experience?*'; '*when together we created nice harmonies, I tried to stay in them so we could enjoy a moment of consonance together*'. Sometimes the objective was to inspire the participant, to show them a myriad of possibilities; sometimes it was to help them to feel secure in unknown territory.

In the example below, I responded to the participant's descending broken triad by playing descending block triads, thus offering an embellished modification of the original idea:

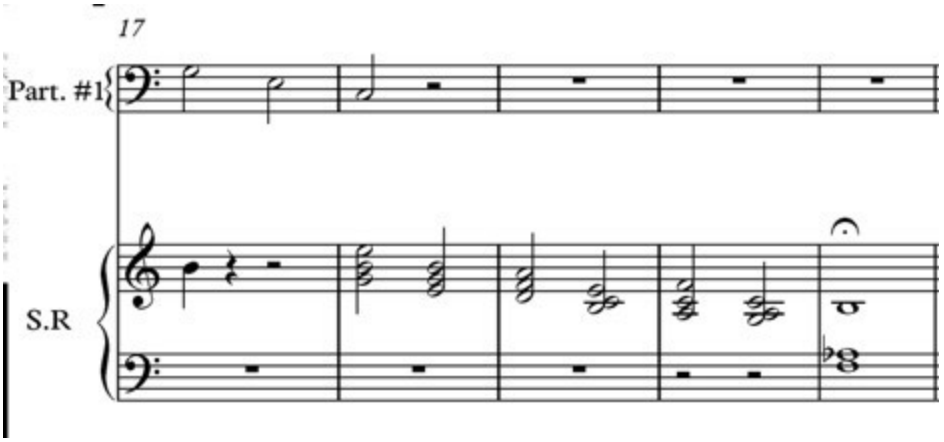

Figure 3: Triadic Embellishment (Improvisation #1)

(S.R=Student-Researcher; Part.#1=Participant #1)

Theme 3: Responding to perceived emotion. This theme encompasses choices I made in response to what I was 'sensing' from the participant, either through words that were spoken, through body language, or through the music. I subdivided this theme into 3 different categories:

Category A: Responding to intuited emotions. This theme also recurred several times throughout these two improvisations and is closely related to Category C of Theme 2. This category was previously named 'wanting to create a safe space', and I realized that many of my musical decisions centered around the idea of creating a 'space': either a safe, inviting space, or a space of freedom and exploration. This was primarily guided by what I intuited about the participant. If I felt the participant was nervous, I would play softer, more predictably, I would mirror back their music more literally to thinking it would provide reassurance. '*I wanted the participant to feel safe to play along, safe to explore*'. If I felt the participant was already comfortable, I would play more liberally, for

the participant may not need direct musical recognition or approval: '*I sensed the participant was confident, so I felt less inclined to mimic [their] ideas exactly*': For example I might reflect back an idea, but slightly modified '*I supported [the participant] with a left hand ostinato, that mirrored [their] rhythm but leaving out a few beats, like a modified/incomplete version of [the participant's] initial rhythmic idea*'. I felt this was enough to tell the participant, *I hear you, I am with you*, without being overbearing. At times I decided to provide a stable groove, to create a sense of predictability for the participant to improvise with greater confidence. What I intuited from the participant influenced the way I responded to their music.

Category B: Responding to emotional content in the music. Closely related to Category A, this theme describes the way I reacted to feelings and emotions perceived in the music. From a reflexive journal entry: *'I played left hand octaves to support the solemnity of the participant's mallet on the djembe*'. The music the participant was contributing suddenly took on a serious, solemn feel, and I deliberately supported that by providing what I felt was a solemn accompaniment, as illustrated in the following excerpt:

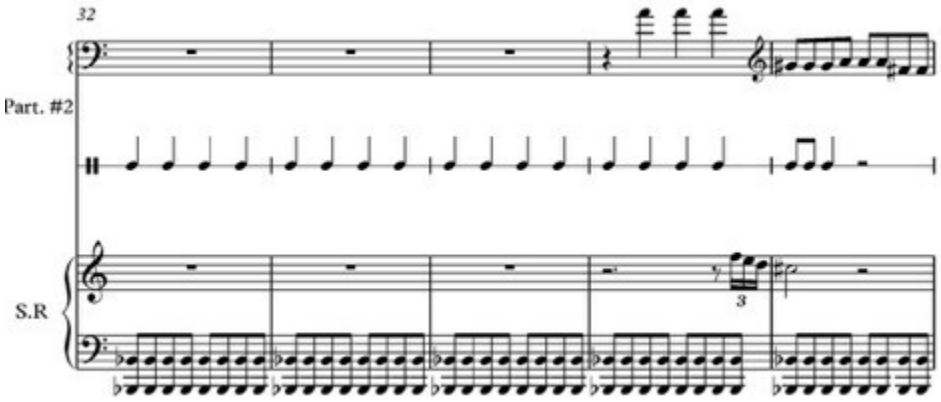

Figure 4: Octaves to Support Solemnity (Improvisation #2)

(S.R=Student-Researcher; Part#2=Participant #2)

Category C: Concern for the participant's thoughts/opinions. There were several instances where I expressed concern for the participant's thoughts. Concern about how the participant was viewing the music and the overall experience certainly influenced some of my decisions. In improvisation #2, I modified what I played because I did not want the participant to think the music was 'corny'. I wrote in the reflexive journal *'I did*

not want [the participant] to think this was ridiculous and un-musical'. In wondering if the participants were still engaged, I questioned: '*Did I think [the participant] was getting bored?*' and '*I also wondered if they [the participant] had had enough, when they were going to stop, or if they were waiting for me to end*'.

An interesting comment that arose in Improvisation #1 (but not in improvisation #2) was *Searching for connection*. At one point I decided to move to a predictable pattern because I didn't feel we were playing together; I felt we had been playing separately, tentatively, but I wanted to connect somehow, through the music: *'After floating around trying to get [the participant] to trust me, to let go, I thought maybe I should provide a stable predictable pulse'*. Though this did not occur in the second improvisation, I felt it important to mention this because it highlights one of the elements that make improvisation therapeutic: human connection.

Some of these themes are so closely related that it is difficult (arguably even counterproductive) to separate them entirely. For example, 'responding to a perceived emotion' such as nervousness, will influence my desire to 'create a safe inviting/space', which in turn will influence the way I 'respond to harmonic/rhythmic material'.

Improvisation #3: from the stance of a musician

Participant brought personal instrument, an acoustic guitar. Participant was an amateur guitarist and seemed excited at the idea of playing music together, and also a little nervous. Participant suggested we pick a key prior to playing, which the student-researcher was not expecting. Duration of improvisation was 6:00.

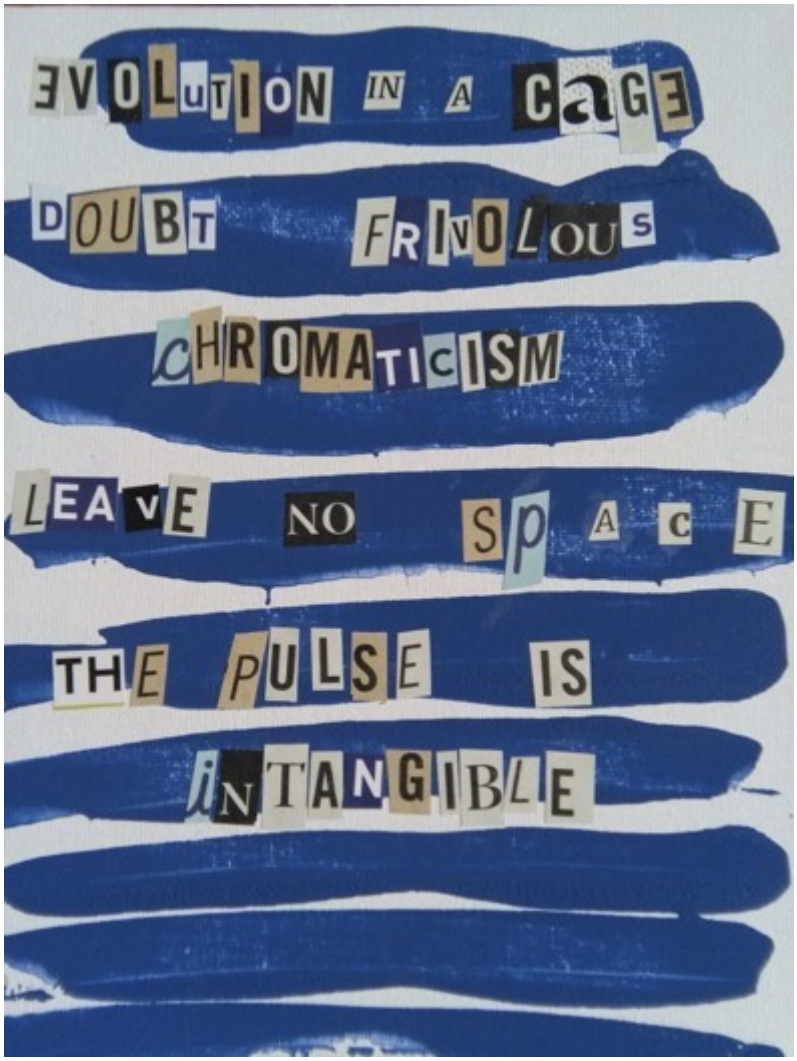

Figure 5: Artistic Response to Improvisation #3

Improvisation #4: from the stance of a musician

Participant #4 played xylophone with 2 mallets, tamboa, and chimes. Participant #4 had no musical background but enjoyed going to hear live music. Participant seemed keen but unsure. Duration of improvisation was 8:15.

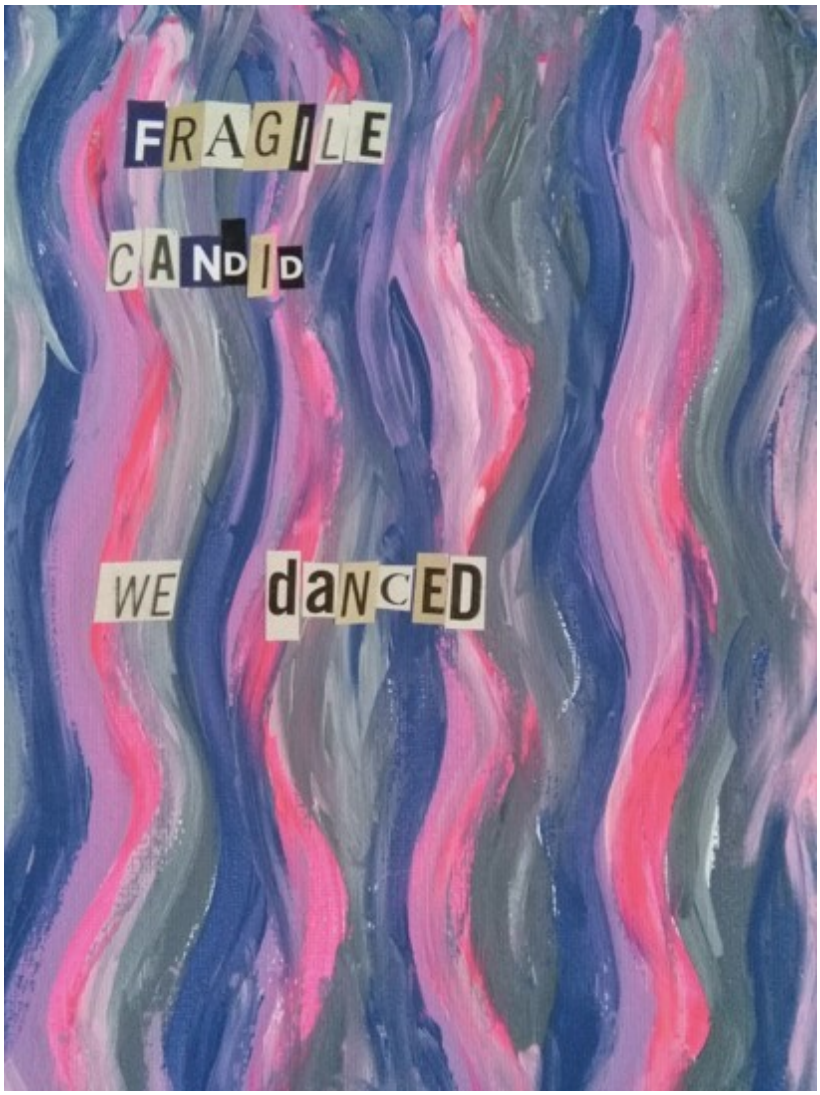

Figure 6: Artistic Response to Improvisation #4

Themes from improvisations #3 + #4: from the stance of a musician

Relevant themes extracted from the mock improvisations as a musician were:

(Themes 1 and 2 from the mock clinical improvisations emerged in the mock musical improvisations as well. Here they are listed as Themes 1 and 2.)

Theme 1: Inspired intuition. Again, I began both of these improvisations, and again could not pinpoint exactly what prompted what I played. Before beginning the third improvisation, the participant asked if we could play in the key of G, which immediately imposed a direction to the improvisation that the others did not have. Although the participant did not mention the blues form, I intuitively began playing bluesy/mixolydian material: *'When they [the participant] asked what key, I intuitively thought a blues, so I*

started playing mixolydian lines'; at the time I was not sure why I did this. It was only after listening back to the tape that I heard the participant quickly play a few blues licks to warm up on their instrument, information which must have been retained by my subconscious. In the 4th improvisation, I began with a more playful opening, using light, staccato chords. I believe this was to off-set the nervous energy I was feeling from the participant: I thought something playful would set a relaxed, lighthearted mood. Both these beginnings were directed by an intuitive inspiration that is difficult to describe in words.

Theme 2: Responding to musical content. This theme was significant in both improvisations; I subdivided it into 3 categories:

Category A: Responding to melodic/harmonic/rhythmic material. In improvisation #3 I often repeated back the rhythmic material played by the participant. Also, during this improvisation, the reflexive journal describes that I was trying to leave space for the participant to join in the music but found myself playing more and more because they weren't playing anything. Interesting to note that my response to silence is to try to fill it in. In improvisation #4, there were long segments where the participant would play a figure and I would repeat it back, either note for note, or using the rhythmic outline, or adding a chord or elongating/elaborating the figure. I would reflect back the participant's chromatic patterns (also in improvisation #4). In improvisation #4 I heard the participant play a phrygian pattern, and immediately played something to support that mood/sound; when I heard the participant go up in register, I also went up in register.

Category B: Creating a rich musical experience. In these two improvisations I was aware that I was a more experienced musician than each of the participants. Therefore, I sometimes played things thinking it would be a fun, enriching experience for the participant. For example, participant #4, in our introductory discussion, mentioned that they enjoyed listening to jazz. During our improvisation, I launched into a funky/jazzy groove while thinking it might be fun for the participant: my goal was to create an enriching musical experience: *'Repeating back their ideas, with a little elaboration, with the goal of creating a rich musical forest'*. Here is a short excerpt from improvisation #4, where we are playing over an ostinato figure (bottom staff), the participant is playing an ascending chromatic line, and the student-researcher responds by

playing a shorter, descending, less chromatic figure. This excerpt exemplifies taking the participant's musical offering and reflecting it with a slight variation:

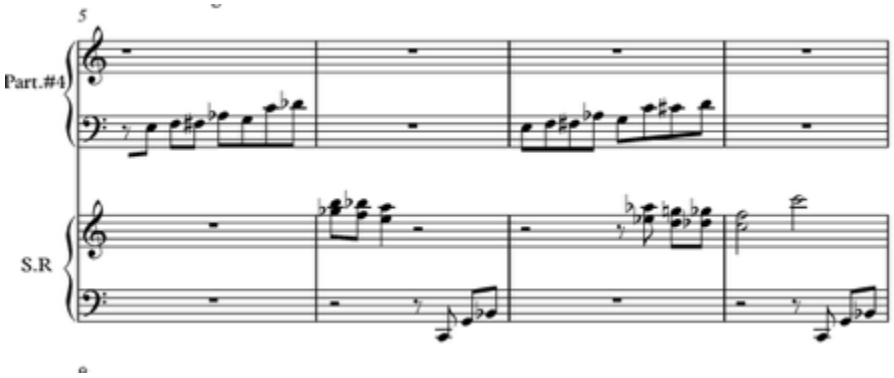

Figure 7: Contrary Motion (Improvisation #4)

(S.R=Student-Researcher; Part#4=Participant #4)

In improvisation #3, I consciously used the material the participant had been playing to create a familiar environment for them to solo: I thought that if they were hearing figures and motifs that were familiar they might feel comfortable to improvise. *Category C: Using idioms/learned techniques*. In these two improvisations, I used idioms and techniques learned through my jazz training. For example, my training in jazz performance has taught me not to repeat figures I hear exactly but to play something complimentary and supportive, which is something I did several times in both improvisations. I kept this in mind as a clinician as well but seemed less concerned with avoiding exact imitation. As a musician, I used certain idioms for purely creative purposes: I played things that were not at all related to things I heard, but rather just to be creative. This observation surprised to me, and I wondered if I had done these things to show off or simply to have fun in music. Sometimes I played familiar rhythmic figures, as in the example below, I used the common 'Charleston' figure:

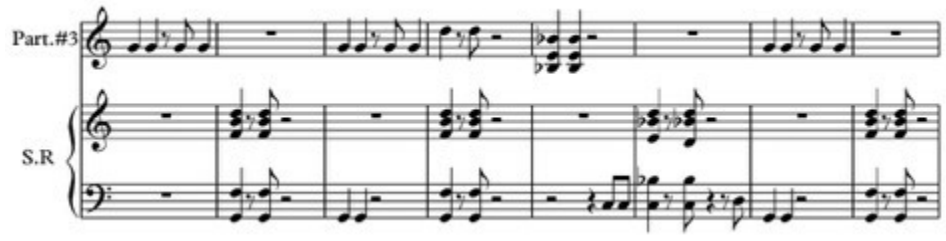

Figure 8: Using Idioms-Charleston Figure (Improvisation #3)

(S.R=Student-Researcher; Part#3=Participant #3)

Sometimes I played conventional jazz material out of habit. For example, participant #3 and I had been playing a common 12-bar blues form (a common structure among musicians), I played specific chords at the end of the chorus, commonly called a 'turnaround'. Even though I didn't hear the participant using this turnaround, I played it anyway. I noticed it had very little perceivable impact on the music, yet I continued to play the same turnaround often (though not always), perhaps out of habit than, or perhaps for aesthetic reasons.

Theme 3: Responding to inner feelings. Lack of interest came up a few times during these improvisations: I felt the music was uninteresting, I wondered when the improvisation would end. This likely influenced my decisions because such thoughts removed me from deep involvement in the music, and perhaps prompted me to lead the participant toward an ending. This theme, which did not appear in the improvisations as a clinician, could be a result of accumulated fatigue and loss of focus, as these improvisations were performed last; perhaps it partly stems from insecurity and perfectionism.

Theme 4: Responding to assumptions.

Category A: Responding to perceived musical expectations. In reading my reflexive journal, I realized how often I catered to expectations, my own as well as those I assumed the participant held. In the third improvisation, the participant expected we would 'jam' on a blues. I believed I was expected to begin the improvisations: '*I tried to kind of solo of what they [the participant] were playing, it felt a little forced, like that was what I SHOULD do, not what I WANTED to do*'. I played certain things because I assumed the participant expected me to. In improvisation #4 I sometimes changed what I was playing because I felt the music was repetitive, so I assumed the participant must be disengaging.

Category B: Concern for participant's thoughts. Similar to the improvisations as a clinician, I remember feeling a self-imposed pressure to make the improvisations interesting and rewarding for the participants. Several times in my notes I wrote: 'I hoped that they didn't feel bored or feel that they were wasting their time'. Perhaps this concern stemmed from the idea that the participants had volunteered to participate in my study, and I felt grateful for their involvement, and wanted to return the favor somehow.

Perhaps the same feelings would not have been present had I been playing with another musician strictly for fun.

Theme 5: Concern for musical exactitude. There were several instances in which I wanted the music to adhere to strict musical rules, mostly regarding form. In the third improvisation, the participant and I had been playing a common 12-bar blues form (a common fixed structure commonly used by musicians) from the beginning of the improvisation. At several places the music deviated from the structure of the form, by omitting or adding beats or bars. Because we were playing on a set framework, the 12-bar blues, I felt annoyed at this breach of the 'rules': In improvisation #4, I had started a regular ostinato figure, where I was played the same thing on the first beat of every bar, to establish predictability; on two different occasions during this section I made a 'mistake', and failed to play on the beginning of the bar, thus interrupting the regularity. While this had very little perceivable consequence on the music or the participant, I remember feeling uncomfortable, as if I had made an irreparable error: *'that will be painful to hear when I listen back to the tapes'*, I thought. Clearly the musician in me strives for precision and exactitude in everything I play, which subconsciously limits the amount of risks I take while improvising. Jazz improvisation is an acquired skill that often involves following certain rules and conventions, but it is also beneficial to know when to let go and follow the music, wherever it may go.

Theme 6: Reacting to physical cues. In both of these musical improvisations I occasionally looked over at the participant, and in both instances, I saw the participant with their head down, eyes locked on their instrument, moving to the beat of the music, seemingly fully engaged in the music. This reassured me that they weren't bored or disinterested and encouraged me to allow the music to continue developing organically rather than try to play something compelling. During the third improvisation, the participant began to tap their foot: this immediately made me nervous because I assumed that the reason they couldn't feel the pulse (and therefore needed to tap their foot) was because my tempo was unclear. *'Was I not setting it up clearly?'* I wrote in my reflexive journal. By interpreting a simple gesture-tapping of the foot-as being a result of something I did indicates an insecurity that I will need to explore further.

The following table is a compilation of all emergent themes. Themes 1 and 2 emerged in both mock clinical and mock musical improvisations (#1, #2, #3, &#4). Theme 3 emerged in only the mock clinical improvisations (#1 & #2) and themes 4, 5, and 6, emerged in only the mock performance improvisations (#3 & #4).

Table 1:Themes and Categories

Theme 1: Inspired intuition
Theme 2: Responding to musical content
Category A: Reflecting melodic/rhythmic/harmonic ideas
Category B: Modeling new ideas
Category C: Using idioms and learned techniques
Category D: Creating a musically rich experience
Theme 3: Responding to perceived emotions
Category A: Responding to intuited emotions
Category b: Responding to emotional content in the music
Category C: Concern for the participants' thoughts/opinions
Theme 4: Responding to inner feelings
Theme 5: Responding to assumptions
Category A: Responding to assumed musical expectations
Category B: Concern for participants' thoughts
Concern for musical exactitude
Theme 6: Reacting to physical cues

Chapter 5: Discussion

This first-person arts-based investigation has provided new insight into my decision-making process and has led to significant developments in my music therapy practice. Scrutinizing my personal decision-making process allowed me to better understand why and how I make spontaneous decisions during improvisation, in both performance and clinical settings. I also gained clarity on how the two types of improvisation—clinical and musical—are similar and different, which has led to greater clarity on my musical identity. The following final chapter includes interpretations of the results of the study, a description of the creative synthesis, personal, educational and professional implications. Limitations of the study are discussed, and closing thoughts are presented.

In answer to the primary research question: what influences my decision-making process? The following paragraphs explicate the results from Chapter 4 by highlighting the themes that emerged in both performance and clinical improvisation.

Theme 1: Inspired musical intuition

Intuition is an important tool in clinical improvisation (Brescia, 2005; Cooper, 2010; Forinash, 1992; McCaffrey, 2013; Pavlicevic, 1990). Brescia's 2005 study on intuition reveals that music therapists experience different forms of intuition. In the results of the present study, I observed two different forms of intuition: musical intuition, which includes how I decide what to play next, and, as we will see later on, and emotional intuition, which includes how I react to emotions I was sensing from the participants.

Musical intuition clearly played a role at the beginning of each improvisation. As I began to play the very first notes, I felt my hands were being guided by an unidentifiable source. This intangible source, indescribable inspiration, is intuition. In those times I felt almost like a witness, a spectator rather than co-creator. The presence of this musical intuition could be felt at other times during the improvisations, but was most obvious at the beginning, before rational, logical thoughts could enter my mind.

Theme 2: Responding to musical content.

The results indicate that I respond quickly to elements I hear in the music: rhythmic patterns, melodic patterns, chromaticism, dynamics. As displayed in the excerpts from the improvisations, many of my musical ideas stem directly from what the participants played. Sometimes I would repeat rhythmic figures explicitly; other times I would elaborate or embellish a rhythmic idea. *Modelling new ideas* (Category B) was a way of communicating with the participants by reacting to their musical offerings. I achieved this through playing in different registers of the piano, playing staccato, by breaking up a repetitive pattern, or playing very loud to create an element of surprise. Other music therapists also describe trying to elicit responses from their clients by suggesting musical ideas, teasing or playing unpredictably, or playing a familiar song (Cooper, 2010). The use of *Idioms and learned techniques* (Category C) impelled me to create vamps and ostinato figures, which are techniques commonly explored in music therapy training (Lee & Houde, 2011). Sometimes, as in improvisation #3, using common rhythmic patterns allowed me to better communicate with the participant, in much the same way improvising musicians relate to one another using familiar phrases and universal vocabulary (Rogers, 2013). *Creating a rich musical experience* (Category D) was a theme that emerged several times throughout all four improvisations. As the participants themselves were not musicians (with the exception of the 3rd participant, who was an amateur musician), I hoped I could offer them a pleasurable experience in music. I have the technical ability and musical knowledge to create a variety of musical environments, and I wanted to provide an enriching and broadening environment for each participant. In the music therapy literature on improvisation, music therapists describe striving to create music that is meaning

ful for their clients (Cooper, 2010). Interestingly, this theme emerged more frequently in the three improvisations where I felt the participant was more nervous. In reaction to perceived discomfort, I endeavored to create meaningful, purposeful music that I hoped would put each participant at ease and encourage them to feel free to express themselves in music. In the one improvisation where I felt the participant was more comfortable, I was less preoccupied with creating an environment, and more focused on interacting and connecting through music.

Theme 3: Responding to perceived emotion.

Many of the choices I made during the four improvisations were based on what I sensed from the participant: *Responding to intuited emotions* (Category A). The results of the present study demonstrate my awareness of each participant's emotional state and a sensitivity to their individual needs during the improvisation; this awareness influenced my decision-making process. Many music therapists report experiencing heightened empathy and awareness of the client's feelings when they engage in clinical improvisation (Cooper, 2010; Forinash, 1992, McCaffrey, 2013). This empathy was less prevalent in the improvisations as a musician, where I was sensitive to the participants' comfort level upon beginning the improvisation, but once engaged in the music this sensitivity was no longer as present. Category B, *Responding to emotional content in the music,* describes how I tried to musically support an emotion I perceived in the music. For example, in Improvisation #2, I reflected the solemnity of a rhythmic pattern offered by the participant by playing octaves in the lower register. Category C, *Concern for the participants thoughts and opinions,* emerged in both clinical and performance improvisational settings. I wondered if the participants were bored or disinterested, which in turn made me feel vulnerable. Many music therapists experience a feeling of vulnerability when they engage in improvisation, due to the complexity and unpredictability of the improvisational process (Cooper, 2010; Forinash, 1992, McCaffrey, 2013), or in reaction to reflections on their abilities as a music therapist (Brown & Pavlicevic, 1997; Cooper, 2010). This concern for participants' thoughts was more prevalent in the improvisations as a musician than as a clinician; perhaps there are some insecurities that need to be addressed. Some of this concern could be due to the fact that I was grateful to the participants for donating their time and effort to participate in this research project, and in return I hoped at the very least the experience would be worthwhile.

In response to the subsidiary research questions: (i.e., What elements of these improvisations are similar?; What elements are different?; and What other insights emerged?), the following paragraphs highlight themes that arose in one improvisational setting but not in the other.

One theme that emerged in the performance but not the clinical improvisations was *Concern for musical exactitude*. I immediately felt uncomfortable when I made what I perceived as an error or inconsistency in the music. This indicates that accurate playing was a prominent goal in the mock performance improvisations. However, in the mock clinical improvisations, the primary goal was not to strive for accuracy, but rather to "guide the participants into new musical territories" (Pavlicevic, 2002, p. 272).

Initially, the theme of *Responding to assumptions*, was pertaining to what the participants were expecting of me. I assumed, though it was never spoken, that because I was the student-researcher, the participants expected me to begin the improvisations; that the participants expected me to lead the music; that they were not allowed to end until I did. These may or may not have been true, but some of my decisions were based on what I thought was expected of me. Then I realized I unconsciously harbored expectations of my own, regarding the participants' engagement, and I began to wonder what I might expect of clients in music therapy clinical improvisation. Perhaps I also have expectations or assumptions about musicians I play with in performance contexts.

Another theme that emerged only in the mock performance improvisations was *Responding to physical cues*. During the two mock performance improvisations, the information I received from the participants' physical cues informed the decisions I made: if the participant's body language led me to believe they were engaged in the music I continued; if their body language led me to believe they were bored, I changed what I was playing. Several factors could have influenced this finding: perhaps I did not look at the participants in the clinical improvisations as often; perhaps when I did look, the participants did not give any physical reactions that influenced my decisions.

The theme *Reacting to inner feelings* also emerged only in the mock performance improvisations. My personal feelings and thoughts emerged more frequently when I was improvising as a musician. I found myself feeling bored, wondering if the improvisation was getting too long, feeling annoyed at what the participant played, being critical of what I played, or feeling insecure about my musicianship. Other therapists also report feeling insecure and vulnerable during improvisation (Brown & Pavlicevic, 1997; Cooper, 2010; Forinash, 1992) These thoughts did not arise in the two improvisations as a

clinician, where I was more focused on the participant, their feelings, and how best to support their music.

Many decisions were made based on previous learning or lived experiences. Specifically, in Improvisation #4, as a musician, I decided to put down the soft pedal with my left foot (to lessen the volume of the piano) when I heard how softly the participant was playing the xylophone. This decision was a direct result of improvisation one, where the participant had played so softly that I worried I would have trouble hearing everything in the recording.

Creative synthesis

Creative synthesis is an essential component of arts-based research. A creative synthesis is the researcher's artistic response to the results of the research, producing an interesting and universal way to disseminate results (Leavy, 2009). The form of the creative synthesis in the present study slowly took shape as the study progressed. I have always been attracted to multidisciplinary art. With this in mind, after listening to, indexing, and transcribing the improvisations, and examining my reflexive journals, I felt the best way to synthesize the data was to create, while listening to each of the improvisations, four individual works of art, in an attempt to reflect the complexity and uniqueness of each musical meeting.

Acrylic paint on canvas provided the base for each piece. I chose a relatively small canvas size to reinforce succinctness and concision. I originally wanted to create the pieces spontaneously, in the same way improvisation itself is a spontaneous process. However, employing an impulsive process did not satisfactorily reflect the results of the research. As I repeatedly listened to the improvisations, I began to feel increasingly alienated from my own music. I was not expecting this portion of this study to be so challenging: I struggled to give meaning to the music, the paintings, and struggled to find a way to relate the paintings to the music.

Leavy's (2009) questions inspired me to focus on the message I wanted to share: "How does the work make one feel? What does the work evoke or provoke? What does the work reveal?" (p.17). I began to feel that paint alone was insufficient to accurately convey my experience and I decided to add text: by blending text with image, shape and color I aspired to create new meaning. Re-reading my reflexive journal notes, I selected

key words and/or phrases that emphasized the themes, and, using cut-out letters from newspapers and magazines, I glued these words to the paintings. This juxtaposition of text and image allowed me to transmit the doubt, subtlety, and complexity with greater clarity and universality.

Through this creative process, I felt that my habitual ways of thinking were being challenged. My thoughts on the meaning of improvisation were expanding, and my thoughts about my musicality were shifting. The creative synthesis encouraged me to conceptualize my findings in a new way, thus reinforcing the essence of the research.

Limitations

This inquiry was subject to several limitations that may have influenced the validity of the results. First, the fact that three of the four improvisations were conducted on the last day, rather than two per day as originally planned. By the time of the last improvisation, I was less energetic, less focused. This lack of stamina resulted in less detailed notes after the fourth and final improvisation. Second, the fact that I pre-selected the instruments available to the participants may have had an impact on the improvisations. If the participants had been able to choose any instrument from a wider selection, or if they been allowed to play the piano, perhaps they would have played or felt differently, which would have had ramifications on my own playing and feelings.

Mock situations provide only a limited representation of reality**.** Improvising in a clinical setting presents myriad unpredictable variables that would be impossible to replicate in mock settings. Similarly, improvising in a performance setting brings many other issues that were impossible to replicate in this study. Thus, the success of the experiments was highly dependent upon my ability to put myself in a clinical or performance mindset, which was challenging. Given that the first two participants were not music therapy clients, and the two last not professional musicians, it was strictly in my mind that the shift happened. If I had been improvising in a true clinical setting, I might have played or reacted differently. This was even more true of the last two improvisations, where I was in the mindset of a musician, playing with another musician, yet very aware of the difference in level of musicianship. Perhaps if I had been playing with musicians who had more experience, I would have had different reactions, and different elements would have emerged.

Using participants had its limitations as well. Improvising music therapy clients would be concerned with their personal reasons for being in therapy, whereas the research participants in this study had no clinical indications. Furthermore, the participants in this study might have been more concerned with 'doing it right', making sure to contribute what was required for the research study. Though I tried to reassure them I was in no way examining what or how they played, they may still have felt that their musical abilities were being scrutinized. These thoughts could have influenced how they played and interacted in the music, which would in turn have influenced the results.

It is possible that because I am more comfortable as a performing improviser and less as a clinical improviser, my ability to observe and record my thoughts and decisions during the two mock performance improvisations was greater than in the mock clinical improvisations.

Lastly, it is important to acknowledge the possible influence my personal assumptions may have had on every stage of the process. As a professional jazz musician, I have spent a large amount of time thinking about, dissecting, analyzing and practicing, the art of improvisation. Though I tried to enter the process free of biases and hypotheses, I had pre-existing ideas of what the data would reveal, and this no doubt influenced my examination and subsequent interpretation of the results.

Implications

Personal. As anticipated, this research broadened my personal understanding of the improvisational process. Through performing and analyzing mock improvisations, and examining reflexive journal notes, I acquired greater awareness into my personal decision-making processes in both clinical and performance improvisational settings. I have become more aware of how I decide what to play, and the role of intuition my improvisational process. I observed that in both settings, my decisions are largely based on what I hear in the music, what I feel emotionally, and my intuition. There are also some differences: in the mock performance improvisations, I was more concerned with what the participants might be thinking about the music, and more concerned with musical accuracy and precision. Identifying these differences and similarities has enabled me to acknowledge the influence of my jazz skills on my clinical improvisation skills, and vice versa. The insights gained through this research will undoubtedly affect my

music therapy practice: I will be more aware of my intuition, more in tune to the emotional content of the music, and more trusting that the music will reveal itself to me one note at a time.

The creative synthesis was also a revealing process. Painting while listening to the improvisations was simultaneously frustrating and exposing. I experienced yet a new way of listening: with the eyes. Trying to translate the auditory into the visual was challenging, almost a puzzle, a problem that I struggled to solve. Over the course of the research, I became increasingly convinced that paint and collage would best represent my conclusions. The paintings were a culmination of many hours of analysis, introspection, self-examination, and were created after listening to the improvisations several times. I hope these pieces inspire reflection and provoke change in how people relate to improvisation.

The results yielded in this study are valuable and can serve as a foundation for further exploration of decision making in clinical and performance improvisation. This study may provide a reference for other music therapists who may have similar questions in their own practice, and who may find inspiration from the findings. Alternatively, music therapists may be inspired to conduct similar research to reveal their own answers. The methodology used in the present study was based on a paper published by Brown & Pavlicevic (1992). Some adaptations were implemented to better address the research questions. This adapted methodology may provide a framework for future students who wish to compare their personal processes in different settings.

Closing thoughts

The entire research process required an immense amount of patience and self-acceptance as I challenged my limits and understandings. Self-listening was arduous, yet the rewards were manifold: I was able to hear details in the music, make connections between the music and my thoughts, and reflect on my decision-making process.

The relevance hearing, sight, and intuition in the results of this study have led me to consider the importance of the senses in improvisation. Intuition is often considered a sixth sense. This had led me to appreciate the importance of self-care in maintaining a healthy body and mind, so that the senses can be fully receptive and reliable. It has also encouraged me to practice following my intuition in everyday life.

Answering the research questions simultaneously led to new queries about my musicality: Are there other aspects of my performance identity that help or hinder my music therapy practice?; Are there aspects of my music therapy training that enhance my career as a performer?; Is it possible to have only one musical identity that encompasses both sides or will I always be more of one than the other, depending on the situation?

References

Aigen, K. (2009). Verticality and containment in song and improvisation: An Application of schema theory to Nordoff-Robbins Music Therapy. *Journal of Music Therapy, XLVI*(3), 238-267. Retrived from https://0-search-proquest-com.mercury.concordia.ca/docview/1096852?accountid=10246

Aigen, K. (2012). Social interaction in jazz: Implications for music therapy. *Nordic Journal of Music Therapy, 22*(3), 180-209. doi:10/1080/08098131.2012.736878. Retrieved from http://www.tandfonline.com/doi/ref/10.1080/08098131.2012.736878?scroll=top

Amir, D. (1993). Moments of insight in the music therapy experience. *Journal of Music Therapy, 12*(1), 85-100. doi: 10.1093/mt/12.1.85. Retrieved from https://academic.oup.com/musictherapy/article/12/1/85/2757097

Amir, D. (1995). On Sound, music, listening and music therapy. In C. B. Kenny (Ed.), *Listening, playing creating: Essays on the power of sound* (pp. 51-57). Albany, NY: State University of New York Press.

Anderson, S. A. (2013). Conference report: The Improvising Brain Symposium 2013. (article excerpt). *Psychomusicology, 23*(4). Retrieved from https://0-search-proquest-com.mercury.concordia.ca/docview/1562131563?accountid=10246

Bae, M. H. (2011). Music therapists' music listening and subsequent musical decision-making. (Doctoral dissertation, Michigan State University). Retrieved from https://d.lib.msu.edu/etd/1273

Beer, L. (2011) A model for clinical decision making in music therapy: planning and implementing improvisational experiences. *Music Therapy Perspectives, 29*(2), 177-125. doi: 10.1093/mtp/29.2.117. Retrieved from https://0-search-proquest-com.mercury.concordia.ca/docview/1024439805?accountid=10246

Berliner, P. (1994). *Thinking in Jazz: The infinite art of improvisation*. Chicago, IL: University of Chicago Press.

Bonde, L. O. (2016). Analyzing and interpreting musical data in interpretivist research. In B. L. Wheeler & K. M. Murphy (Eds.), *Music Therapy Research*: Third Edition (pp. 457-486). Dallas, TX: Barcelona.

Brescia, T. (2005). A Qualitative study of intuition as experienced and used by music

therapists. In A. Meadows (Ed.) *Qualitative Inquiries in Music Therapy, 2*(3), pp. 62-112. Retrieved from: http://www.barcelonapublishers.com/resources/QIMTV2/QIMT20052(3)Brescia.pdf

Brown, S. & Pavlicevic, M. (1997). Clinical improvisation in creative music therapy: Musical aesthetic and the interpersonal dimension. *The Arts in Psychotherapy, 23*(5), 397-405. doi:10.1016/S0197-4556(96)00033-0. Retrieved from https://www.sciencedirect.com/science/article/abs/pii/S0197455696000330

Bruscia, K. (2014). *Defining music therapy*. (3rd ed.). Gilsum, NH: Barcelona.

Cooper, M. (2010). Clinical-musical responses of Nordoff-Robbins music therapists: The process of clinical improvisation. *Qualitative Inquiries in Music Therapy, 5*, 86-115. Barcelona.

Forinash, M. (1992). A Phenomenological analysis of Nordoff-Robbins approach to music therapy: The lived experience of clinical improvisation. *Music Therapy Journal, 11*(1), 120-141. Retrieved from http://musictherapy.oxfordjournals.org/

Gilbertson, S. (2013). Improvisation and meaning. *International Journal of Qualitative Studies on Health and Well-being, 8*(1), 1-9. doi:10.3402/qhw.v810.20604. Retrieved from http://www.tandfonline.com/doi/full/10.3402/qhw.v8i0.20604

Hodson. R. (2007). *Interaction, Improvisation, and Interplay in Jazz*. New York and London: Routledge.

Langdon, G. S. (1995). The power of silence in music therapy. In C. B. Kenny (Ed.), *Listening, playing creating: Essays on the power of sound.* (pp. 65-69). Albany, NY: State University of New York Press.

Lee, C. A. (2000). A method of analyzing improvisations in music therapy. *Journal of Music Therapy, 37*(2). 147-167. Retrieved from https://0-academic-oup-com.mercury.concordia.ca/jmt/article/37/2/147/1049975

Lee, C. A. (2003). *Architecture of Aesthetic Music Therapy*. Gilsum, NH: Barcelona.

Lee, C. A (2016). *Music at the edge: The music therapy experiences of a musician with AIDS.* (2nd ed.). New York, NY: Routledge.

Lee, C. A. & Houde, M. (2011). *Improvising in styles*. Gilsum, NH: Barcelona.

Kenny, C. B. (Ed.) (1995). *Listening, playing creating: Essays on the power of sound*. Albany, NY: State University of New York Press.

Leavy, P. (2009). *Method meets art: Arts-based research practice*. New York, NY: Guilford.

Meadows, A., & Wimpenny, K. (2017). Core themes in music therapy clinical improvisation: An Arts-informed qualitative research synthesis. *Journal of Music Therapy, 54*(2), 161-195. doi: 10.1093/jmt/thx006. Retrived from https://0-academic-oup-com.mercury.concordia.ca/jmt/article/54/2/161/4049211

McCaffrey, T. (2013). Music therapists' experience of self in clinical improvisation in music therapy: A phenomenological investigation. *The Arts in Psychotherapy, 40,* 306-311. doi: 10.1016/j.aip.2013.05.018

Nachmanovitch, S. (1990). *Free play: Improvisation in life and art*. New York, NY: Penguin Putnam.

Pavlicevic, M. (1990). Dynamic interplay in clinical improvisation. *British Journal of Music Therapy, 4*(2) 5-9. Retrived from https://voices.no/index.php/voices/article/view/88/70

Pavlicevic, M. (2000). Improvisation in music therapy: Human communication in sound. *Journal of Music Therapy, XXXXVII* (4), 269-285. http://www.chinamusictherapy.org/file/file/doc/Improvisation%20in%20Music%20Therapy_%20Human%20Communication%20in%20Sound.pdf

Priestly, M. (1994). *Essays on Analytical Music Therapy.* Phoenixville, PA: Barcelona.

Rogers, S. (2013). Researching musical improvisation: Questions and challenges. *Psychomusicology: Music, Mind, and Brain, 23*(4), 269-272. doi: 10.1037pmu0000027

Ruud, E. (1995). Improvisation as a liminal experience: Jazz and music therapy as modern "Rites de Passage". In C. B. Kenny (Ed.), *Listening, playing creating: Essays on the power of sound.* (pp. 91-117). Albany, NY: State University of New York Press.

Scheiby, B. (2015). Analytical Music Therapy. In B. Wheeler (Ed.) Music Therapy Handbook. New York, NY: Guilford Press.

Thompson, S. (2013). Decision making in music therapy: The use of a decision-making tree. *The Australian Journal of Music Therapy, 24*, 48-64. Retrieved from http://www.openmusiclibrary.org/article/67482

Trondalen, G. (2009). 'Self-listening' in music therapy with a young woman suffering from anorexia nervosa. *Nordic Journal of Music Therapy, 12*(1), 3-17. doi: 10/1080/08098130309478069. Retrieved from http://wwwtandfonline.com/loi/rmjm20

Wang, Y. & Ruhe, G. (2007). The Cognitive process of decision making. *International Journal of Cognitive Informatics and Natural Intelligence, 1*(2), 73-85. Retrieved from http://www.ucalgary.ca/icic/files/icic/67-IJCINI-1205-DecisionMaking.pdf

Wheeler, B. L. (1999). Experiencing pleasure working with severely disabled children. *Journal of Music Therapy, 36*(1). Retrieved from https://0-academic-oup-com.mercury.concordia.ca/jmt/article/36/1/56/914650

Appendix A: Ethics Approval

CERTIFICATION OF ETHICAL ACCEPTABILITY
FOR RESEARCH INVOLVING HUMAN SUBJECTS

Name of Applicant: Marie-Fatima Rudolf

Department: Faculty of Fine Arts \ Creative Arts Therapies

Agency: N/A

Title of Project: Listening and Decision Making in Music Therapy Clinical Improvisation

Certification Number: 30008192

Valid From: July 12, 2017 **to:** July 11, 2018

The members of the University Human Research Ethics Committee have examined the application for a grant to support the above-named project, and consider the experimental procedures, as outlined by the applicant, to be acceptable on ethical grounds for research involving human subjects.

Dr. James Pfaus, Chair, University Human Research Ethics Committee

Appendix B: English Recruitment poster

Note: French equivalent also made.

Concordia University

Creative Arts Therapies
Master degree in Music Therapy

RECRUITING  PARTICIPANTS!

Would you like to participate in a research study on musical improvisation?

What is improvised music?
Music that is made spontaneously. No rules, no mistakes.
No musical background required

In partial fulfillment of a masters in music therapy, I am conducting a first-person arts-based research on how my decision-making process differs while improvising in music therapy and music performance.

If you can donate 20 minutes of your time to come to the VA building (1395 René Lévesque West/Crescent) (VA023) and play improvised music, together with the student-researcher, for 4-5 minutes, please contact:

Marie-Fatima Rudolf, Music Therapy Master degree student

for more details email: mf_jazz@yahoo.ca

Research supervisor:
Guylaine Vaillancourt, PhD, MTA,
Associate Professor in Music Therapy
g.vaillancourt@concordia.ca

Appendix C: English Consent Form

Note: (French equivalent was also available for French-speaking participants)

INFORMATION AND CONSENT FORM

Study Title: Listening and Decision Making in Music Therapy Clinical Improvisation
Researcher: Marie-Fatima Rudolf
Researcher's Contact Information: 514-691-8097, mf_jazz@yahoo.ca
Faculty Supervisor: Guylaine Vaillancourt, PhD, MTA
Faculty Supervisor's Contact Information: g.vaillancourt@concordia.ca

Source of funding for the study: none

You are being invited to participate in the research study mentioned above. This form provides information about what participating would mean. Please read it carefully before deciding if you want to participate or not. If there is anything you do not understand, or if you want more information, please ask the researcher.

A. PURPOSE

The purpose of this first-person arts-based study is for the student-researcher to gain insight into her listening and decision-making processes during musical improvisation and clinical improvisation.

B. PROCEDURES

If you participate, you will be asked to come to the Concordia University VA building, 1395 René-Lévesque W. to meet the student-researcher; you will be asked to select an instrument from a variety of instruments available through the music therapy department; after getting comfortable in the setting, you will be asked to play this instrument for 3-5 minutes, while the student-researcher plays the piano. This portion of the meeting ONLY will be audio recorded by the student-researcher's HD-Q3 recording device. You will not be asked to answer any questions or perform any additional tasks.

In total, participating in this study will take 20-30 minutes.

C. RISKS AND BENEFITS

You might face certain risks by participating in this research. These risks include: First, there is a risk that you may feel uncomfortable playing improvised music, if you are not accustomed to doing so. Second, it is possible that the music may bring up some unexpected emotional content. Though this second risk is minimal, if it becomes an issue the student-researcher will help you through the issues and/or direct you to the appropriate resources to ensure your emotional well-being. There may be unknown risks.

Potential benefits include: the opportunity to play music! More importantly, the opportunity to contribute to the field of music therapy research, and aid the student-researcher in becoming a better music therapist, and completing her masters degree.

D. CONFIDENTIALITY

The student-researcher will gather the following information as part of this research: name and contact information for meeting purposes only, as well as 3-5 minutes of recorded music.

Nobody will access the information, except the researcher and her supervisor. We will only use the information for the purposes of the research described in this form.

The information gathered will be coded. That means that the information will be identified by a code. The researcher will have a list that links the code to your name.

The researcher will protect the information by storing the recorded music on a password protected computer. Once the coding, data analysis and the research completed, the files will be deleted.

The researcher intends to publish the results of the research (on Spectrum, Concordia University's website of graduate research). However, it will not be possible to identify you in the published results.

The student-researcher will destroy the information five years after the end of the study.

F. CONDITIONS OF PARTICIPATION

You do not have to participate in this research. It is purely your decision. If you do participate, you can stop at any time. You can also ask that the information you provided not be used, and your choice will be respected. If you decide that you don't want us to use your information, you must tell the student-researcher before November 30, 2017.

There are no negative consequences for not participating, stopping in the middle, or asking us not to use your information.

G. PARTICIPANT'S DECLARATION

I have read and understood this form. I have had the chance to ask questions and any questions have been answered. I agree to participate in this research under the conditions described.

NAME (please print)

_____

SIGNATURE

_____

DATE _____

If you have questions about the scientific or scholarly aspects of this research, please contact the researcher. Their contact information is on page 1. You may also contact their faculty supervisor.

If you have concerns about ethical issues in this research, please contact the

Manager, Research Ethics, Concordia University, 514.848.2424 ex. 7481 or

oor.ethics@concordia.ca