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## Reconstructing the Boundaries of Dementia: Clinical Improvisation as a Musically Mindful Experience in Long Term Care

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### Abstract

This study explores the use of clinical improvisation with clients either showing symptoms of or having a diagnosis of dementia (related symptoms, e.g. social isolation, depression, disorientation, and cognitive deterioration). Many studies have been completed on the use of music therapy with this population; however few have focused on improvisation. This study is unique in that it explores the experiences of improvisation with a focus on musical analysis and meaning. Through a qualitative study of eight weekly sessions with six different female clients, this investigation aims to offer a rich description of moments of improvised music in relation to characteristics that often deteriorate with dementia. A discussion on the transcendence of certain boundaries of dementia through the natural qualities of mindfulness that exist within a musical experience is provided.

**Keywords:** *dementia, clinical improvisation, music analysis, neurodegenerative boundaries, mindfulness, musical values, well being, health*

### Introduction

In May 2010, I began my full time graduate internship at a long-term care facility in Southern Ontario, and this setting quickly became the birthplace of my research desires and curiosities. I experienced innumerable musical connections within a clinical improvisatory setting, and yet encountered many moments of disconnection and disorientation in music as well. Through the research of these experiences, I discovered the values of a music centred approach to those with symptoms of dementia. What I quickly came to understand was how musical experiences seemed to embody the degenerative processes of aging and dementia, involving time/reality orientation, communication, and meaning (Aldridge, 2005). I realized that these experiences could be understood and cultivated within the framework of structured improvisations. With further analysis of these ideas, I discovered the idea of mindfulness (Bishop, Lau, Shapiro, Carlson, Anderson, Carmody, Segal et al., 2004), an experience that was inherent in musical encounters involving, awareness, connection, and compassion. It was through these discoveries that I was able to understand qualities of music as an artistic

medium of existence, and how through music centred practice, we can understand our wellbeing as a musical phenomenon.

## Literature Review

### Clinical Improvisation and Dementia

While there is a wide range of literature on music therapy and older adults, very few focus on the experience of improvisation and how it relates to neurological functions. Aldridge (2000) developed a music therapy assessment based on improvisation. This discusses how improvisation can potentially understand cognitive functioning in areas conventional tests may not be able to access. Ansdell (1995) wrote about the principles of the Nordoff and Robbins approach (based on improvisation) and its value in working with adults and older adults. Simpson (2000) wrote about a case study in which improvisation was discussed in detail with an older man diagnosed with dementia. This analysis and investigation into the musical aspects of a creative and improvisatory relationship seems to be lacking in research concerning dementia.

In a study of dementia by Bruer (2007) researchers used an improvisational based intervention with participants that involved personalized hello songs, music involving humour, call and response music making, and the incorporation of songs. While some improvisation was implemented, an understanding of the musical aspects (rhythm, harmony, melody and form etc.) and its relationship to the results was not the focus of the research.

### Music and Neurodegenerative Disorders

Much literature has been written surrounding music's correlation with the brain and neuron functioning. Levitin (2009) stated that the processing of musical structure activates areas in "the prefrontal cortex, inferior frontal cortex, superior temporal poles and cerebellum" (p.10). He also stated that when emotions are integrated within this musical structure "activity extends to the ventral tagmental area, the nucleus accumbens, and the hypothalamus" (p. 10).

Thaut (2005) highlighted the temporal character of music as one of the most important characteristics of music (p. 173). Aldridge (2005) studied these perceptions and concepts of music structure and wrote how music therapy offers a space of temporal orientation that can affect cognitive processes (p. 15). Aldridge described how those with dementia experience a physiological loss of time structure in relation to activity (p. 32). In response, this research attempts to understand the aesthetics of music and their role in understanding time, communication, and meaning with older adults.

### The Introduction of Mindfulness

In understanding musical qualities and the meaning they have for those diagnosed with dementia (and people in general), mindful qualities and their relationship to health seemed to be contextualized in the experiences of music. Bishop et al. (2004) discussed two concepts of mindfulness, the first being the focus of attention on the present moment, and the second being a focus that is characterized by "curiosity, openness and acceptance" (p. 232). Langer and Moldoveanu (2000) and McBee (2008) wrote about the experience of mindfulness in elder care and stated how the practice of this concept had noteworthy effects on the quality of life of those affected by their age.

Burgoon et al. (2000) discussed the importance of message production and reception in the research surrounding mindfulness. In relating this to the therapeutic relationship, Bishop et al. (2004) discussed the freedom and space given for meaning and attunement of emotions when considering mindfulness. This research investigates the concepts of mindfulness and their relationship and natural existence within the experiences of musical improvisation for those diagnosed with dementia.

## The Purpose and Research Questions

Therefore, the purpose of this research is to present a holistic account of 8 weeks of clinical improvisations with a number of clients showing symptoms of or having a diagnosis of dementia. This served to achieve a heightened level of understanding surrounding the experience of improvised music with this population. Specifically, it investigated moments of improvised music in relation to characteristics that seem to deteriorate with neurodegenerative disorders. Additionally, the concept of mindfulness was studied in relation to its inherent qualities that exist in music and the relationship this has with the overall health of those with dementia. Through the improvisatory experiences, this research contributes to music centred practice by further understanding musical values and the relationship they have with one's state of wellbeing and existence (Aigen, 2005).

Following 6 months of working with this population the main question became: What aesthetic qualities of music are valuable when clinically improvising with older adults with symptoms of dementia? From this main question arose a number of subcategories of questions: a) how do the structural qualities of music represent one's state of wellbeing in this population? b) how do the structural qualities of music offer aspects of a mindful experience to the chosen population? c) what does a musically mindful experience look like? d) what are the implications of this concept (musical mindfulness) for music centred practice and future research?

## Method

### Research Design

This research is qualitative with a descriptive nature and is influenced by grounded theory techniques as it develops "a constructed theory" around clinical improvisation and the concept of mindfulness (Amir, 2005, p. 365). Studying the musical experiences between the participants and therapist was a key component of the research. The reasoning is abductive, as the researcher has used their knowledge and experience to interpret the data. The experience of the emerging results has also been sculpted by the literature reviewed for this study (Ahonen, 2010). The data analysis is also based on adapted grounded theory techniques, which involve coding, theoretical sampling, and data synthesis (Amir, 2005, p. 367) in order to create a theory. The process outlined when using these methods is a prominent feature of grounded theory research.

The process of data analysis in this research involved a selection of segments (from the improvisations) and a musical analysis component inspired by Smeijsters (1997) who presents the idea of meaningful episodes, based on "Greenberg's 'episode paradigm' (1986)" (p. 183). Once a moment is labelled as a 'meaningful' episode they are further analysed (p.184). This further stage involves the musical analysis of each episode and was loosely based on a procedure developed from Ferrara's phenomenological tool for music analysis as described by Forinash and Grocke (2005, p. 324).

### Research Setting and Participants

The six female participants of this study were residents of a long term care facility, located in Ontario, all over the age of 85 and living in the facility for at least two years. The participants had all experienced cognitive deterioration and had either shown symptoms of or had been diagnosed with dementia. Some of the women had other diagnoses (stroke, depression, anxiety, or insomnia) while some participants experienced forms of agitation, wandering, communication difficulties, and/or social isolation. The long-term care facility offers a number of interventions and services such as physiotherapy, recreational therapy, pastoral therapy, and one-on-one visits (with recreation staff). Half of the participants were active residents - participating in several programs each week - and the other half (who often experience depression or have a more severe dementia diagnosis) were involved in minimal programming.

## Data Collection

The primary data for this research came naturally from the individual improvisation sessions (15 minutes to 1 hour), in the music therapy room of the facility, over an 8-week research period. Each session produced a number of videotaped improvisations with each participant and the therapist, and from these musical interactions, the data for analysing was collected. These included: a) field notes by therapist (music therapy intern) -Notes were written for each session. These notes contained musical and personal reflections and impressions of the participants' musical and personal experience. b) video taped segments - Since there were a number of improvisations, one minute segments were selected for analysis (this selection procedure is discussed in the following section). These segments were coded into key themes, allowing them to be grouped under broader concepts; c) transcription of music by therapist – Musical elements were transcribed as part of my reflection as the therapist.

## Data Analysis: Improvisation and Analysis Procedures

In creating a grounded theory experience, an analysis procedure was created to develop experiences of music and their potential meaning. Based on the selection of musical segments and an adapted version of Ferrara's (1984) analytic method (as cited in, Forinash & Grocke, 2005), the data (musical improvisations) from this study underwent the analytic procedures listed below.

### Phase One.

Choosing selected segments (videos of improvisations) to analyse. Upon initial review of all videos, a total of 60, one-minute segments were chosen for analysis. Segments were chosen based on repetitive and consistent musical experiences that arose from the data. These experiences came to represent musical moments of clear or unclear: awareness, mutuality, and attunement. These concepts became the requirement for each segment and will be highlighted in the results section.

### Phase Two.

Analyzing chosen moments with an adapted version of Ferrara's (1984) method (as cited in, Forinash & Grocke, 2005). (This analysis was influenced by Lee's (2000) method of analyzing improvisation in music therapy and De Backer and Wigram's (2007) analysis of notated music examples selected from improvisation of psychotic patients).

**Listen for syntactical meaning.** Objective responses were noted. Focus was on musical elements; harmonic structure, rhythm, melody, form, instruments, dynamics, etc. (Forinash & Grocke, 2005, p. 324). A large-scale portrait of the improvisations (incorporating phrasing, melody, harmony and rhythm) was graphically designed to represent musical ideas over time. These timelines were used to analyse musical elements and musical interactions between participant and therapist. Main key areas and tempo/time were notated at the beginning and throughout the minute segment. Rhythmic, melodic and harmonic cells and figures were marked/discussed throughout (ex. Theme 1, client initiates and therapist repeats); the main musical ideas were marked and notated in their simplest form. Analytic summaries of the musical segments were written underneath each timeline.

**Listen for semantic meaning.** Subjective responses were noted (Forinash & Grocke, 2005, p. 324); focus on feelings and emotional reactions to each 1-minute musical segment. This was done in a free manner and reactions were purely emotional, musical, or a combination of both. The material was related through the joining of similar material into broad categories and subcategories of experiences.

**The meaning dimensions of previous listening experiences .** Musical timelines and summaries were compared to their respective semantic summary and a description of their relationship was created. From this process, numerous meaning units appeared and were organized to produce the final categories that will be presented in the results section of this paper. In combining musical and personal responses to the musical segments, specific musical experiences arose from the data. These qualities of music will

be presented as universal experiences and the details of the data will be interspersed throughout to enrich these descriptions.

## Ethical Issues

In completing this research a dual role of researcher and clinician was accepted and therefore it was necessary to acknowledge possible implications for this study. In order to mitigate against personal bias impacting the data analysis procedure, a reflexive process was implemented that ensured sufficient supervision. The nature of grounded theory in this study focused on the analysis of data once it was collected. Thus this collection period (the therapy) was not influenced by the analysis and any reactions or experiences with this process. Developing a concrete form of analysis when listening and interpreting the data was essential in controlling personal reactions to musical experience.

Participants who were unable to fully understand this research study and what was involved required additional steps to protect their rights. The guardians of these participants were consulted regarding the details of the study and the role of the participant. The purpose and details of the study were stated in the written consent form and there was a separate consent form for guardians to sign if a signed assent form was not possible. Details of the intervention were described and attached to the separate consent form for guardians of participants who were unable to understand the details of the study. Participants and guardians were given a copy of the approval form from the ethics committee at Wilfrid Laurier University and were given the opportunity to ask questions and/or express any concerns before signing the consent form as well as any time during the research study.

## Trustworthiness

This paper emphasizes the importance of individual observation of our own work as clinicians. This kind of clinical reflection can enhance our individual work as music therapists as we gain more awareness surrounding our musical interventions and how we listen to and perceive such experiences. Creating a consistent way of listening to selected segments developed a level of awareness around personal experiences with music and how they informed any perceptions on each musical moment within the data. The 'musical values' discussed in this paper became a response to Aigen's (2005) writings on our responsibility as therapists to investigate the unique nature of music and what it has to offer individuals. It is important to note the many other values inherent in music and we must continue to observe their meaning within therapy through clinical observation of our work. Without musical analysis and reflection, the richness of individual examples would never have implied more universal values of music and the relationship they had with this population.

## Results - Musical Experiences

Through the analysis of selected musical material the health and wellbeing of those with neurodegenerative symptoms was understood. Descriptions of musical material represented symptoms of dementia and their role in creating experiences of internal/external *disconnect* within a musical interaction. Furthermore, there were also musical descriptions, which represented the transcendence of these symptoms and how this created experiences of internal/external *connection* within a musical interaction. Musical descriptions of *disconnection* from the data include: sensorial interaction, uncertainty, unconsciousness, separateness, discrete and subtle dialogue, frustration and tentativeness. Musical descriptions of *connection* include: awareness, focus, attention, creativity, openness, no inhibition, dialogue, moment-to-moment interaction and expressiveness.

After grouping these qualities of connection/disconnection, it was discovered that they were created (or not) from the musical experiences of one's relationship to one of

**Table 1**  
*Boundaries, Music and Mindfulness*

Neurodegenerative Boundary	Musical Value	Mindful Quality
Reality/Time Orientation	Musical Awareness a. Exploration b. Centring	Focus and Attention
Communication	Musical Mutuality a. Communication b. Creative Interaction	Sharing and Novelty
Meaning	Musical Attunement Acknowledgement, Space and Intimacy	Acceptance and Compassion

three distinct symptoms of dementia: **A loss of; Reality/Time Orientation, Communication and Meaning** (Aldridge, 2005). Through the semantic and syntactical analysis of each selected video segment, a musical context served to provide another way of seeing the human experiences of time, communication, and meaning in dementia care.

The musical analysis of this particular research provided the means to understand and articulate how health became a portrait of musical connection that also reflected an experience of mindfulness. Mindfulness represents a healthy way of being and existing that applies to all domains of human health as it involves attention, awareness, openness, and compassion. As discussed in the literature review by (Hick, 2008), this concept not only looks towards internal health development but also external development in our existence over time as social beings.

Each selected musical segment underwent its own individual improvisation analysis, and it is not the point of this study to devalue the individual differences that the subjective experience of music creates. Despite wide structural differences, these specific musical elements represented three broad experiences that became the foundation of this research. The following sections will present these broad experiences of ‘music as health’ (Abrams, 2011) and call upon individual experiences to enrich these explanations and enhance the values of improvisation as a musically mindful experience. The following table (Table 1) presents the three neurological boundaries that often influenced one’s experience of connection/disconnection in music. It also represents three broad experiences of music and their natural value of mindful qualities that came to transcend these boundaries.

### Musical Awareness (Exploration and Centring)

#### Searching for Musical Focus and Attention: Time and Reality Orientation

The most apparent and frequently occurring characteristic of dementia portrayed in musical interactions was the idea of reality/time disorientation. Frustration, agitation, self-doubt, confusion, and exhaustion are extremely common ways of being that were often present in sessions. This influenced the concept of being dissociated from a present moment focus over musical time as Thaut (2005) discussed how temporal order can be altered with neurological complications. In the context of reality and time, the idea of musical mindfulness entered in regards to its unique concentration on present moment awareness.

Kramer et al. (2008) wrote extensively on mindfulness in the therapeutic relationship and described something similar to these statements in a (verbal) process called



*Insight Dialogue.* The initial stage (labeled *Pause*) “refers to a temporal pause from habitual thoughts and responses and an attitude of mindfulness toward experience in the present moment” (p. 200). In this subchapter, mindfulness as a musical experience comes to represent an orientation of internal time and reality that is lost with those diagnosed with dementia. Overcoming unstable orientation with the essence of a mindful awareness was analogous to the nature of a concrete musical structure over time. The following section explains the role of improvisation in understanding how this experience can manifest itself in the music that is created.

### Musical Experience: Musical Awareness

In many musical examples, the fragile nature of musical connection often blurred moments of musical focus and awareness in present time and reality. The analysis of many segments, including this first reflective example, revealed a lost sense of musical organization and form: *Laura (pseudonym) is playing the drum in a random manner, allowing the sticks to rattle quietly on the surface. I continuously play two chords with a staccato accent to see if she would respond to a stark and strong rhythm. Almost immediately Laura begins to clearly play a beat along with me ... she loses this pattern after a few measures and begins mumbling to herself.*

Snippets of clear rhythmic cells would often become lost as confusion took over; anxiety and agitation dominated a willingness to play after an initial musical sound; and self-doubt and extreme tentativeness erased any wish to engage. The musical environment then became the context in re-structuring these experiences so that confusion became clarity, anxiety became manageable, and insecurities became willingness. In these situations, it was common to search for a rhythm or sound that could create a point of mutual focus for the client and therapist to orient towards. As a result, musical ideas were created, but often lost and left behind as a new or altered idea was found to recreate another moment of fleeting yet mutual musical focus. Aldridge (2005) highlighted the temporal nature of music as an offering for structured creativity through its repetitive nature that encouraged attention and connection (p. 32) The data revealed a sense of musical exploration and searching amongst moments of musical centring that represented organized and clear experiences in time and over time.

#### a. Musical Exploration

As Hick (2008) described mindfulness as a process of paying attention (p. 13), a sense of searching penetrated many musical segments since moments of musical focus with this population were often ephemeral. During these times an overwhelming sense of confusion resulted. This experience of music represented an exploration between different focal points of music until the participant and therapist were able to unite upon a shared musical structure in time.

The idea of a continuous settled and unsettled musical movement reflects the sensitive paradox of the participant’s willingness to continue and their ever present vulnerability of confusion and self-doubt (among others). Sustaining a moment of focus in time became the challenge and this often resulted in a sense of musical instability. Thus these experiences are better described as a musical balance between exploration and centring.

During one specific musical example the participant was playing the cymbal and chimes. Her rhythm on the cymbal matched the beat of the drone in the bass of the piano. However, at times her playing became unclear as she struggled to maintain the beat. The therapists playing in the right hand was exploratory which matched the less distinct sounds the participant was creating with the chimes. The therapist experimented with short melodies in the upper register using small intervals and descending lines. Despite the focused nature of the simple tonic and dominant pedal, there was still a sense of exploration as there was an attempt to find a musical sound that could allow both individuals to maintain a sense of time and yet develop other musical elements and timbres. This was represented by the inconsistent main beat as well as the wan-

dering quality of the melodic figures in the right hand of the piano. In this example it appeared the participant was grasping her sense of time from the consistent beat of the drone. Musical segments that embodied this concept of musical exploration, allowed the therapist to understand the impact in offering (in these situations) a centred and clear temporal dynamic in which the participant and therapist can share. In the analysis it was written: *I hear Kate (pseudonym) trying to play a rhythm but also losing it – I am unsure of how to support her in this moment, I feel confused and uncertain.* The idea of further centring can be seen in the discussion and musical example of the following section.

## b. Musical Centring

Through the analysis of many similar segments, musical centring is described as a way of focusing the therapist and participant towards a shared temporal structure. The idea of musical focus should not belittle the quality of music that is being offered, which is why the word minimalism has been chosen, a sophisticated way of using minimal musical material. From an expansive and exploratory state of temporal incoherence in music, it often became apparent when the participant and therapist discovered something musical to orient towards. In retrospect, the therapist missed many of these small musical cues in sessions. When discovered however, the music seemed to scale down to the very sound the client and therapist were able to focus on. Whether on the piano or using percussion instruments (the choices available at the facility), rhythm often became the element of clarity. This makes sense as many neurological sources, including Thaut (2005), indicate that rhythm can influence how we perceive time and space (p. 176). In the second phase of *Insightful Dialogue* called *Phasing*, Kramer et al. (2008) stated the purpose of focusing in mindfulness is to step out of habitual patterns, to focus on the space around them, and to develop ‘inner-stability’ (p. 201). The following are examples of musical qualities from numerous segments where this idea of stability (often rhythmically) would occur:

1. Repetition - Participants often offered a basic beat or simple/small rhythmic cell that they could only reproduce a few times. A repetitive beat or rhythmic cell often reoriented the participant and often provided the structure for them to maintain their beat/theme.
2. Musical Space – The above concept was often complimented with static harmonic ideas on the piano; open fifths in the bass (and other open intervals), octaves, one consistent chord/drone or even a single tone. If present, melodies often contained only a few intervals, were repetitive and rhythmically steady.
3. Musical Clarity – These musical qualities constructed the small structural themes that often captured the attention of participants. They offered structure through clear thematic statements in which both the therapist and participant could orientate towards. This often became the structure in bringing the improvisation to further musical places, while maintaining orientation and awareness.

In learning from moments of musical exploration, the next musical example represents a focus of musical material. Musical space was given to a participant who was hesitant on playing and had been presenting herself as confused and agitated. This space was created through the alteration of silence and the use of two dominant seventh chords in F major on the piano along with a simple vocal melody. Slowly, the participant played the cymbal within the structure of the musical material presented by the piano. These cues are small but have been the result of musical simplicity, space and patience.

Through the idea of musical centring, participants’ rhythms that were once imprecise and inconsistent (or became this way), became clear and continuous. The reconstruction of a lost rhythm was a subtle indicator of the client’s awareness to the present musical moment. Those that lost a sense of music making (or had difficulty producing in the first place) often predicted the simplicity of certain musical material and perhaps allowed them to feel grounded and safe enough to finally enter into the mu-





Figure 1  
Musical Excerpt 1

sic. Schwarz (1980/81), regarding the composer's, Steve Reich's minimalist style, wrote that repetition can focus our internal minds on small details that develop our attention to the overall form (p. 378). In attempts to facilitate a creative musical experience, moments were encountered when the participants may not have even been aware of themselves in the music therapy room. These moments of overwhelming music and saturation often contributed to the anxiety or disorientation they may have been experiencing. They also overwhelmed those who initiated a clear musical figure and may have been able to maintain this had the responding music been more focused to meet this.

The following example (Figure 1) is another portrait of musical awareness through the rhythmic utilization of open fifths. This participant had trouble physically finding the drum and keeping a beat for longer than a measure. In this minute segment, a consistent rhythm was repeated by the therapist on the drum, and this was supported by three open fifth intervals in the bass of the piano. A simple vocal line was used and repeated. The participant struggles at times to maintain the rhythm but is actively focused towards the beat and the groove of the music. This example represents a repetition of simplistic musical material within an aesthetic setting in which the participant can experience awareness.

Within this experience of improvisation, the observations of *musical self-awareness* are the only indication that there is some sort of orientation occurring. However, whether this attention is musical, personal, or habitual (among many other factors), is currently unknown. Wallace (as cited in Brown & Ryan, 2003), described awareness as a varying experience that can involve "clarity" or "blunted thought or action" (p. 824). At this point, stating that the participant is mindfully aware in music is subjective. Despite whether musical attention at this point is habitual or meaningful, the occurrence of it is necessary before we can offer another musical experience. The following section describes a way in which we can understand the movement from concentration to musical creativity and communication, when a participant is willing. This section introduces more concrete experiences of music and the implication they have towards less ambiguous moments of connection and mindfulness.

## Musical Mutuality (Communication and Creative Interaction)

### Attaining Musical Sharing and Novelty: Communication

Two qualities of dementia that influenced the manifestation of music in this research were monotony/sensorial behaviours and self-doubt/hesitancy. Consequently, these inhibited the potential communicative experiences of improvisation. Some participants could go through phases of musical searching before discovering a strong musical focus, which remained stable, while others immediately engaged in a strict and stable musical pattern. Regardless, it was important to enhance moments of individual awareness with musically mindful moments of communication and creativity/novelty. In this way, it was possible to breakdown the boundaries of sensorial motions and self-hesitancy to be creative and communicative in music. Aldridge (2005) discussed how when

we are not in touch with timing then our movements are affected, which further influences our ability to communicate (p. 29). If we can reconstruct musical awareness, then it is possible to re-coordinate movements in the hopes of achieving a shared musical experience.

Referring again to Kramer et al. (2008) and *Insightful Dialogue*, the next mindful phase is called *Openness*, which they described as the development of internal focus to openness and awareness of external context (p. 200). In this sense, openness refers to the openness towards others (the therapist) and the environment (the improvisation we created together) and serves to dissolve boundaries of communication (influenced by dementia). In the same context they also refer to the stage called *Trust Emergence*, which was described as a spontaneous practice that is adaptable to the present moment (p. 200). The term trust comes to represent more than a musical dialogue between two people. It can be seen as another level of communication - a mutually shared and creative experience with another. These mindful qualities come to portray a mutual willingness to move some place creative and novel in a reciprocal musical dialogue. The movement from a subjective inward focus to outward expression creates a clear experience of connection that manifests itself in music in a different way. However, this experience still contains the fragile factors inherent in the musical qualities of these participants. At this point it is possible to see if musical cells have creative vision and a potential for sharing, two concepts often lost with this population.

### Musical Experience: Musical Mutuality

Music became the experience that could reconstruct focused, yet unconscious and pervasive motions into communicative and creative playing. In these instances the musical environment turned into a landscape of accompaniment where the participant could go back and forth between moments of musical awareness/repetition and musical dialogue and creativity. Musical dialogue enabled tentative and gentle playing to be encouraged and also allowed metronomic players to become aware of another form of rhythmic experience. Pushing the boundaries of musical creativity enabled participants to play beyond a basic beat and truly explore their capacity for musical climax. However, despite these more extreme experiences, musical awareness was extremely important in the continuity and resolution of such vulnerable and often fragile moments in music.

#### a. Musical Communication

In many musical segments musical invitations and responses were clear and overemphasized, while the musical space left in response for participants demanded time and patience. The embellishment of musical dialogue comes from two distinct ways in which dementia influenced the participant's personalities in music, despite the presence of temporal orientation. The first seemed to be a manifestation of frailness, feelings of worthlessness, and hesitation, common characteristics found with each participant in their uncertain musical rhythms and melodies. The therapist's exaggerated musical ideas were often simple and remained tonally unresolved as an invitation to continue. Occasionally, the therapist had to repeat this idea a number of times before participants were willing to continue. This patience was often imperative and at times, sudden motions or swells of music would diminish any motivation that had been potentially cultivating. When participants did engage in a response/dialogue the therapists timing in acknowledging this sometimes demanded a sense of musical delicacy. Musical acknowledgments to their responses were usually immediate and met their sound. Leaving too much space and ambiguity in musical answers often gave participants a reason to become overcome by their hesitation and uncertainty again. The following (Figure 2) is an example of a gentle yet expressive and clear dialogue in music from the data.

In the analysis it was written:



Figure 2.  
Musical Excerpt 2

*Improvising around a light theme by Grieg (Arietta), I leave spaces for the participant to respond with small rhythmical cells before reflecting back this material. This material involves consonant harmonies in E flat major and phrases that end in an upwards melodic movement which lends itself to be carried on by another. I allow the participant to initiate the start of a new phrase, yet acknowledge this almost immediately as her soft and small cues are hesitant and quiet.*

Another example of how clear musical communication manifested itself was with participants who played in a metronomic manner. In some cases the therapist utilized different tempos and rhythmic ideas to interact with someone who became fixated on a steady beat. Whereas some participants enjoyed this steady sensation while being aware of the musical environment, others became completely lost in the motion and the aim was to bring them into a musical interaction. This phenomenon highlighted the potential ambiguity behind an apparent demonstration of musical focus and the fragility of music in offering specific musically-cognitive experiences to participants.

One participant became so captivated by a musical beat that it seemed habitual, despite changes in a larger musical context. The therapist attempted to match the participant's strong beat at first, using a repetitive rhythmic pattern with thick chords in a descending A minor chord progression. Despite the building of tempo, the therapist decided to leave this idea behind and play sparse and slow chords. The participant disregarded this aesthetic alteration and continued with the strength and vigour that had been established. It is through this experience one could understand how this participant was fixed with a musically metronomic experience. It was also learned (as you will see in the next musical example) how one could acknowledge this groove yet also allow the participant to experience rhythm in a different musical context.

Within the data, focusing on a dialogue through changes in groove became an important experience in allowing participants to hear another and react with them in music. This involved tempo changes, emphasis on the offbeat, rhythmic phrases with rests, using polyrhythms and changing the emphasis of beat (half time/double time). In an improvisatory dialogue G. Aldridge (2000) discussed how he searched for ways to offer rhythmic variety in order to create a musical environment the client could react to (p. 155). The following (Figure 3) is an example of how the participant mentioned in the previous musical segment was a part of a rhythmic exploration outside of a basic beat. The difference in this segment is that the therapist had acknowledged her habitual rhythmic need for a longer period of time through a repetitive and simple melody and rhythmic harmonies in F mixolydian. As this consistent beat was built upon, the piano theme was able to 'take off' rhythmically by the therapist playing fast and florid musical figures in the upper register. The client immediately responded by changing her tempo and doubling her speed. The two resolved this by coming back to the main beat (see figure 3) and its accompanying melodic and harmonic material.

## b. Creative Interaction

The idea of a shared creative encounter is often ambiguous and subjective. However, this particular experience was sculpted by the symptoms of dementia and how music was able to push their communicative limits. These 'limits' were different for each individual, some only being able to achieve a level of extended musical focus with minimal musical material. However, there were distinct (though not as common) experiences



Figure 3  
Musical Excerpt 3

of musical climax and creative exploration where a reciprocal expression was shared between the participant and therapist. In this context, communication can be seen in a creative light of novel exploration with another. These moments often occurred when participants were willing to creatively express themselves in a spontaneous musical environment but needed the context and movement of the music to allow them to be a part of this. Fatigue, the comfort of musical monotony, and tentativeness often inhibited this experience for some participants. Yet others, if strategically and musically encouraged, could enter into this world. This type of musical participation was able to offer a clear experience of mutual creation, trust in the present moment, and the confidence to be a part of a spontaneous musical moment, which is again reflected in the qualities of mindfulness. These moments were sometimes fleeting and easily lost, especially to fatigue. Moments of musical flourishes were often contrasted by strong resolutions of predictable and stable musical patterns that the participant could foresee. Also, a predictable musical element, such as a consistent rhythm or tonal centre, was often present throughout moments of musical ambiguity. Taking a participant to a heightened musical state for too long, without a sense of musical grounding, often resulted in a loss of musical orientation. This was a result of the uncertainty, confusion and sensitivity that dementia can create.

Musical figures of 'creativity' were sometimes represented through atonal implications, rhythmic ambiguity, flourishing melodic figures and strong musical pushes towards a climax (through dynamics, tempo and texture). Atonality was a rare occurrence in sessions, as some participants seemed to engage more when music was more tonally and formally clear. The hidden structural implications of atonality were often confusing for participants and this provided the therapist with valuable information in offering this novel musical experience. Perhaps for some participants their musical focus and awareness were influenced by the clear audition of changing musical structures. Thus, if more obscure musical figures were being used, incorporating a consistent familiar musical element offered something for individuals to musically focus on and grasp. The times atonality was implicated in the therapists musical contributions were when participants were engaged melodically (using the piano) and their production had a wandering quality. In early attempts to match the resulting chromaticism, the therapist's atonal figures lacked structure and the ensuing musical sound was one of uncertainty (which resulted in a loss of musical engagement). However, once the therapist employed a clearly audible repetitive rhythmic pattern/basic beat or a strong and revisited fundamental tone, cohesion was often restored and a musical structure of focus was available for participants.

This phenomenon was congruent with obscured rhythms, flourishing melodic patterns, and intense climaxes in the music (through the building tension of texture, dynamics, and tempo). A free sense of timelessness often resulted in an immediate experience of musical disconnect, but there were ways in which this 'timeless' feeling could be experienced while keeping a theoretical sense of time. Polyrhythms and different accents of beat were two elements in the data that were used most frequently. In hindsight, the use of different meters (7/8 and 5/8) and frequently changing meters provided this experience as well. Following a short period of rhythmic ambiguity in the data, the therapist would often fall back into a strong basic beat. Climaxes of melodies, texture, tempo and dynamics were frequently contrasted by simple and repetitive musical structures, often initiated by the participant, which reintroduced predictable musical

material. These rhythmical and tonal resolutions demonstrated the participants' understanding of musical process and form and the ever constant need of temporal cohesion. These descriptions of musical tension and release are inherent in most natural musical formations, but it is the analysis of these moments in therapy that allow therapists to understand potential experience of musical community and expression. The following is a personal reflection: *Through the use of a simple chord progression in E major and a lyrical melody (once created by the participant) the participant and I engage in a musical climax of tempo, texture, and dynamics. Movements are strong and there is a sense of mutuality within a structured and supported musical landscape. Despite the building of material, the heart of the improvisation stays simple, and the two are grounded by rhythm and harmony and clear musical direction.*

Through the participants' involvement in a climactic musical phrase, therapists are able to offer them a novel and creatively spontaneous interaction. Returning to a comprehensive quote by Aldridge (2005) involving timing, communication, and meaning, we can use the latter part of his words in understanding the final subchapter of results. "If this breaks down then we lose a sense of meaning for ourselves, and we lose meaning as a person in a social context. What we do literally makes no sense; This is the process of de-mentation" (p. 29). In musically mindful attempts to offer awareness and communication, we can potentially offer meaning and attunement back to those who have lost such feelings and experiences. While we can understand how the above sections can offer a meaningful experience, the following section describes meaning through a different and more intuitive light involving mindful qualities of acceptance and compassion in music.

## Musical Attunement (Acknowledgment, Space and Intimacy)

### Offering Musical Acceptance and Compassion: Meaning

The following section originates from a unique perspective surrounding the experiences of acceptance and compassion with those living in long term care. As discussed, a sense of personal and social meaning was often created through musical interactions and connection. In addition to these encounters, the therapist also searched for others ways in which they could offer this experience when a physical interaction in music seemed inappropriate or impossible. Throughout such work in long-term care, the therapist has been able to verbally communicate with participants about their experiences of acceptance and compassion within their environments. However, during moments where no words were spoken, a personal opinion is the only source of perspective. While an objective stance can be taken through musical manifestations of focused and opened experiences, one can only speculate on non-verbal and hypothesized moments of acceptance and compassion. However, these opinions are necessary in presenting a complete picture of the experiences of music that arose from the data. This section of descriptive musical encounters represents Aldridge's (2005) moments of introspection as he claims that ultimately we must trust in our own observations and 'common humanity' (p. 16). These reflections were a method of understanding my musical role in enabling or disabling participants from a meaningful interaction with their environment.

An experience of acceptance and compassion in a musical interaction involves a semiconscious stream of musical choices based on one's sense of another in an empathetic and vulnerable environment. In relation to mindfulness, Hayes, Strosahl, and Wilson (1999) stated that these concepts involve a "conscious decision to abandon one's agenda to have a different experience and an active process of "allowing" current thoughts, feelings, and sensations" (as cited in Bishop et al. 2004, p. 233). In musical segments when perceived emotions were musically acknowledged there arose specific musical moments of truth, the truth being the reality of life with dementia and in long term care. Returning to Kramer et al. (2008) and *Insightful Dialogue*, the next mindful phases are called *Listen Deeply* and *Speak the Truth*. Similar to the ideas of acceptance and compassion mentioned above, these stages look to the receptivity of emotions,





Figure 4  
Musical Excerpt 4

and “attunement to self and others” (p. 201). These phases focus on the importance of mindfulness when interacting with another.

The settings in which these participants have been placed often take away the opportunity for individuals to mindfully *feel* their reality, let alone with another musically empathetic and understanding individual. In a sense, they lose one of the only ways in which they may be able to sense themselves as a part of a meaningful and interactive whole. This third and final experience of music was a representation of a warm, receptive, and attentive listener to real and emotional needs. This section serves to understand those moments when we can only rely on our perceptions of others’ gestures, movements, and states of being to offer communal meaning. In these moments, asking for musical participation was unfitting.

### Musical Experience: Musical Attunement

In many musical segments, it was difficult to create a meaningful yet physically active musical interaction. Upon reflection, it was apparent that the participant was fatigued, needed space, or was being a part of the musical environment in a reflective manner. When we understand the diagnosis of dementia, this makes sense. Consequently, their “being” in music was not directly open and it was important to not modify these boundaries in such a straightforward manner. At these times, the music became more emotionally informed to create feelings of connection and care for those who needed to “just be” as Aldridge (2005) discussed how timbre is a crucial musical element in addressing emotional expression (p. 37). In these moments, the therapist often turned to particular modes and tonalities, utilizing the major and minor implications within each to accommodate ever-changing cues of emotion. Their emotionally informed musical intuition was heightened, and as a result, the use of musical elements was extremely focused on intervallic quality, the construction of phrases, and harmonic underpinnings. This diverges from the first two sections of musical experiences, as the musical focus often surrounded the construction and enhancement of rhythm as the germinal musical cell.

### Acknowledgment, Space and Intimacy

The following (Figure 4) is an example of a participant who had been engaged in an interactive dialogue for an extended period of time. She became fatigued and was unable to consistently hold her body up in her wheelchair. She continued to play during these moments of fatigue, and the music was mutually paradoxical. In this example, the piano support utilized the Phrygian mode in C, acknowledging the participant’s fatigue with minor elements and falling intervals of the mode, and acknowledging her bursts of energy to play with more major elements and open intervals.

The participant ended up rising and falling with the music (however, we can only subjectively assume who is influencing whom). A musical landscape was created where she could utilize her passion to play but also rest when needed. The use of the Phrygian mode at this time was intuitive. The therapist had consistently practiced within this mode and had come to understand the heaviness yet beauty that was inherent in its intervallic make up.

On a contradictory note, there were numerous examples where the therapist continued to ‘encourage participation’ to ‘reach’ the non – musical aims of social engagement and improvement of motor skills. In hindsight, these attempts seem superficial and ignore the immediate emotional portrait of the participant within the music. While there were no prescriptive formulas for emotional musical construction, the emphasis on one’s musicological responsibility as clinical improvisers becomes magnified. While therapists cannot generalize what musical qualities mean to others, there are inherent universal qualities that they need to practice to understand what they can *potentially* mean in therapy.

The next example represents particular moments when participants appeared to relate to the musical experience in a receptive manner, indicating their presence through body language, gestures, and vocalizations. These individuals were more isolated and withdrawn, and it was important to enhance interaction in subtle ways. In these moments the idea of emotionally informed music was significantly intensified again and the idea of musical simplicity and space became important. Musically pushing or overwhelming those who needed space became detrimental in attaining a form of physical connection. At times, the music often took a concentrated stance to create moments of physical intimacy; an experience that is represented in the following reflection: *Utilizing small and consonant intervals (3rds and 6ths) in the upper register of the piano the participant moves closer to the piano until her head leans forward to meet my own. The intervallic quality is open and soft as a simple and lyrical melody line is being sung.* The therapist would often use elements similar to those described in the first description of musical experience, such as open intervals, octaves, and single tones. The voice also became important at these times. The personal quality and non - intrusive potential of the voice seemed to create a safe ‘calling’ quality of connection and care.

This final experience of music with these participants balanced musical space and focused musical intuitions. The effect was often a connection through intimacy created with body language and the space to rest and reflect. These reflections came from direct requests from participants as well as spontaneous moments of nostalgia that were discussed afterwards. The resulting experience has been viewed as a musical landscape that reflects individuals and allows them to be in a realistic environment of care and truth. When constructed, in a musical sense, a space was created that allowed participants to enter a form of connection, in active or receptive ways. Musical construction, in this context, is the conscious construction of musical material used with a direct intention of achieving a particular feeling or atmosphere. It is these musical experiences that emphasized the true vulnerability and emotional strength inherent in those affected with dementia.

Sabat (2001) described how those with dementia can still communicate, maintain speech, and engage socially and creatively with their given context (p. 28). This creative and caring environment of conversation is one we can offer our clients naturally, within the context of music. As a musically mindful experience, acceptance and compassion originate from the therapist, as we cannot assume these feelings of our participants. Through their cues of intimacy and reflection, it seems imperative that we offer these musically mindful qualities of acceptance and compassion first, in the hopes that our participants can bring themselves and their realities together in our supportive environment.

## Conclusion

### A Cohesive Concept: Music as a Mindful Medium

Improvised music is the medium for an initial contact with participants. This musical contact can inform a more stable connection in the music, or an obscured and fragile connection. These experiences can often result from our current states of wellbeing (whether they are influenced by dementia or not). Through the structures of music, contact is initiated through a musical statement and we come to understand what this

contact means through detailed analysis of musical reactions. We can further construct music, through free yet structured improvisation to provide specific experiences of music and the unique virtues it has to offer. Spontaneous yet structured music remains the moment by moment, intentional medium that can connect to and understand the meaning of participant's interaction and the potential paths it might travel. The resulting data is not a specific process and remains a flexible and open framework of improvisation. However, a musically mindful focus gives us the opportunity to understand the construction of music and the impact it can have on certain 'boundaries' of dementia. Thus, the resulting title of this paper is; Clinical Improvisation as a Musically Mindful Experience in Long Term Care. Music qualities and mindful qualities are viewed as an analogous experience that is unique to clinical improvisation.

## A Cohesive Concept: Further Implications

### Music and Mindfulness: Individuals in Long Term Care

Presenting improvisation to create a musically mindful experience can be offered to any individual. However, it is the uniqueness of dementia that makes this process so distinct in long term care. The disease's qualities affect how the process is initiated and cultivated and how we can address the immediate needs of those affected. Quality of life has been discussed extensively within the context elder care, and as we have seen, mindfulness is a meaningful and creative way of offering characteristics which are involved in wellbeing and a higher quality of life.

Brown and Ryan (2003) highlighted autonomy, competence, and relatedness as key experiences in mindfulness. How important are these experiences to those in settings where spontaneous, creative, and meaningful interactions are virtually non-existent? Somewhere where the mechanical and unconscious degenerative characteristics of aging are only enhanced by more mechanical and unconscious environments? In the fragile, yet strong, environment of music therapy with those with dementia, it is crucial that our clinical musicianship is spontaneous yet uniquely and intentionally structured, to enhance the musical cell that becomes the key to connecting with those we work with.

### Music and Well Being

It is important from a musicological perspective to understand the construction and significance of musical structures that seem to have the ability to rewire our neurological processing and affect our overall state of health. Styles, rhythm, musical dialoguing, musical landscapes, and emotionally informed choices of modes/scales/intervals were global concepts of music discussed in this paper. While each particular example may not elicit the same response in another individual, it was important to note the clinical thread these musical ideas had throughout the data. In understanding the impact the aesthetics of music can have, we can then become more aware of our improvisational choices as clinical musicologists in therapy. Instead of seeing these concepts as two separate identities that need to be bridged through other mediums outside of music, it is possible to understand the language of music as a unique expression of cultivating human health (Abrams, 2011). In this light we are saying one's musical self is an artistic representation of one's existence through the formations of musical components (Nordoff & Robbins, 2007). Is it not possible to understand global musical threads within individual experiences as evidence that formations of music can inform and restructure how people relate to themselves and the world, within a creative improvisatory context? Can we not consider that perhaps it is our contexts in life that we need to consider changing in understanding one's capacity to function on numerous levels? This research challenges us to answer these questions, not only in elder care but across all populations.

## Final Thoughts

As therapists, we must discover our responsibilities in offering these individuals ways in which medical and environmental boundaries can dissipate, thereby revealing a conscious, creative and interactive human being. From the perspective of a clinical improviser, it becomes our musical responsibility to understand syntactic and semantic experiences of musical structures and their resulting pragmatic effect in therapy. As a result of this work, it is evident that empirical value can be expressed through pure qualitative experiences of quantitative musical formations. In this research, musical structures were discovered that were able to reflect experiences of mindfulness despite the appearance of medical boundaries and obstacles with those diagnosed with dementia. It is integral to continue these types of investigations in order to meet the musico-logical responsibility that is inherent to our work as a clinical improvisers. For those diagnosed with dementia (in long term care), life seems to be in a state of liminality; a state where life and death are neither attainable nor an immediate reality and thus an altered form of existence between two states of being is manifested. While life inevitably fades between the spectrum of existence and death, the aesthetics of music will perpetually remain ubiquitous and obtainable to reconstruct the notion of form and life.

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