

RESEARCH | PEER REVIEWED

The Therapeutic Value of Recording in Music Therapy for Adult Clients in a Concurrent Disorders Inpatient Treatment Facility

Kevin Kirkland 1*, Shannon Nesbitt 2

1 Capilano University in North Vancouver, Canada

2 The Burnaby Centre for Mental Health and Addictions, Canada

*capmt40@gmail.com

Received: 12 December 2018 Accepted: 17 June 2019 Published: 1 July 2019

Editor: Katrina Skewes McFerran Reviewer: Jason Kenner

Abstract

While recording traditionally has been viewed as a practical, adjunctive role of the music therapist, here the authors examine the skillful use of recording devices and software as fertile ground for the development of therapeutic programs with tangible benefits for adult clients in a concurrent disorders recovery setting. The integration and layering of musical composition with musical performance, digital technologies, and production invite rich and engaging conversations about therapeutic goals, processes, and outcomes. Using program evaluation and reflections on practice, the authors discuss how their interactions with clients through recording have yielded new insights into therapist roles and identities as well as expressions of music therapy. We outline the case for therapy-oriented recording, and a description of the authors' setting and information collection methods identified before a literature review on the use of recording in music therapy. The authors then distinguish four types of therapeutic recording illustrated by case examples from work with clients. The article culminates with a discussion of challenges and benefits associated with therapeutic recording. The authors conclude that recording offers critical and rewarding, yet often unrecognized, opportunities for music therapists to be innovators in their field.

Keywords: music therapy, recording, music technology, songwriting, rap, hip-hop, mental health, addiction, adults, dual diagnosis, concurrent disorders, recovery

Introduction

Our focus on the therapeutic benefits of recording has evolved through our professional roles and commitments. We are staff music therapists at a Canadian public health-care facility for the treatment of concurrent disorders: mental health and addiction. The writing of this article draws on our individual and shared experiences using, discussing, and reflecting on the uses of recording as a potent and legitimate framework for music therapy. There is little written on the use of digital music technologies in

music therapy. For readers who wish to develop their knowledge of music technology in music therapy we refer to the works of Crowe and Rio (2004), Magee (2014a,, 2014b), Magee et al., (2011), and Hadley, Hanna, Miller, and Bonaventura (2014).

Our emphasis on recording developed after staff music therapists were hired at their current facility approximately six years ago. Our studio resources today include an Apple 24-inch desktop computer with GarageBand, a FocusRite Scarlett 18i6 audio interface device with eight XLR/MIDI/quarter-inch inputs, a Mackie mixing board, and a Røde condenser microphone along with earphones to minimize bleed during recording. A secondary effect of the microphone is that it suggests a professional recording studio environment for clients. The studio also has an electronic drum kit that can be plugged directly into the audio interface; bass, electric, and acoustic guitars with compatible pick-ups; and a full-sized Yamaha digital piano—all of which are capable of input into the same interface. This makes it possible to record up to eight instruments cleanly without background noise and for clients to collaborate in the studio. This realization compelled us to search for ways to make use of our resources, which in turn led us to explore the value of recording in depth. At the same time, clients were extremely motivated to have opportunities to make recordings.

While setting up and using the equipment, we found that many program participants were impressed by the acoustic instruments and a wide range of recording devices around them in the physical environment. Some knew how to use digital and nondigital technologies; others did not, but were mesmerized by resources that were accessible to them and that afforded them a different quality of programming experience than they expected or were familiar with receiving.

The Case for Therapeutic Recording

When can recording function as a music therapy technique? How important is the product, that is, the actual recording produced in the course of therapy? What do clients notice and hear in their recordings? Can recordings be used as texts to document, analyze, and evaluate individual and group participation, engagement, and progress in specific areas over time? What benefit does recording afford clients in terms of their recovery and well-being? What kinds of planned and organic structures and decisions would support the use of composition, recording, and production as purposeful music therapy interventions? In short, how could we draw on the wonder and power of recording to inform our roles and responsibilities as music therapists to support clients' health in our sessions?

We are guided by the conviction that music therapy uses music experiences and client–therapist relationships for therapeutic change (Gold, Solli, Krueger, & Lie, 2009). We also find inspiration in Borczon's (1997) recovery model, which focuses on themes of hope, healthy self-concept, empowerment, and meaning. When we speak of recording as a technique of music therapy, we are suggesting, first, that it has application for purposes of therapeutic change in clients and, second, that it has the capacity to improve clients' health by offering a framework to develop healthy senses of agency and self-concept as well as skills needed to manage everyday decisions and recovery. In other words, recording programs and the intentions, experiences, and the outcomes they encompass have the potential to be dynamic and creative catalysts for individual and group music therapy sessions when guided by thoughtful planning and consideration of client needs and backgrounds.

Our Recording Environment: The Healthcare Facility and Clientele

Our healthcare provider offers treatment services to clients in a concurrent-disorders, tertiary treatment setting. Tertiary care is for clients requiring specialized support from staff skilled in the treatment of complex issues. Concurrent disorders are defined by the Centre for Addiction and Mental Health (2012) as a substance use disorder in conjunction with mental health challenges. Many clients have multiple levels of substance use disorders along with one or more Axis I mental health diagnosis, the most com-

mon being schizophrenia, bipolar disorder, schizoaffective disorder, and major depressive disorder. At our facility, an average of 90 clients stay for up to 9 months, receiving multidisciplinary care planning, treatment, psychiatric services, and post-discharge continuity of care. Clients range in age from 19 to 65 years and are culturally diverse. They are typically referred by other provincial healthcare facilities and hospitals or by the courts where treatment is as an option as an alternative to prison. Some clients may be psychiatrically certified, that is, hospitalized and treated against their will, when their safety or the safety of others is at risk. In other cases, individuals self-opting for treatment may directly apply for admission.

Music therapy is increasingly recognized as an essential modality in the treatment of concurrent disorders as reflected by the growing number of referrals we receive. It is documented to be an effective means of motivating clients to engage in recovery (Murphy, 2017; Silverman, 2015; Vander Kooij, 2009). We support clients as they work to express themselves creatively while developing life skills, develop insight into the roots of substance use and how to manage their mental health more effectively, and improve their understanding of the complexities of their trauma histories in the recovery process. Clients sometimes gain incentive to stay in recovery because of the availability of music therapy, with the option to record holding great appeal. Music therapy is respected as an integral yet distinct form of professional service which, when used in conjunction with other treatment services, plays a crucial role in nurturing and supporting clients with complex substance use issues.

In this healthcare environment, a key focus for clients with concurrent disorders is optimal health at different levels and stages of recovery. One level is the quality of life for clients through programs that offer a sense of hope and positive change. Another level is decision-making skills. We ascribe to anti-oppressive practice, which seeks to empower clients with decision-making processes and to provide programming centering around the client's musical resources and skills (Freire, 2000; Kirkland, 2004; Kumashiro, 2000a, 2000b). In the recording studio, we facilitate learning and problemsolving opportunities for clients. After introducing them to different equipment and technologies, we encourage individuals to develop their knowledge, skills, and selfconfidence by offering them time and space to work on projects. We believe that it is imperative to be respectful and inclusive in the ways we plan and conduct music therapy programs. Seeking a client's input at every possible opportunity makes the process collaborative and provides maximum input and agency. This process also helps to decrease power imbalances in a context in which the therapist may be perceived as having all the power and clients may be viewed as incompetent or incapable (Wallerstein, 2006). A final area of support is the development of technical skills. Teaching clients to use software such as GarageBand provides opportunities to gain skills useful after completion of their recovery at the facility. We have had several clients continue to create and produce music post-treatment. Each individual's recovery is assessed on a case-by-case basis with optimal health being a primary focus.

Structuring our Practice-Informed Inquiry into Therapeutic Recording

As our recording programs became established and we refined our technical skills and understandings of client needs and interests, we decided to delve further into the value of therapeutic recording. Staff music therapists led the practice-based inquiry with music therapy students and interns over six years between 2013 and 2019. Consent to release information about clients' experiences in music therapy was routinely obtained. Consent included options for audio-recordings or video-recordings as well as options for session content to be used in our informal inquiry, teaching, presentations, and publications. Clients could consent to any or all of these. We also let them know they did not have to provide consent to participate in our inquiry in order to receive music therapy at the facility and that at any time their consent could be withdrawn. To further strengthen our understandings of our fieldwork, we conducted a literature review on therapeutic recording as described below.

Literature Review

A survey of literature reveals growing recognition of recording as an essential component of music therapy across a range of practices and settings, including mental health and addiction (Baker, 2013a,, 2013b; Clements-Cortés, 2013; Crowe & Rio, 2004; Fulford, 2002; Henderson, 1983; Montello & Coons, 1983). However, most commonly, references to recording are not a primary focus of inquiry, but instead described contextually or incidentally, its benefits paired with other techniques, such as songwriting, rapping, and performing (Grocke, Bloch, & Castle, 2008,, 2009; Plener, Sukale, Ludolph, & Stegemann, 2010).

Historical precedence for recording a client's music with therapeutic purposes in mind occurs as early as Priestley's (1975; Priestley & Eschen, 2002). In *Analytical Music Therapy*, Priestley describes how recorded improvisations, solo or paired with a music therapist, can later be reviewed to understand ways of communicating. Significantly, Priestley refers to metaphors of sound expressions. Listening to recordings of improvisations, she maintains, allows both client and therapist to re-experience sounds expressed from potentially new perspectives. Recording speaks to the value of both the process and the product, with the product being an often-overlooked valuable outcome of the process.

Music therapy pioneers Paul Nordoff and Clive Robbins (Nordoff & Robbins, 1975,, 2004) and Clive and Carol Robbins (Robbins & Robbins, 1991a,, 1991b) also made regular use of musical recordings. They used recording for clinical reviews of their sessions, to listen for themes and motifs to aid in planning sessions and to track indicators of change (Robbins & Robbins, 1991b).

More recently, attention to recording in specific contexts is explored by Hadley et al., (2014), and Krout (2014) who write about music technology in health settings; Sadnovik (2014), who highlights multicultural music therapy which includes advocating use of technological equipment to achieve this end; Weissberger (2014), who discusses use of GarageBand as a motivational tool; and, Adams & Lajoie (2014), who use of music technology with clients across the lifespan. The value of recording for female survivors of sexual abuse is discussed in an article that describe performance and recording as the culmination of emotional work (Day, Baker, & Darlington, 2009, p. 24). O'Callaghan (1996,, 2008) refers to the benefits of recording in palliative care where lyric writing offers psychosocial, spiritual, and emotional support. Smith (2007) focuses on the group creation of a CD with persons with concurrent disorders in an area of Vancouver known for high poverty and substance use. Baker and Wigram (2005) share the benefits of songwriting for children with emotional and communicative challenges to creatively engage in problem-solving and express thoughts and feelings associated with health-related challenges. They write, The therapeutic effect is brought about through the client's creation, performance and/or recording of his or her [sic] own song" (p. 14). Grocke et al. (2009) describe the quality of life for participants living with a severe and enduring mental health challenge. They refer to group recording of original songs in a professional studio as a way to culminate sessions. Clients experienced a sense of achievement in being able to produce a CD that could be shared with friends and family" (p. 98). Elsewhere, Whitehead-Pleaux, Clark, and Spall (2011) and Whitehead-Pleaux & Spall (2014) use recording in pediatrics to write songs and to create electronic music. Recording is also central to music therapy programs that focus on rap as a personalized form of self-expression (Evans, 2010; Gonzalez & Hayes, 2009; Hadley & Yancy, 2011; Kirkland & King, 2019). In many instances, both the process and the product were valuable.

Recording lyrics provides the opportunity to eternalize thoughts and feelings followed by hearing one's voice in the finished product and the impact of the statements and emotions expressed (Day et al., 2009; Derrington, 2005). Listening to the recorded product is an opportunity for individual and group awareness of the lyric content, and the message(s) intended and expressed (Jolly, 1998; Lindberg, 1995; Newham, 1999). Post-recording listening can open up an opportunity for here-and-now awareness, such

as the key phrase of the song, the intention of the words, what the song's title might be, and how the client feels now.

One reason for music therapists to listen attentively to recorded lyrics is to get a sense of the overall state of health of a client. In the cases of clients with concurrent disorders, we may notice signs of psychosis or mania. At the same time, there may be indicators of hopefulness, determination, and a desire for positive change. The significance of recording in this context is an ongoing mandate to support clients in their pursuit of optimal health.

Though precedents for recording in music therapy are readily available, it is challenging to find works that identify recording as the primary therapeutic focus. Recording is routinely perceived as a necessary adjunct to facilitating therapeutic programming as opposed to the concept that it has the potential to be a key component to music therapy. In Magee's preface (Magee & Burland, 2014a) she identifies a lack of training in clinical uses of music technology as another barrier. Although music therapists today are gaining some skills using recording software and music technology, as recently as 2009, Day et al. stated that, "the therapeutic relevance for clients of recording and performing songs have only recently been explored (O'Brien, 2006; Turry, 2005) and are still relatively unknown" (p. 19).

Forms of Therapeutic Recording

In our music therapy sessions and inquiry, we have found it helpful to consider of four applications of recording, each with its identifying features, considerations, and therapeutic benefits. They include: 1) vocal recording, 2) instrumental recording, 3) recording and video production, and 4) recording and electronic composition. The various forms overlap with each other, but each one can be self-standing. There is a sense that they are qualitatively distinct from one another musically and therapeutically.

We have observed contrasts as well as congruences among the four applications in different music therapy programs we offer three times per week, including Rap and Recovery sessions, a program for recovery-based lyric writing and recording; and, Recording Studio, sessions for individual and collaborative recording projects which can be any variation of vocal, instrumental, and electronic music. Individual music therapy sessions may also include recording. In the writing that follows, we describe each of the four types of recording and provide supporting case examples.

Vocal Recording

Vocal recording encompasses the range of communicative expression used in conjunction with recording. Examples of vocal recording we witness include songwriting, rapping, singing, vocalization, beatboxing, freestyling, and speaking. In recording sessions, clients may use original music or perform a cover version of a pre-composed song. Vocal recording also includes opportunities for mindful listening, another oral language proficiency.

One popular music therapy group centered around recording that we developed is called Rap and Recovery. We have found that rap can become a personal avenue of insight and expression. The result can be engaging explorations and discussions around life experiences and goal setting, coping mechanisms, personal perspective-taking, self-awareness, and identity (Hense & McFerran, 2017). We concur with Yancy and Hadley (2011) who maintain that «[r]ap narratives are also filled with themes regarding the importance of family, positive role models, perseverance/resiliency, warnings/cautionary tales, positive self-image, healthy choices, change, and planning for the future" (p. xxvii). For these reasons, and that rap is a preferred genre by many of our clients, it is an integral focus of music therapy. The use of rap in music therapy requires a deep respect and understanding of rap history as an art form (Gardstrom, 1999; Tyson, 2002). Tyson came from a social work background and arguably is one of the first writers who brought to light the therapeutic benefits of hip-hop and rap, followed by several from the field of music therapy (Bednarz & Nikkel, 1992; Borling, 2017; Gallagher &

Steel, 2002; Hadley & Yancy, 2011; Mössler, Chen, Heldal, & Gold, 2011; Gold et al., 2009; Gold et al., 2013; Vega, 2017; Viega, 2012). We concur with Renshaw (2015) and Viega (2015) who state that music therapists need to be aware of their potential cultural limitations in regards to rap music. A social justice approach to the use of rap in music therapy can offer more immediate access to discussions about oppression, social justice/feminism, and empowerment. At the same time, the music industry and dominant artists within rap have branched into styles of rap that are oppressive, patriarchal, misogynistic, and violent (Bodry, 2018; Larsen, 2006; Weitzer & Kubrin, 2009). We seek to remain sensitive to the African-American roots of rap within hip-hop culture while embracing rap's expansion to other genders and races becoming prominent artists in the area. Canadian clients from a vast array of ethnic and cultural backgrounds understand themes of oppression and social justice on personal and systemic levels because of the marginalization they have experienced. As clients with addictions and mental health issues they are well aware of the stigma and Othering that can occur. For this reason, we aim to embrace the underlying philosophy of hip-op to offer a social justice lens that is inclusive of all participants regardless of race, culture, social status, class, gender, and sexuality (Bishop, 2002; McQuillar, 2007; Stephens & Wright, 2000) thus supporting a foundation that encourages individual agency and positive self-concept (Veltre & Hadley, 2012).

The Rap and Recovery program invites clients to create a group recording in order to listen to, discuss, analyze, and process individual thoughts and feelings as they relate to recovery. Imagining and planning for change and the future can include where the hook or chorus comes in and what that message is about, examining the direction of the song, i.e., where does the story go? What is the outcome of events? In our concurrent disorders setting, we have found it helpful for clients to consider what comes after substance use. Planning for a weekly session typically begins with the music therapist preparing (curating or creating) a beat and a song title/theme. Examples of themes/song titles include "Why I started using substances," "I want a better life," "I can do this", "Suffering and transcendence", "A year from now", and "When I'm kind to myself". An alternative approach is to invite clients to choose a theme that resonates with the group and the tone of the beat during a session (Crooke, 2018). The theme selection process requires group consensus that can allow for greater creative control for clients, although experienced leadership to facilitate discussion and consensus in a time-limited group is required.

Following theme selection, participants write and record lyrics to a beat while the therapist makes notes of images, keywords, phrases, and other elements used by clients during a music therapy group session. Lyric writing is usually preferred over freestyle because planning and execution are valuable where impulse control is often a significant challenge. However, freestyled lyrics can reveal uncensored thoughts, impulses, and default modes of functioning, thus revealing unconscious drives, thought patterns, behaviours, and cognitive distortions that can be worth exploring with a client. On one occasion, a client began a freestyle rap about being broke then stopped himself after he said, "Gonna get a needle...." It is useful at times such as these for clients to reflect on default impulses and be the editor of their own narratives.

When it is time to record, all clients are encouraged to step up to the microphone, listen to the beat and their voice through the headphones, and record their lyrics. In cases where clients are hesitant, the music therapist encourages them to speak or even sing the words over the beat. If clients do not want to record, that is also respected. Clients are also invited to read their lyrics from where they are seated, and once they have a successful experience of that vocalization, they often have the confidence to record their words. When one client leads the way, others will also participate. Experiences creating and recording songs together can strengthen group cohesion.

We believe that insight comes in many forms, and sometimes it emerges from the recording. In one instance, a client came for an individual recording studio session during which she freestyled her lyrics. The therapist and client listened to the completed recording, and the therapist noted to herself that the lyrics consisted of tangential

thinking, free association, and random rhymes. Patterns revealed in how a client makes use of music and relates to music can inform the therapist about the psychological state of the client. Questions such as "What's the song about?" may prompt a client to make meaning out of lyrics. "What's the name of the song?" is a question that can lead the client to some insight in attempts to summarize lyrics into a song title, a task that can be challenging for those whose thought processes are disjointed. Whereas music-centered approaches emphasize the centrality of music as a catalyst for change, we feel that insight-based discussions of lyric content offer different perspectives of a topic and that revelations shared can promote bonding and empathic behaviours among group members or within an individual. Follow-up discussions also serve as opportunities for clients to practice their social skills and assertiveness by giving each other feedback about lyrics and by expressing their thoughts, attitudes, and feelings about themselves and their recovery. Social competence is a standard goal area in this population, where the acuity of mental health issues, adverse childhood histories, and cognitive impairment from extensive substance use have disrupted interpersonal relationships.

For clients who do not play an instrument and who do not like rap, another recording-based technique is singing to a karaoke track, though we sometimes re-create a song using acoustic instruments. The latter allows for the concept of a cover version of the song. Doing a cover version implies making the song one's own and can relieve perceived pressures of thinking one needs to replicate the original perfectly. A cover song also allows us to adapt the key to the vocal range best suited to the client.

The importance of the voice in music therapy sessions cannot be underestimated. The acceptance of one's voice can be a tender process as clients discover their agency in singing a personally meaningful song (Summers, 1999,, 2014; Uhlig & Baker, 2011) as you will see in the next section. In a population where histories of trauma are evident in a high percentage of clients' histories, using one's voice for expression may be novel and helpful for growth and development (Beathard & Krout, 2008; Hatcher, 2007; Rolvsjord & Halstead, 2013). It may be time to reconsider the voice as a primary instrument in music therapy and to rediscover its benefits and joys through recording.

Owen's Voice: From "Hurt" to "Hallelujah"

When clients want to record precomposed lyrics vocally, we encourage them to choose a personally meaningful song that speaks to their therapeutic goals. This kind of song can be vastly different from a favourite song. In the case of the latter, it may be the accompanying music or beat and not the words that are liked or even consciously noticed. Sometimes clients may need permission and coaching to alter original lyrics in ways that are personally significant and potentially transformative.

The impact of recording a profoundly moving song exists in Owen's story, a man in his fifties with a history of severe alcoholism and Major Depressive Disorder. He came for treatment on two separate occasions at the healthcare facility where we work. In his second stay, he focused on his expressive domain.

Owen showed up at the door of the music therapy studio, saying he wanted to record. Owen began by participating in karaoke in music therapy, but remained shy about his voice and was self-critical. Still, he continued to sing and record in music therapy sessions and made significant progress around his self-worth and agency. Owen later reported to the music therapist that he felt he had been limiting himself by only focusing on his physical health during his previous stay and that he wanted to broaden his resources and discover more about his creative self in hopes that this would help with relapse prevention. His music therapy began with singing and recording songs to acoustic accompaniment, then participation in music therapy groups, eventually becoming the lead singer in a band consisting of clients that were video-recorded. As another domain of recording, video-recordings of performances and concerts, whether individual or group, provide a tangible outcome of a client's accomplishments.

In initial band practices, Owen and other band members decided on a set of songs. We printed lyric and chord books and scheduled regular rehearsals on Sunday evenings. At the onset, Owen sat in a chair and cast his eyes down on the songbook. He was worried where to come in after instrumental breaks, was reticent to use the microphone, and looked more like the wounded boy he carried within him than a self-assured man in his fifties. He was experiencing a degree of regression related to child-hood trauma. It is not uncommon for clients who have endured traumatic early life experiences to present as regressed, that is, functioning from or sometimes retreating to, an earlier developmental phase (Lokko & Stern, 2015).

Music therapy goals for Owen included fostering his agency, adopting a singing posture of confidence, and engaging successfully in leadership. He responded well to coaching. We encouraged him to own the stage, to make eye contact, and to stand when singing in order to "own" his presence. If the key was not right for him, he spoke up and said so, and modulations were made. A second client played electric bass. A third client who played electric guitar attended only sporadically was later discharged against medical advice. We continued to be enthusiastic about continuing with the show. As the concert neared, we discussed the need for a master of ceremonies, believing it is best if a client can fulfill that role. Owen and another client volunteered to share the responsibility. They independently researched background information about the songs, created cue cards, and were very well prepared. On concert night they introduced each song with confidence, stage presence, and humour. There was consistent enthusiasm in rehearsals because of the joy of music, the collaborative energy, and anticipation of the concert, also because the concert would be filmed. We filmed the clients featured in the band using informed consent then provided copies of the DVD to each participant. The following is a segment of a letter Owen wrote where he detailed his experiences in music therapy during his recovery. Citations are added where he references songs.

According to Carl Jung, some of our most precious and extraordinary gifts lie in the shadow of our unconscious, devoid of expression. They may be utterly unknown to us, or we may have banished them there for our reasons. I had no notion of this when, as a new client at the facility, I first wandered downstairs to listen to others sing karaoke. Music and song held power to move me, but addiction had sickened my mind, body, and heart. One by one, other clients sang, then the music therapist asked me if I'd like to pick a song. The previous client had sung Johnny Cash's rendition of "Hurt" (Reznor, 2002), and as that seemed to be an apt choice at the moment, I sang it again. Like a siphon, the song sucked the hurt from my heart, infusing the sorrowful words with my pain, and I struggled to finish, my throat constricting and my eyes stinging. And so began a therapeutic journey of recovery and discovery, at once risky and rewarding, filled with laughter, joy, weeping, and healing.

Midway through my second stay at the facility, I signed up for "Recording Studio," which is offered twice weekly. I had heard the commotion of others laying down rap beats, but I had something milder and "Gentle on My Mind" (Hartford, 1967) became the first song I recorded, singing vocals over a soundtrack the music therapist found. It was daunting to sing into a microphone knowing everything, mistakes and all, was being recorded. Being vulnerable, I experienced significant emotions of self-loathing and shame. It was difficult to listen to my voice, but the music therapist set me at ease, assuring me that it was all part of the process. Each time I listened to myself, I noticed my tentative vocals, yet my confidence (and my voice) grew. I began to experience compassion for myself whenever I heard the recording.

"Hallelujah" by Leonard Cohen (Cohen, 1984) was an intuitive next project, being such a profound piece of music and poetry. I broke down crying when we found the right key for me to sing it in. Many sessions came and went with a music therapist-in-training adding her keyboard expertise, the music therapist on electric and acoustic guitar, and both together singing angelic harmonies. There were little setbacks and frustrations during the process, but lots of laughter and joy too. I felt a thrill each time I arrived and left feeling richer after the session ended. The precious gift of musical expression had been stirred to life and brought forth painfully yielding a beautiful transformation: a glow in my healing heart, and a sense of wonder and rightness in my world. I remain exceedingly thankful for my experience with music therapy.

Owen's process of expressing himself through his voice facilitated improved self-confidence and self-worth, a finding supported by Baker, Wigram, Scott, and McFerran (2008,, 2009). Through rehearsal, audio- and video recording, and a therapeutic alliance that nurtured his agency and capability, he blossomed. Owen has maintained sobriety for what is now three years since discharge.

Instrumental Recording (Precomposed or Improvisational)

Recording instruments, both acoustic and electronic, is useful for clients who want to rehearse and capture their music to produce an audio-recording. Their music can be improvised or based on songs created by themselves individually or in a group; it may also be precomposed songs written by others. In the case of the latter, this affords opportunities to do a cover version. The music therapist offers to hook up equipment and run recording software, guide and give prompts about sound levels, checks positions of clients with each other, and monitors any other elements the group may need to consider for optimum recording success.

For certain clients, the opportunity to record instrumental music is particularly well suited to their skills within this expressive domain. While some individuals may combine all forms of recording, including vocal and electronic composition, others are most comfortable on an instrument only since it does not require verbal communication. Bear in mind that the vast majority of clients have had no formal training in music lessons and music theory. They rely primarily on their innate capacity to play by ear and to learn music through repeated listening and repetition. We have noticed that in the case of clients with substance use issues before admission who also have psychosis, music often serves to fascinate and engage. Although recording is not required during an improvisational session, clients remain enthusiastic about recording their music, and it is common to record a 20-minute improvisation without a break.

Among those clients who wish to play and record an instrument are those who practice consistently in isolation. While they desire to record their music, they may find it challenging to record with someone else. Although recording is not required during an improvisational session, clients remain enthusiastic about recording their music, and it is common to record a 20-minute improvisation without a break. We store all client recordings in an individual client's folder on an office computer specifically for music therapy sessions. When listening to their recordings, clients can not only focus on technical elements of recording, but also discuss their future plans, the general mood of the piece, and respond to prompts from the therapist about favourite moments, song title, endings, structure, musical dialogue, and other potentially therapeutic topics. Based on the feedback we have received, clients feel that being in a recording studio elevates the experience of music-making.

Dean: Instrumental Change

When Dean attended his first Rap and Recovery session, he entered the room and headed towards the electronic drum set and began playing. It was apparent that he had musical skills. Once settled into the rap session, however, Dean found he was unable to write lyrics based on the session's theme. Even with individual coaching during the group, he struggled with this task. We recognized that his diagnosis of Fetal Alcohol Spectrum Disorder might be interfering with his ability to produce written lyrics. He encountered this challenge each week, but wanted to persevere. While exploring ways to support him, we were also mindful that Dean's initial focus of attention in the studio had been the drum set. One week, when the rap group had ended early, we asked if anyone wanted to "jam". Dean volunteered to play drums and, to our surprise, Mark, another reticent client, said that he would play acoustic guitar. Mark had refractory psychosis and was also significantly challenged in verbal-centered groups, but had never expressed an interest in or capacity for playing guitar. Both Mark and Dean asked if we could record their improvisations.

In this particular situation, recording occurred by capturing music from the microphone in the room, but for a cleaner and acoustically balanced effect plugging in the instruments to the audio interface supports a higher quality recording. By hooking up instruments, a clean rendition allows clients and therapists to talk (e.g., cues to count in order to finish a song) and ignore unanticipated noises such as the ring of the office phone or a knock at the studio door. Typically, the music therapists intervene musically and verbally as minimally as possible during a recording when clients desire to play music together. Instead, we observe clients' potential to self-organize and assess the degree of assistance they want or need as we did with Dean and Mark on this occasion.

Both enjoyed listening to their final recording. The process of listening also made the clients aware of what happened when they did not play music together. For example, they would increase their speed as the music continued, and they would struggle to find a satisfying ending to their performance. Recording together required planning, timing, and a measure of reciprocal listening. After listening to their improvisations, both clients heard imperfections and errors, but were coached to understand that their performance did not have to be perfect. Improvisation, like life, can include both dissonance and beauty.

Nevertheless, we were able to inquire about the parameters of an improvisation that would lead to the feeling of a more polished recording. Factors such as making eye contact or giving a verbal cue when both clients wanted to end the song were elements they wanted to improve. Part of this could be supported by asking them to position themselves in each other's lines of sight, so they could rely on visual as well as auditory cues as the song unfolded. Questions around musical endings also led to a discussion about ways of tying up a song. With supportive questions and input, we collectively problem solved for the next recording and invited them to sign up for a Recording Studio session.

Dean and Mark made use of Recording Studio sessions each week. Plans to do further recordings resulted in the ambition to practice between sessions. The result was ongoing rehearsal and collaboration between them in the music therapy studio and during the week in the practice room that sits adjacent to the studio. Both clients recorded several improvisations and cover songs. The music therapist sometimes assisted structure by playing a third instrument such as a keyboard or electric bass or by using the click track in GarageBand to help the clients maintain a steady beat.

One result of both clients playing and recording together regularly was that Dean's musicality in other areas began to shine. It was evident that he possessed musical skills not only on drums, but also on acoustic guitar and as a singer. His strong musicality, including perfect pitch, enabled him to reproduce complex chords and rhythmic patterns that he had learned by listening to one of his favourite bands, Porcupine Tree. He recorded an initial draft of a song of theirs called *Time Flies* (Wilson, 2009), as he knew the first two minutes of the song and wanted to master the rest. Having the opportunity to record the song prompted his motivation to learn the full tune. At the same time, he was frustrated because he could not accurately replicate the guitar playing throughout the song. Promoting the idea of a cover version was again helpful in that it encouraged him to persevere towards a more personalized performance style. Recording can provide a direction and reward for ongoing effort and practice. In Dean's case, opportunities to record instrumentally facilitated his growth and versatility across different forms of musical expression.

Recording and Video Production

Music today often consists of its portrayal through a visual form on the Internet and television channels featuring music videos. For this reason, some clients feel like it is a natural outcome of creating music to produce their music in a visual format. There are different scenarios in which recording and video production operate together. They include: 1) videotaping clients who record music while rehearsing, 2) videotaping a

polished recording of a song; 3) videotaping live client performances, including on-site concerts, and 4) videotaping clients who may wish to post a song on social media.

There are significant benefits to each type of video production as well as specific decisions from creative and therapeutic perspectives why one form of video production might be valued over another. In the case of rehearsal videotaping, the music therapist may wish to provide feedback to clients regarding musical technique, lighting, vocal and on-stage presence, eye contact, and opening and closing of a song. Video production of a final recording that clients have rehearsed is comparable to a music video in the music industry. It serves as motivation for clients to plan, practice, and adjust their performance towards this desired outcome.

Videotaping a live performance creates a legacy or permanent record for clients to share with others. It is also a tangible reminder of success that allows the music to remain with the client and offers a sense of completion and satisfaction. Beyond creating an mp3, clients can distribute their music to share with friends and family through social media platforms. Posting a recovery-themed song to a social media site can be straightforward, but requires an image or visual embedded in it to be posted there. We sometimes use iMovie or similar software to create a simple video with a client-generated title. Even a single, public domain image or photo of the client can readily lead to video creation.

Sometimes ideas for video production emerge from the recording process. Such is the case with the creation of a music video of a feature song or tribute song. These are best made when filmed live rather than dubbed over because of the challenge of lining up the audio with the visuals. We use a hand-held camera purchased for use in the music therapy studio. This allows us to film clients such as Owen or to assist others in the production of their music video as illustrated in the upcoming case example of Geoff.

Clients are still developing self-confidence and social skills as part of their recovery. On one occasion, the first author started supporting a client with schizophrenia who had hopes of creating a music video. Geoff experienced anxiety when working on the production of a music video. In both cases, the recording and video production processes raised technical considerations as well as artistic and therapeutic forms of assistance.

Geoff: Self Image

When Geoff entered treatment for schizophrenia and addiction, they reported at rounds that his only self-identified strength was rap. He had refractory psychosis, a symptom of schizophrenia. He also had a diagnosis of antisocial personality disorder. Geoff was barely engaged in other programs on the assessment unit and routinely self-isolated in his room.

An invitation to come to the music therapy studio was met with enthusiasm. He brought a few pages of written lyrics, and the music therapist gave him a notebook to continue writing new material. This first song contained disparaging remarks about his brother, which the client was reluctant to discuss in any detail.

After many challenges with psychosis and about three months into his stay, his psychiatrist recommended that Geoff take clozapine, an atypical antipsychotic medication mainly used for persons with persistent symptoms of schizophrenia. Geoff revealed to the music therapist that he was hesitant to take medication for fear it would dampen his creativity. His concerns allowed us to discuss perceived drawbacks versus the possible benefits of the medication. Geoff wondered if it would lessen his psychosis and, if that were the case, what his writing would reflect. Maybe it would be different. Maybe a new style would emerge. Geoff decided to try the medication.

The results were dramatic. Geoff gained insight and was less isolative and calmer. Before clozapine, he had done recordings of lyrics that he had written and given freestyled performances to beats that he had chosen. The lyrics used clever rhyme schemes that were tangential, roaming from one idea to another, lacking a cohesive

narrative or central theme. While exploring his lyrics with the music therapist, Geoff understood that he could not give his raps a title because his thematic content was unclear and at times obtuse. Asked about writing a hook, he needed support to identify threads that tied his writing together. It is important to note that Geoff appreciated such questions; he wanted to better himself as an artist and understood the need to connect with his audience. His initial goal was to write songs in order to become famous, but slowly he began to recognize that songwriters sometimes write about their own lives and experiences.

With a nudge from the music therapist, he began to write about personally meaningful topics, including the experience of having schizophrenia. The music therapist noticed that his lyrics were expressing greater care for others as evidenced by songs he wrote for patients in a children's hospital and later about his stepfather and brother.

As his self-confidence continued to grow, Geoff decided that he would like to produce a post-recording music video on YouTube featuring him performing one of his original songs, a composition about his mental health. Using a handheld camera, we filmed him rapping his song as he listened to it in his headphones. Videotaping took place in the music therapy studio and outdoors to allow for different locations and angles. The video was edited in iMovie and overlaid with the original recording. Geoff was impressed with the final product then posted the video on his YouTube channel. With the culmination of a recovery and mental-health-themed music video, Geoff fulfilled his goal.

With the posting of the video, though, he became fearfully anxious about having to perform on tour if the song went viral. "Though maybe thinking it will go viral is my psychosis", it was a moment of self-awareness followed by a discussion about how being hopeful is healthy, but it is important to maintain realistic expectations and to write songs first and foremost for oneself because creativity is a rewarding component to life. The music therapist said, "Even if it does go viral, you can choose how you respond. You do not have to give concerts unless you want to. You're in charge here. You can continue producing the occasional song for release on YouTube. You can keep it manageable." Geoff looked visibly relaxed and nodded, exhaling loudly. From an anti-oppressive perspective, Geoff was supported to develop his agency and was able to recognize that he was the decisionmaker regarding his creative output. He also developed an awareness of whether his psychosis was being activated, showing progress from his initial admission to the facility.

There were also opportunities for Geoff to review his lyrics and artistic style. After he started taking clozapine, he listened to several recordings from previous music therapy sessions. He re-examined disparaging comments he had made about his brother in the first session. In response, he wrote a new song that expressed feelings of care for his brother and newborn baby while describing how he had felt cast aside, as well as how his schizophrenia and addiction had fractured his relationship with his brother. He also commented that in many songs he was speaking very quickly and that the content did not make much sense. The music therapist agreed that the pace was fast, but also noted important phrases that were worth writing down as focal points.

There was therapeutic value in this discussion and a positive rapport between Geoff and the music therapist. Geoff requested that the music therapist delete his first song that denigrated his brother. He was concerned about how his brother might feel if he heard the song. These moments of empathy contradicted his other diagnosis of antisocial personality disorder, which is sometimes assigned early in a client's medical history when under the use of substances and in psychosis, where their presenting behaviours can be markedly different. When mentioned at rounds, the psychiatrist agreed that Geoff no longer met the criteria for the disorder.

Intentionality and planning, identified by Bent Jensen (2004) in his music therapy work with clients with schizophrenia, became essential elements of Geoff's raps and allowed him to write about specific themes, identify hooks, edit his lyrics, give songs a title, and rehearse in order to create a finished product. According to Jensen, if the forming of identity and sense of self are discovered through experience then a success-

oriented approach that nurtures ego mastery can strengthen clients who are fragile and feel that they are viewed as a case rather than a person (pp. 617–18). Shifting from stream-of-consciousness rhyming to a personalized and coherent rap style allowed Geoff to develop versatility in his range of expression.

Recording and Electronic Composition

Electronic composition involves the use of software to create music and soundtracks on a computer. In addition to electronic composing software, we use an audio interface, music effects processors, a MIDI keyboard, synthesizer, mixer, speakers, and headphones. Technologies and equipment available for electronic composing and recording are continually evolving. At its simplest, electronic composition can occur with only a computer, which is often more accessible to clients than a studio with a variety of equipment input options. It is vital for music therapists to take an interest in electronic recording and to familiarize themselves with the most current technologies, then develop the skills needed to use the technologies effectively for specific therapeutic purposes. Our work is informed by Michael Viega's (2014) valuable concept of Ambient Music. His comprehensive understanding of this topic includes the "use of electronics to create acoustic spaces that do not exist in nature" (n.p.). His definitions attribute elements of mood and emotion, intention, immersion in sonic worlds, and other vital components worth routinely incorporating into sessions.

Electronic composition and recording may involve multiple segments of recordings sourced from other inputs or software loops. Skillful use of software, like hardware, allows clients different options for expressing their creativity and refining the type of recording they wish to produce (Misje, 2013).

There are similarities and differences between electronic and traditional forms of composing and recording. Traditional views of composition may include creating chords and lyrics or score for a song. Electronic composition is done on screen and is, therefore, more visual and auditory rather than written. Possibilities for creative expression through electronic means are akin to those expressed on traditional instruments. However, electronic composition may also involve experimental forms of composing, using new elements, frameworks, sounds, genres, and ideas about what constitutes music. Beat making used for electronic composition, for example, falls into the category of sound expression and musical talent (Crooke, 2018).

The use of electronic composing and recording can shift roles and responsibilities in the client-therapist relationship. Typically, there is an ongoing need for collaboration, consultation, and willingness to support a client's vision for a particular type of recording. Clients in our music therapy sessions have different backgrounds and levels of comfort using recording software. Although some may have advanced digital literacy skills, others may require assistance from the music therapist to make optimal use of an application in order to produce a final recording. Clients are also encouraged to spend time by themselves in the studio wearing headphones to continue work on their compositions. The therapist is accessible nearby should the client need support.

Electronically produced music has shared and distinct benefits. The first is that it responds to a client's area of passion in music and therefore serves as a point of entry into music therapy. While it involves more time in front of a computer, it engages the same skills as those used in other types of recording: planning, listening, skill acquisition and development, discussing and critiquing a draft or complete work, editing, product creation, and dissemination. By integrating clients' creative expression with music therapy purposes, processes, and outcomes, the recording process will serve types of artistic and personal needs for those living with concurrent disorders.

Vincent: Composing Himself

I find my personal taste now driven towards Techno, Tech House, House, EDM ...it keeps my brain active and intuitive and creative. Music's played a different role in my recovery...it's really changed my perspective. Being able to do something like this [composi-

tion] gave me the happiness of believing in myself. In this last relapse I knew I was pretty far off ...I didn't want to just chase a dream. Music therapy has taught me how to do it and create something that is tangible. It helps me organize my thoughts. Music, it's a beautiful thing, right? It's like my eyes open up, like ahhh, I breathe a sigh of relief because I've found something that calms my schizophrenia.

Vincent, a 40-year-old man with schizophrenia, was already skilled at creating ambient soundtracks. "Ambient" does not refer to background music, but rather music that possesses an aesthetic quality paired with a therapeutic purpose for the client. Michael Viega (2014) defines Ambient Music as including circumstances where the music "allows for the listener to be immersed in sonic worlds", creating a space that can calm and focus on sound textures (n.p.). When sessions involve ambient music, the music therapist may have many roles: learning from the client about composition and production using electronic equipment; assisting with set-up for successful compositional experiences; teaching the use of additional or novel equipment so the client can utilize skills independently after discharge from care; discussing factors such as the mood the music conveys, choice of song title, and how the client feels about the final product; and assessing ways in which the client might want to share creative expression at the facility and through online platforms.

Sometimes we teach clients how to record and then we stay off to the side to work on another task, but remain available should our assistance be needed. To this end, there is a parallel between a recording based on what Winnicott (1953,, 1969) calls an intermediary or transitional object or what poet Karen Chase (2007) calls the "third thing" (p. 6). Though the recording is not a physical object like a drum, it can nevertheless function as a shared process that has the potential to create a point of connection between client and therapist. Sessions must sustain cultural identifications, that is, attending to primary musical strengths and interests of the client. The music therapist must research and integrate EDM (Electronic Dance Music), Techno, Trance, Tribal House, and other subgenres into a music therapy recording session as required.

What are challenges when recording?

In our roles as music therapists, we have found that all four types of recording have therapeutic value. However, there are also challenges involved when using recording in music therapy. The first is having space, equipment, and versatility to record. Although music therapists as a whole are increasingly comfortable using technology for therapeutic purposes (Hahna, Hadley, Miller, & Bonaventura, 2012; Magee & Burland, 2008a,, 2008b; Magee et al., 2011), some cite barriers such as lack of training, finances, and perceived appropriateness of using digital technology with clients. Other obstacles are lack of clarity about client consent and how to give clients their own completed recording when computer access is unavailable or when the use of e-mail may compromise client/therapist boundaries. Some facilities, like ours, do not permit clients to use personal electronic devices such as an iPad, laptop computer, or cell phone. Some sites block WiFi access. What is essential is that the music therapist anticipates the steps, barriers, and solutions that will allow for successful recording without jeopardizing the therapeutic needs of the client and professional standards of the music therapist.

Another challenge to recording in a therapeutic context may be the duration of therapist-client contact. In many instances, a group or individual may benefit most by completing a recording in a single session. Baker et al. (2009), who write about therapeutic songwriting in mental health contexts without particular emphasis on recording, note that most songs are created and completed in a single session. In sessions where a song is written and created—usually to a preset melodic structure such as blues or to a familiar or simple melody line—the final product may be recorded and made available to the client(s).

Time limitations, along with a client's mental health status, are factors to weigh in session planning and timetabling. Single-session formats may also mean that attention

to specific therapeutic goals and artistic elements of the recording may not receive indepth attention.

For some clients, the public expression of private thoughts and feelings may be another challenge. A recording can transform personal experience into a shared experience in a group music therapy setting, providing a means to uncover underlying feelings, worries, and hopes. With the careful and attentive acknowledgment of their lyrics, clients can experience being heard.

Some clients arrive enamoured with the prospect of recording, but become self-conscious or anxious when standing before a microphone, which is quite a normal response if we place ourselves in the shoes of the clients. Teasing apart professionally rehearsed and mastered recordings by famous artists in contrast to personal and informal types of recording often helps clients persevere with their musical ambitions. Feelings of inadequacy may be metaphors for other aspects of a client's life in other non-musical domains. When viewed as a parallel to ongoing substance use, breaking a musical pattern may have implications for other areas. Consequently, helping a client to make informed decisions in order to change a pattern and make a shift to a new song may be beneficial. Deciding how and to what degree to edit and complete a recording can provide productive avenues of inquiry, exploration, reflection, and support for clients with diverse needs.

While software programs allow for extensive editing and levels of enhancement, such as layers of tracks and auto-tuning, we try to avoid overproducing and altering a client's authentic voice. We aim for the recording process to be something they can replicate on their own after discharge from the facility.

Client Access to Recordings

Our experiences recording over time demonstrated the impracticalities of CDs for most clients. CDs are easily damaged and scratched and get lost when clients transfer to other facilities for further treatment, stay at halfway houses or shelters or lose all belongings because of substance use relapse. Fortunately, reliance on the use of CDs has mostly been replaced by more efficient technologies. Cloud-based storage offers clients ongoing access to their recordings. Using cloud-based services allows clients to manage their music. It also allows them to share personalized recordings easily with friends and loved ones.

Notwithstanding this convenience, songs—recorded or not—that glorify substance use, are misogynistic, sexually vulgar, violent, racist, sexist, or that intentionally demean others, should not be posted or shared publicly. In these instances, attempts to process lyrics with a client are often the first recourse. The discussion aims at generating insight and building rapport with a client working on recovery. Dissemination of a recording, even the provision of a personal copy, is not permitted when guidelines about respectful content are not present. We practice a zero-tolerance approach when music therapy is used to victimize others.

The importance of respectful conduct by clients and therapists adheres to our Canadian Association of Music Therapists' Code of Ethics (CAMT) (2002) regarding the dignity and rights of persons, which we view as extending to the care of all clients at the facility as well as to an overarching view of social responsibility. The importance of respectful language and behaviour in music therapy generally and in recording sessions specifically are also influenced by our facility's ethical practice and risk of harm assessment. Clients who record controversial lyrics are encouraged to continue participating in music therapy with the expectation that their language and behaviour will be respectful. The editing of their lyrics may entail repeated practice on the part of the client to acquire new ways of being in healthier relationships to music, themselves, and others. This approach is also very compatible with the seeking safety program offered to clients with trauma histories (Najavits, 2009).

Conclusion

As the field of music therapy continues to expand, one of the challenges that music therapists need to consider in a restless reflection on practice is how to integrate new and emerging digital music and video technologies into professional practice. Although decisions about whether or not to use specific digital music and video technologies for specific purposes and populations vary according to context, budget, time, personal preference, support systems, accessibility, and other factors, options to use one technology or another will influence efficiencies and possibilities for understanding and supporting clients. Even as advances in hardware and software have created far-reaching changes in education, consumer spending and finance, and other areas, their underlying impact on music therapy has been no less dramatic. We are mindful when we develop and refine music therapy programs that we need to consider what roles technology might play and what digital and electronic advances have occurred since we last used a particular technology. The need for music therapy clinicians and educators alike to develop basic proficiency with music technologies (Crowe & Rio, 2004; Hahna et al., 2012; Jones, 2006; Krout, 1992) is crucial and timely.

It is in this landscape that we have identified recording as an essential therapeutic component to client self-development. Drawing on our experience at a concurrent disorders treatment facility and the data we collected, we described four types of recording—vocal, instrumental, video production, and electronic composition—and illustrated each with a case example. We hope that by deconstructing recording into these categories that they will be more concrete and therefore accessible to music therapists. Although we have a recording studio and excellent resources at our facility, we believe that the types of sessions we offer can likewise see implementation with equal success across a diverse spectrum of music therapy settings with varying levels of digital music technology. Emerging technologies make it possible to produce quality recordings in a variety of music therapy settings (Logan, 2014), sometimes at a low cost. Some forms of recording, such as vocal and electronic, can be facilitated with the use of a microphone or computer.

Programs that include mindful use of recording offer substantial therapeutic, supportive opportunities for methodical listening, planning, self-organization, rehearsal, patience, collaboration, creativity, performance, comprehension, and self-expression, as well as teamwork, reflection, and insight.

Another way to think about recording as a catalyst for personal growth and well-being is to pair recording with opportunities for clients to reflect on and recompose their lives, akin to life review using lyric analysis of their self-composed songs (Jurgensmeier, 2012; O'Callaghan & Grocke, 2009). This process helps to externalize thoughts, feelings, and biographical experiences into tangible form. While this is occurring, the music therapist functions as an enlightened witness and assistant auto-biographer (Kraemer, 2006, p. 242). In the presence of an attuned listener, personal self-reflection becomes a venue for nurturing and elevating client success and accomplishment (Erskine, 1998). That all of this unfolds in a recording environment confirms its value as a catalyst for therapeutic change and self-development. We hope that other music therapists will embrace the creative and therapeutic potential of recording in their areas of practice and inquiry.

About the authors

Kevin Kirkland is an instructor in the music therapy program at Capilano University in North Vancouver, Canada and also works as a certified music therapist in a concurrent disorders setting for Provincial Health Services Authority.

Shannon Nesbitt holds bachelors degrees in both music and music therapy, as well as a masters in music performance. She has been working as a music therapist in a concurrent disorders setting for Provincial Health Services Authority for 5 years.

References

- Adams, J., & Lajoie, M. (2014). Playing in the band: The story of The Headbangers, a performance ensemble for young people and young adults using assistive devices. In W. L. Magee (Ed.), *Music technology in therapeutic and health settings* (pp. 235-246). London: Jessica Kingsley Publishers.
- Baker, F. A. (2013a). Front and center stage: Participants performing songs created during therapy. *The Arts in Psychotherapy*, 40(1), 20-28.
- Baker, F. A. (2013b). An investigation of the sociocultural factors impacting on the therapeutic songwriting process. *Nordic Journal of Music Therapy*, *23*(2), 123-151, http://dx.doi.org/10.1080/08098131.2013.783094.
- Baker, F. A., & Wigram, T. (Eds.). (2005). Song writing methods, techniques and clinical applications for music therapy clinicians, educators, and students. London: Jessica Kingsley.
- Baker, F. A., Wigram, T., Stott, D., & McFerran, K. (2008). Therapeutic songwriting in music therapy, Part I: Who are the therapists, who are the clients, and why is songwriting used? *Nordic Journal of Music Therapy*, *17*(2), 105-123.
- Baker, F. A., Wigram, T., Stott, D., & McFerran, K. (2009). Therapeutic songwriting in music therapy, Part II: Comparing the literature with practice across diverse populations. *NordicJournal of Music Therapy*, *18*(1), 32-56, https://doi.org/10.1080/08098130802496373.
- Beathard, B., & Krout, R. E. (2008). A music therapy clinical case study of a girl with childhood apraxia of speech: Finding Lily's voice. *The Arts inPsychotherapy*, *35*(2), 107-116.
- Bishop, A. (2002). Becoming an ally: Breaking the cycle of oppression in people. Halifax, NS: Fernwood.
- Bednarz, L. F., & Nikkel, B. (1992). The role of music therapy in the treatment of young adults diagnosed with mental illness and substance use. *Music Therapy Perspectives*, 10(1), 21-26, https://doi.org/10.1093/mtp/10.1.21.
- Bodry, K. (2018). *Clinical applications of feminist theory in music therapy: A phenomenological study* (Master's thesis). North Carolina: Appalachian State University. Retrieved from https://libres.uncg.edu/ir/asu/f/Bodry_Kendra_2018_Thesis.pdf.
- Borczon, R. M. (1997). Music therapy: Group vignettes. Gilsum, NH: Barcelona Publishers.
- Borling, J. (2017). Stage two recovery for substance use disorders: Considerations and strategies for music therapists. *Music and Medicine: An Interdisciplinary Journal*, *9*(1), 59-63.
- Canadian Association of Music Therapists. (2002). *Code of Ethics*. Waterloo, ON: Wilfrid Laurier University.
- Centre for Addiction & Mental Health. (2012). What are concurrent disorders? Retrieved from http://www.camh.ca/en/hospital/health_information/
 a_z_mental_health_and_addiction_information/concurrent_disorders/
 concurrent_substance_use_and_mental_health_disorders_information_guide/Pages/
 what_are_cd_infoguide.aspx#notes.
- Chase, K. (2007). Land of stone: Breaking silence through poetry. Detroit: Wayne State University Press.
- Clements-Cortés, A. (2013). High-tech therapy: Music technology in music therapy. *Canadian Music Educator, Summer*, *37*, 37-39.
- Cohen, L. (1984). Hallelujah. Various Positions, [Record], New York, NY, Columbia.
- Crooke, A. H. D. (2018). Music technology and the Hip Hop beat making tradition: A history of typology of equipment for music therapy. *Voices: A World Forum for Music Therapy*, 18(2).
- Crowe, B. J., & Rio, R. (2004). Implications of technology in music therapy practice and research for music therapy education: A review of literature. *Journal of Music Therapy*, 41(4), 282-320.
- Day, T., Baker, F. A., & Darlington, Y. (2009). Beyond the therapy room: Women's experiences of 'going public' with song creations. *British Journal of Music Therapy*, 23(1), 19-26.

- Derrington, P. (2005). Teenagers and songwriting: Supporting students in a mainstream secondary school. In F. A. Baker & T. Wigram (Eds.), Songwriting: Methods, techniques and clinical applications for music therapy clinicians, educators and students (pp. 68-81). London: Jessica Kingsley Publishers.
- Erskine, R. G. (1998). Attunement and involvement: Therapeutic responses to relationship needs. *International Journal of Psychotherapy*, *3*(3), 235-244.
- Evans, D. J. (2010). The challenge of treating conduct disorder in low-resourced settings: Rap music to the rescue. *Journal of Child & Adolescent Mental Health*, 22(2), 145-152.
- Freire, P. (2000). *Pedagogy of the oppressed*. New York: The Continuum International Publishing Group.
- Fulford, M. (2002). Overview of a music therapy program at a maximum security unit of a state psychiatric facility. *Music Therapy Perspectives*, 20(2), 112-116.
- Gallagher, L. M., & Steel, A. L. (2002). Music therapy with offenders in a substance use/mental illness treatment program. *Music Therapy Perspectives*, *20*(2), 117-122, https://doi.org/10.1093/mtp/20.2.117.
- Gardstrom, S. C. (1999). Music exposure and criminal behavior: Perceptions of juvenile offenders. *Journal of Music Therapy*, 36(3), 207-221.
- Gold, C., Solli, H. P., Krueger, K. R., & Lie, S. (2009). Dose-response relationship in music therapy for people with serious mental disorders: Systematic review and meta-analysis. *Clinical Psychology Review*, *29*(3), 193-207, https://doi.org/10.1016/j.cpr.2009.01.001.
- Gold, C., Mössler, K., Grocke, D. E., Heldal, T. O., Tjemsland, L., Aarre, T., & Rolvsjord, R. (2013). Individual music therapy for mental health care clients with low therapy motivation: Multicentre randomised controlled trial. *Psychotherapy and Psychosomatics*, 82(5), 319-331, https://doi.org/10.1159%2F000348452.
- Gonzalez, T., & Hayes, B. G. (2009). Rap music in school counseling based on Don Elligan's rap therapy. *Journal of Creativity in Mental Health*, 4(2), 161-172.
- Grocke, D. E., Bloch, S., & Castle, D. (2008). Is there a role for music therapy in the care of the severely mentally ill? *Australasian Psychiatry*, *16*(6), 442-445, https://doi.org/10.1080%2F10398560802366171.
- Grocke, D. E., Bloch, S., & Castle, D. (2009). The effect of group music therapy on quality of life for participants living with a severe and enduring mental illness. *Journal of Music Therapy*, 46(2), 90-104.
- Hadley, S., & Yancy, G. (Eds.). (2011). *Therapeutic uses of rap and hip-hop*. New York: Routledge.
- Hadley, S., Hahna, N. D., Miller, V. H., & Bonaventura, M. (2014). Setting the scene: An overview of the use of music technology in practice. In W. L. Magee (Ed.), *Music technology in therapeutic and health settings* (pp. 25-44). London: Jessica Kingsley Publishers.
- Hahna, N. D., Hadley, S., Miller, V. H., & Bonaventura, M. (2012). Music technology usage in music therapy: A survey of practice. *The Arts in Psychotherapy*, *39*, 456-464.
- Hartford, J. (1967). Gentle on My Mind [Recorded by Glen Campbell]. *Gentle on My Mind*, [Record], Hollywood, CA, Capital Studios.
- Hatcher, J. (2007). Therapeutic songwriting and complex trauma. *Canadian Journal of Music Therapy*, 13(2), 115-131.
- Henderson, S. (1983). Effect of a music therapy program upon awareness of mood in music, group cohesion, and self-esteem among hospitalized adolescent patients. *Journal of Music Therapy*, *20*(1), 14-20, https://doi.org/10.1093/jmt/20.1.14.
- Hense, C., & McFerran, K. S. (2017). Promoting young people's musical identities to facilitate recovery from mental illness. *Journal of Youth Studies*, *20*(8), 997-1012, https://doi.org/10.1080%2F13676261.2017.1287888.
- Jensen, B. (2004). *The principle of polarisation used in working with schizophrenic patients* (Paper presented at the Many faces of music therapy). 6th European Music Therapy Congress, Jyväskylä, Finland. pp. 612-626.

- Jolly, C. (1998). Breaking out of silence, breaking into song: A music therapy model of practice for witnessing the healing of adult survivors of sexual abuse (Master's thesis). Vancouver, BC.: University of British Columbia.
- Jones, J. D. (2006). Songs composed for use in music therapy: A survey of original songwriting practices of music therapists. *Journal of Music Therapy*, *43*(2), 94-110.
- Jurgensmeier, B. (2012). The effects of lyric analysis and songwriting music therapy techniques on self-esteem and coping skills among homeless adolescents (Master's thesis). Lawrence, Kansas: University of Kansas. Retrieved from https://kuscholarworks.ku.edu/bitstream/handle/1808/10764/Jurgensmeier ku 0099M 12507 DATA 1.pdf?sequence=1.
- Kirkland, K. (2004). *A grim fairy tale: A mythopoetic discourse on taboo, trauma, and anti-oppressive pedagogy* (Doctoral dissertation). The University of British Columbia, Vancouver, BC.
- Kirkland, K., & King, S. H. (2019). Rap & Recovery: A music therapy process-oriented intervention for adults with concurrent disorders. *Approaches: An Interdisciplinary Journal of Music Therapy*, 11(1).
- Kraemer, S. (2006). Something happens: Elements of therapeutic change. *Clinical Child Psychology and Psychiatry*, 11(2), 239-248.
- Krout, R. E. (1992). Integrating technology. Music Therapy Perspectives, 8, 8-9.
- Krout, R. E. (2014). Music technology used in therapeutic and health settings: Definitions of devices and resources. In W. L. Magee (Ed.), Music technology in therapeutic and healthsettings (pp. 45-62). London: Jessica Kingsley.
- Kumashiro, K. (2000a). Teaching and learning through desire, crisis, and difference: Perverted reflections on anti-oppressive education. *Radical Teacher*, *58*, 6-11.
- Kumashiro, K. (2000b). Toward a theory of anti-oppressive education. *Review of Educational Research*, 70(1), 25-53.
- Larsen, J. K. (2006). *Sexism and misogyny in American hip-hop culture* (Master's thesis). (Unpublished master's thesis). The University of Oslo, Oslo, Norway.
- Lindberg, K. A. (1995). Songs of healing: Songwriting with an abused adolescent. *Music Therapy*, 13(1), 93-108.
- Logan, M. (2014). Music therapy recording setups. *Technology*, *April 9*, *2014*, Retrieved from http://musictherapysource.com/music-therapy-recording-setups.
- Lokko, H. N., & Stern, T. A. (2015). Regression: Diagnosis, evaluation, and management. *Primary Care Companion for CNS Disorders*, 17(3), https://doi.org/ 10.4088%2FPCC.14f01761.
- Magee, W. L., & Burland, K. (2008a). Using electronic music technologies in music therapy: Opportunities, limitations, and clinical indicators. *British Journal of Music Therapy*, 22(1), 3-15.
- Magee, W. L., & Burland, K. (2008b). An exploratory study on the use of electronic technologies in clinical music therapy. *Nordic Journal of Music Therapy*, *17*(2), 124-141.
- Magee, W. L., Kubicek, L., Martino, I., Townsend, J., Whitehead-Pleaux, A., & Zigo, J. B. (2011). Using music technology in music therapy with populations across the life span in medical and educational programs. *Music and Medicine*, 3(3), 146-153.
- Magee, W. L. (2014a). *Music technology in therapeutic and health settings*. London: Jessica Kingsley Publishers.
- Magee, W. L. (2014b). Models for roles and collaborations with using music technology in Music therapy. In W. L. Magee (Ed.), *Music technology in therapeutic and health settings* (pp. 361-386). London: Jessica Kingsley Publishers.
- McQuillar, T. L. (2007). When rap had a conscience: The artists, organizations, and historic events that inspired and influenced the "Golden Age" of hip-hop from 1987 to 1996. New York, NY: Thunder's Mouth Press.

- Misje, R. (2013). Music technology in music therapy: A study of the possibilities, potential and problems around the use of music technologies in music therapy with youths and adolescents (Master's thesis). University of Bergen, Bergen, Norway.
- Montello, L., & Coons, E. (1983). Effect of active versus passive group music therapy on preadolescents with emotional, learning, and behavior disorders. *Journal of Music Therapy*, 35(1), 49-67.
- Mössler, K., Chen, X., Heldal, T. O., & Gold, C. (2011). Music therapy for people with schizophrenia and schizophrenia-like disorders. *Cochrane Database of SystematicReviews*, *12*, https://doi.org/10.1002%2F14651858.CD004025.pub3.
- Murphy, K. M. (2017). Music therapy in addictions treatment: A systematic review of the literature and recommendations for future research. *Music and Medicine: AnInterdisciplinary Journal*, *9*(1), 15-23.
- Najavits, L. M. (2009). Seeking safety: An implementation guide. In A. Rubin & D. W. Springer (Eds.), *The clinician's guide to evidence-based practice* (pp. 311-347). Hoboken, NJ: John Wiley.
- Newham, P. (1999). *Using voice and song in therapy: The practical application of Voice Movement Therapy*. London: Jessica Kingsley Publishers.
- Nordoff, P., & Robbins, C. (1975). *Music therapy in special education*. London: MacDonald & Evans.
- Nordoff, P., & Robbins, C. (2004). *Therapy in music for handicapped children*. Gilsum, NH: Barcelona Publishers.
- O'Brien, E. (2006). Opera therapy: Creating and performing a new work with cancer patients and professional singers. *Nordic Journal of Music Therapy*, *15*(1), 82-96.
- O'Callaghan, C. (1996). Pain, music, creativity, and music therapy in palliative care. *American Journal of Hospice & Palliative Medicine*, 13(2), 43-49.
- O'Callaghan, C. (2008). Lullament: Lullaby and lament therapeutic qualities actualized through Music therapy. *American Journal of Hospice & Palliative Medicine*, 25(2), 93-99.
- O'Callaghan, C., & Grocke, D. E. (2009). Lyric analysis research in music therapy: Rationales, methods and representations. *The Arts in Psychotherapy*, *36*(5), 320-328, https://doi.org/10.1016/j.aip.2009.09.004.
- Plener, P. L., Sukale, T., Ludolph, A. G., & Stegemann, T. (2010). "Stop cutting–rock!": A pilot study of a music therapeutic program for self-injuring adolescents. *Music & Medicine*, *2*(1), 59-65.
- Priestley, M. (1975). Music therapy in action (2nd ed.). Louis, MO: MMB Music.
- Priestley, M., & Eschen, J. T. (2002). Analytical music therapy: Origin and development. In J. T. Eschen (Ed.), *Analytical music therapy* (pp. 11-16). London: Jessica Kingsley Publishers.
- Renshaw, S. (2015). *The use of rap music in music therapy treatment with adolescents and young adults: A survey* (Master's thesis). Appalachian State University, Boone, North Carolina.
- Reznor, T. (2002). Hurt. The Downward Spiral[Recorded by Johnny Cash]. *American IV: The Man Comes Around*, [CD], Los Angeles, CA, American Recording Company.
- Robbins, C., & Robbins, C. (1991a). Self-communications in creative music therapy. In K. E. Bruscia (Ed.), *Case studies in music therapy* (pp. 55-72). Gilsum, NH: Barcelona Publishers.
- Robbins, C., & Robbins, C. (1991b). Creative music therapy in bringing order, change and communicativeness to the life of a brain-injured adolescent. In K. E. Bruscia (Ed.), *Case studies in music therapy* (pp. 231-249). Gilsum, NH: Barcelona Publishers.
- Rolvsjord, R., & Halstead, J. (2013). A woman's voice: The politics of gender identity in music therapy and everyday life. *The Arts in Psychotherapy*, 40, 420-427.
- Sadnovik, N. (2014). The birth of a therapeutic recording studio: Addressing the needs of the hip-hop generation on an adult inpatient psychiatric unit. In W. L. Magee (Ed.), *Music technology in therapeutic and health settings* (pp. 247-262). London: Jessica Kingsley Publishers.

- Silverman, M. J. (2015). *Music therapy in mental health for illness management and recovery*. Oxford, England: Oxford University Press.
- Smith, J. G. (2007). Creating a "Circle of Song" within Canada's poorest postal code. *Canadian Journal of Music Therapy*, 13(2), 103-114.
- Stephens, R. J., & Wright, E. (2000). Beyond bitches, niggers, and ho's: Some suggestions for including rap music as a qualitative data source. *Race and Society*, *3*(1), 23-40, https://doi.org/10.1016/S1090-9524(01)00019-5.
- Summers, S. (1999). *A tapestry of voices: Community building with a geriatric choir* (Master's thesis). British Columbia Open University, Burnaby, BC.
- Summers, S. (2014). *Portraits of vocal psychotherapists: Singing as a healing influence for change and transformation* (Doctoral dissertation). Antioch University, Yellow Springs, OH.
- Turry, A. (2005). Music psychotherapy and community music therapy: Questions and considerations. *Voices: A World Forum for Music Therapy*, *5*(1).
- Tyson, E. (2002). Hip Hop therapy: An exploratory study of a rap music intervention with atrisk and delinquent youth. *Journal of Poetry Therapy*, 15(3), 131-144.
- Uhlig, S., & Baker, F. A. (2011). Voicework in music therapy: Pioneers and a new generation. In F. A. Baker & S. Uhlig (Eds.), *Voicework in music therapy: Research and practice* (pp. 25-42). London: Jessica Kingsley.
- Vander Kooij, C. (2009). Recovery themes in songs written by adults living with serious mental illnesses. *Canadian Journal of Music Therapy*, *15*(1), 37-58.
- Vega, V. P. (2017). Music therapy with addiction and co-occurring disorders. *Music and Medicine: An Interdisciplinary Journal*, *9*(1), 45-49.
- Veltre, V. J., & Hadley, S. (2012). It's bigger than hip-hop: A hip-hop feminist approach to music therapy with adolescent females. In S. Hadley & G. Yancy (Eds.), *Therapeutic uses of rap and hip-hop* (pp. 79-98). New York: Routledge.
- Viega, M. (2012). The hero's journey in hip-hop and its applications in music therapy. In S. Hadley & G. Yancy (Eds.), *Therapeutic uses of rap and hip-hop* (pp. 57-78). New York: Routledge.
- Viega, M. (2014). Listening in the ambient mode: Implications for music therapy practice and theory. *Voices: A World Forum for Music Therapy*, 14(2).
- Viega, M. (2015). Exploring the discourse in Hip Hop and implications for music therapy practice. *Music Therapy Perspectives*, *34*(2), 1-9, https://doi.org/10.1093%2Fmtp%2Fmiv035.
- Wallerstein, N. (2006). What is the evidence on effectiveness of empowerment to improve health? Retrieved from http://www.euro.who.int/Document/E88086.pdf.
- Weissberger, A. (2014). GarageBand as a digital co-facilitator: Creating and capturing moments with adults and elderly people with chronic health conditions. In W. L. Magee (Ed.), *Music technology in therapeutic and health settings* (pp. 279-294). London: Jessica Kingsley Publishers.
- Weitzer, R., & Kubrin, C. E. (2009). Misogyny in rap music: A content analysis of prevalence and meanings. *Men and Masculinities*, 12(1), 3-29.
- Whitehead-Pleaux, A., Clark, S. L., & Spall, L. (2011). Indications and counterindications for electronic music technologies in a pediatric medical setting. *Music and Medicine, May 13*, 1, 1-9.
- Whitehead-Pleaux, A., & Spall, L. (2014). Innovations in medical music therapy: The use of electronic music technologies in a pediatric burn hospital. In W. L. Magee (Ed.), *Music technology in therapeutic and health settings* (pp. 154-162). London: Jessica Kingsley Publishers.
- Wilson, S. (2009). Time flies[Recorded by Porcupine Tree]. *The Incident*, [CD], Sony/ATV Music Publishing.
- Winnicott, D. W. (1953). Transitional objects and transitional phenomena. *International Journal of Psychoanalysis*, *34*, 89-97.

Winnicott, D. W. (1969). The use of an object. *International Journal of Psychoanalysis*, *50*, 711-716.

Yancy, G., & Hadley, S. (2011). Introduction: Giv'em just one mic: The therapeutic agency of rap and hip-hop. In S. Hadley & G. Yancy (Eds.), *Therapeutic uses of rap and hip-hop*. New York: Routledge.