Research Symposium Proceedings 2012

Held at the 38th Annual Conference of the Canadian Association for Music Therapy (CAMT) in partnership with Concordia University

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PREFACE

Although research has become a more integral part of the annual CAMT conferences in recent years, this is the first time that we have held a symposium of this magnitude. These proceedings could be considered an exciting reflection of the diversity that is currently occurring in music therapy research at both national and international levels. The work presented by novice and experienced investigators truly seems to indicate that music therapy research is a discipline that is finally coming into its own in Canada. It is our hope that this symposium and these proceedings will inspire CAMT conference planning committees to hold a similar event at each future annual conference as this will surely help to promote the ongoing growth and advancement of our field.

We would like to acknowledge the input and support of several individuals and organizations. We would like to thank all of the conference delegates who attended the symposium and especially those who shared their work. On May 3rd, we were pleased to welcome Dr. Stephen Snow, Chair of the Creative Arts Therapies Department at Concordia University who provided opening remarks. On May 4th, we were pleased to begin the day with Dr. Brynjulf Stige whose keynote presentation on research in community music therapy set an inspiring tone for all that followed. Finally, we are very grateful to Concordia University and the Vice-President, Research & Graduate Studies' Aid to Research Related Events, Publication, Exhibition and Dissemination Activities (ARRE) award that provided financial support for this event.

Laurel Young, Research Symposium Coordinator
Guylaine Vaillancourt, CAMT Conference Co-chair
Sandi Curtis, CAMT Conference Co-chair

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Finding the freedom to play through improvisation: A music therapist's experience / *Hélène Gaudreau*

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Burnout among music therapists: A phenomenological study / *Kiki Chang*

In a phenomenological study, six music therapists in Canada were interviewed to investigate "What is a music therapist's experience of burnout truly like?" "Is it similar to another music therapist's experience?" and "What are the differences between their experiences?" The common shared experience of the participants and implications for the profession will be discussed.

Creation of a program in music therapy for caregivers of parents with Alzheimer's disease / *Christelle Laforme*

This presentation will outline the construction of a music therapy program for caregivers of parents with Alzheimer's disease. It will help to increase understanding of Alzheimer's disease, the caregivers' situation, and music therapy's role in supporting caregivers. Research process and results will be presented.

Palliative patients' experience of the Bonny Method of Guided Imagery and Music / *Sheilla Killoran*

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A phenomenological look at the combined use of music therapy and massage therapy in cancer care */ Jessica Ford*

This study involved a single-session music therapy and massage therapy treatment with nine participants from an inpatient oncology unit. Potential benefits of the use of music therapy in combination with massage therapy in cancer care will be presented, as will a basis for the application of this approach with other populations.

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RESEARCH POSTER DISPLAY

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Abstracts and Papers

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This presentation will introduce completed and ongoing research initiatives from the 'Manfred and Penny Conrad Institute for Music Therapy Research.' It will include an evaluation of an important piece of historical and musicological research, comparing the 'art' music of Paul Nordoff with his compositional process and structure of clinical improvisations.

Arts-based inquiry: A workshop / Carolyn Arnason & Amanda Schenstead

Key ideas in arts-based inquiry will be presented. Possible convergences between performative methodologies, improvisation and therapy will be explored; and the ethics of arts-based inquiry will be discussed. As a group, participants will have the opportunity to experience a systematic approach to arts-based data analysis drawing on the concepts and processes used in heuristic research.

A new model for music therapy with young people in diverse school contexts / *Katrina McFerran*

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The purpose of this study was to identify predictors of responsiveness to Bonny Method of Guided Imagery and Music. It was hypothesized that when combined, Sense of Coherence, anxiety, classical music experience, gender, and/or age would account for a significant amount of variance in responsiveness to BMGIM. Implications for future research, practice, and education will be discussed.

A philosophical inquiry: Exploring diversity and unity within music therapy/

Kerry L. Byers
Music Therapy of London, Canada

Music therapy is a diverse population with a multitude of approaches that segment the field, creating inner tensions and frustrating communication both within and outside of the profession. This presentation will review results obtained from interviewing 24 music therapy educators, from eleven countries, discussing the topics of diversity and unity.

Keywords: *music therapy, foundational theory, diversity, unity*

Music therapy is very difficult to describe, particularly as diversity within the profession has developed in response to the varying needs of clients served within different situational, cultural and theoretical contexts (Bruscia, 1998; Bunt, 1994; Wigram, Pedersen & Bonde, 2002). In embracing a wide range of definitions and theories, the field's boundaries have become so large that it can be a challenge to discern the difference between music therapy and other music-based and health-based professions. Additionally, those within the field are unable to identify what unites them (Bruscia, 1998; Kenny, 1999; Wigram, Pedersen & Bonde, 2002). Bruscia (1998), in *Defining Music Therapy*, did a thorough job of delineating the many aspects of music therapy, providing an inclusive look at the profession. Yet, in trying to embrace all work being fulfilled under the banner of music therapy, the result was that he emphasized the field's many differences. The multitude of variation in music therapy raises the question of what commonalities exist between the differences. The profession can build upon Bruscia's seminal work by identifying those beliefs that unite the field.

This paper presents a small portion of the results from a study that sought to identify the common assumptions shared across all the differences within music therapy. The purpose of the larger study was to ask: 1) Are there any premises that bind the whole profession?; and, 2) Is music therapy in fact two (or more) separate professions under one label? This paper outlines the results from 24 interviews with music therapy educators from Europe, United States, Canada, Australia, Japan, Argentina and Brazil. The interviews focused on identifying current ideas concerning diversity and unity within music therapy. Eight themes emerged from the discussions, three of which are discussed below: diversity, divisions within music therapy, and a unified theory of music therapy.

RESULTS

Diversity appeared to be accepted as a natural part of life and an inherent component of music, and was therefore recognized as being a necessary component of music therapy. Many difficulties with diversity were identified, yet it was simultaneously stated that diversity is important. The negative aspects of diversity included animosity between therapists, communication problems within and beyond the profession, and a wide scope of practice that results in communication and training problems. The participants saw diversity as being important in meeting client needs. In a circular way it could be stated that, the clientele is diverse so music therapy must be diverse, or conversely, because music therapy is diverse it is able to serve a diverse clientele. Diversity was also assumed to be important for growth and development though only vague guidance was provided on how to support diversity within the field. Participants believed it requires respect, an open mind, and a belief in the value of diversity. Clarification of the strengths of each approach, and perhaps the development of a specialization structure were identified as potential steps needed to facilitate a diverse profession.

Discussions revealed that diversity, while valued, also created many areas of division. Each layer provides a different perspective through which to perceive the profession, and each is influenced by cultural context, health care structures, and the economy. Every therapist's practice reflects a combination of the many layers, incorporating at times extreme points of a layer while at other points existing in between a layer's boundaries. The many layers articulated were as follows: creative use of music - functional use of music, psychological theory or philosophical approach, client diagnosis, work setting, session goals, session format, inclusion or exclusion of verbal communication in a session, pre-composed music/improvised music, live music/ recorded music, guitar/piano focus/ other instrumental focus, "preferred" music/improvised music, importance of clinical musicianship/music as a tool, music outcome/behavioural outcome, music as an agent of change/ therapist-client relationship as an agent of change, creative/rationale, product/process, and the inner experience of music/outer experience of music. Beyond division that exists in clinical practice, division also was identified in training, which is understood to influence practice. These layers consisted of: short - long training periods, undergraduate - graduate training, eclectic - specific curriculum, generalized - specialized training, therapist - musician training.

Most of the participants support diversity while cautiously supporting the evolution of a unified profession. Various means by which this could occur were suggested, including the development of specializations, delineation of the strengths and abilities of each approach, facilitation of awareness of, and interactions with, colleagues from varying approaches, clarification of terms and development of terminology that is clearly understood not only between music therapists but amongst other professionals and the public, and the development of an inclusive, respectful music therapy culture.

The development of a grand theory did not seem to be of importance to the interviewees, and in fact, some participants were very emphatic in their declaration that their thoughts not be used to argue for the development of a foundational

theory. The label "music therapy" appeared to be enough for many of them, with the recognition that there may be little beyond "music" that ties the profession together. Diversity and an inclusive stance was held to be of importance by a majority of the participants, with no one advocating that firm boundaries be established (though a few participants suggested that this might be necessary). Yet, many problems were identified in relation to this stance. The profession continues to experience animosity within the profession and confusion and communication problems both within and outside of the field, and despite protests that diversity is needed to ensure the field's development, growth appears to occur when the profession acts with a single unified voice (e.g., Germany versus the United States).

This general stance, of being inclusive and of avoiding the definition of firm boundaries for the profession, is understandable when one realizes that music therapists naturally adapt services to meet client needs. Every client is accepted as based upon their own individuality. This all-embracing attitude, however, appears to have created a general refusal within the profession to acknowledge the problems that diversity and undefined boundaries create for fear that exclusivity will develop. There are problems with being so diverse, and there are problems with having no firm parameters to the field. Strength is found in having a single voice with which to confront government legislation, educate other health care professionals, and elicit work from potential clients. The challenge is to find a way to have that single defined voice while still embracing diversity and ensuring the field's ability to respond to cultural and social change. The difficulty in attaining this end should not, however, be allowed to impede its development. As attempts have been made to identify a grand theory, and as so many theoretical concepts are embraced in the many approaches, it is doubtful that a grand theory is part of the solution. Rather, it seems that the development of a common philosophy may be needed.

IMPLICATIONS

While it is doubtful that there are many elements to music therapy that all music therapists will agree upon, the participants did identify some shared premises that may possibly be acceptable to a majority of the profession. These shared premises were: a) Music is important to humanity, b) Music affects change in people, c) Music therapy involves the purposeful use of music to engage and affect a client's behaviour (with recognition that an approach's focus may solely be on musical behaviour, or may primarily target other behavioural areas, e.g., cognitive, social or physical behaviour), d) Music therapists use music to help other people, e) Music therapy services have form and purpose, involve client-therapist interactions, and share non-specific factors (as defined in the psychology literature), and f) Music therapists care for, and are compassionate about, their clients.

Each premise serves as a hypothesis upon which music therapy research can, and is, predicated. The question then becomes, are these premises strong and distinct enough to form a basis upon which music therapy can grow, or is music therapy an umbrella term for a multitude of services?

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Music therapy, community of practice and the internet: A cyber ethnographic exploration/*Danna Grace Da Costa*

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As the internet becomes the accepted primary form of communication, the music therapy profession has utilized it to aid in the proliferation of music therapy knowledge among both professionals and the general population. The purpose of this study was to discover how music therapists utilize the internet to complement their offline practices using Etienne Wenger's Community of Practice (CoP) theory to frame the study. As this study sought to examine and discover how the music therapy community utilizes the internet to help/support/communicate online, and how it complements offline practice, cyber ethnographic techniques of online researcher observation and participant interview conducted through computer mediated communication (CMC) were used (e.g. Skype, email, etc.). The sites observed, and from which participants were recruited, were the Canadian Association of Music Therapy (CAMT) website, *Voices,* and the World Federation of Music Therapy (WFMT) website. This study could influence current communication and social supports within the field of music therapy.

Keywords: Music Therapy; Community of Practice

Even during the 1950s and 1960s when the first university music therapy programs began to emerge in Europe, North America, Latin America and Australia, music therapists were spread throughout the globe. Today, the World Federation of Music Therapy (WFMT) currently has regional liaisons in North America, Latin America, Europe, Southeast Asia, Australia and New Zealand, the Western Pacific, Africa, and the Eastern Mediterranean (retrieved from http://www.wfmt.info/WFMT/Regional_Information.html, September 2010). Thus, as the internet becomes the accepted primary form of communication the music therapy profession has utilized it to aid in the proliferation of music therapy knowledge among both professionals and the general population. The purpose of this study is to discover how music therapists utilize the internet to complement their offline practices, with Etienne Wenger's Community of Practice (CoP) theory used to frame the study (Wenger, McDermontt, & Snyder 2002).

Wenger defines CoPs as, "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002). This is consistent when examining music therapy professionals as we continuously collaborate to grow our body of knowledge for the betterment of

the people we help, be that through conferences, the internet or conversations with colleagues. The value members of a professional community place on sharing and generating knowledge within their field is the nature of CoPs, and can therefore be utilized as a frame of understanding the music therapy community (Wenger, McDermott, & Snyder, 2002). CoPs are diverse, however, they maintain the same basic structure of having a domain (identity, values, perceived purpose); community (social structure promoting social relationship and interaction development); and practice, which is "a set of socially defined…common approaches and shared standards that create a basis for action, communication, problem solving, performance, and accountability" (Wenger, McDermott, & Snyder, p. 28 & 38, 2002).

Also explored within Wenger, McDermott and Snyder's work is how both CoP challenges and benefits can be magnified within distributed CoPs, which are communities of professionals dispersed throughout the globe (Wenger, McDermott, & Snyder, 2002). Collectively, music therapists globally can be seen as a distributed community. As echoed throughout online ethnographic studies, the four key issues of distributed communities are distance (e.g. decreased face to face[F2F] interaction); affiliation (e.g. conflict due to differing views and differing priorities); size,(e.g. the global scale of distributed CoPs may lead to weaker social ties); and culture, as distributed communities are often cross cultural, communication can be difficult, and values may be interpreted differently (Wenger, McDermott, & Snyder, 2002; Hine, 2000; Jones, 1995; Baym in Jones, 1995). Nevertheless, if issues are overcome it can lead to increased positive experiences within a distributed CoP (Wenger, McDermott, & Snyder, 2002).

Burgess and Green's research centers on the evolution of You Tube into an online video and participatory culture (2009). Participatory culture is defined as "one in which 'fans and other consumers are invited to actively participate in the creation and circulation of new content'," and "that in practice the economic and cultural rearrangements that 'participatory culture' stands for are as disruptive and uncomfortable as they might be potentially liberating", and that it is "less about technology, cultural and political questions" (Jenkins in Burgess, & Green, 2009, p. 10; Burgess, & Green, 2009, p. 10-11). It is important to recognize that the way communities represent themselves on the internet, in their website and forum conceptualizations both for professional communication and support, and for sharing knowledge with professionals and the general public, can become the outward representation of the community or CoP to the world.

The goal of this research is to analyze how music therapists utilize the internet to complement their offline practices, and how they use the internet to help, support, and communicate with members of the community online, thus, raising the questions: (1) how does the online music therapy community utilize the internet to facilitate resource/knowledge sharing?; (2) how do music therapy interactions online support music therapy interactions/practices offline?; (3) do music therapy forums differ from traditional online discussion forums, and if so, how?; and (4) how do music therapists use the internet to communicate? This study has implications for music therapy practice and communication within the distributed music therapy

community.

METHOD

Participants

Research Ethics Board approval was given by the University of Windsor to use online cyber ethnographic methods twofold. Firstly, permission was sought and given by forum moderators to act as a participant observer/ "lurker" on the three moderated boards on the CAMT website, Voices unmoderated forum, and the WFMT website (Atay, 2009, Hine 2000, Hine 2005). Secondly, permission from the same forum moderators was given to post advertisements seeking participants who were interviewed through CMC (e.g. Skype, instant messaging, email, etc.).

There were four participants, two from the WFMT site and two from the CAMT site. As no participants volunteered from Voices' unmoderated forum, it was analyzed using measures of central tendency to assess active and passive participation on the forum. Two participants were male and two female; one resided in Europe, two in North America, and one in Oceania. Participants were 26-49 years old (mean=41.25 years old; median= 45 years). All participants were practicing music therapists and/or have practiced music therapy and were still involved in the music therapy community through research, teaching, supervision, or advocacy and one had returned to school for a graduate degree. Years of experience ranged from 2-20+ years. All chose videoconferencing CMC for interviews (e.g. Skype, Webex, iMeet, etc.).

Materials

Participants were given semi-structured interviews using CMC videoconferencing tools, and interviews were recorded via digital audio recorder. Identical sets of interview questions were broken down into: (a) demographic questions, (b) questions regarding music therapy training and practice, and (c) open-ended interview questions. Each interview began with a review of informed consent, prior to interviews being recorded.

Procedure

Within the context of this study's Research Ethics Board (REB) approval process prior to "lurking" as a researcher, which allowed for naturalistic observation of the online community to avoid changing the dynamic within the community prior to the researcher posting advertisements seeking participants (Atay, 2009; Hine 2000; Hine 2005; Waldron 2010), I reviewed each websites' forum rules and found no rules prohibiting the use of the forums for research purposes on any sites, and "lurking" was done online following approval from my REB (Waldron, 2011).

In addition to "lurking" I interviewed participants using their preferred CMCs. Prior to advertising for participants on the forums I first emailed the forum moderators of all the websites to ask permission to post an advertisement seeking participants for interviews, a copy of which was attached to the email for forum

moderator approval. The advertisement included mine and my faculty advisor's contact information and emails so that interested participants could make contact themselves, an explanation of the purpose of the study, the name of the forum moderator, a description of what would be required of participants, an explanation of ethics and the rights of participants regarding participation and withdrawal, and also contact information for the University of Windsor's Research Ethics Board (see e.g. on Voices at http://pub45.bravenet.com/forum/static/show.php?usernum=3862196689&frmid=156&msgid=1027899&cmd=show). Once approval was given by forum administrators, advertisements were posted on the three CAMT moderated forums for general members, and *Voices* unmoderated forum, in early April 2011. The administrator of WFMT publications was contacted for permission to send advertisements to WFMT regional liaison bloggers among other WFMT members on the site of which emails were listed. Following approval, email versions of the participant advertisement were sent to these individuals in early March 2011. Screen shots were taken of all sites after forum approval was given to aid in website analysis and coding.

Participants initiated contact via email, and were then sent informed consent and audio recording consent forms, and asked their preferred interview date and time, and their preferred CMC method via email. Forms were reviewed, signed, scanned and returned. Interviews were audio-recorded on a digital recorder, then transcribed. They lasted an hour at most, and were semi-structured. Transcriptions were sent to participants for change and/or omission requests and approval as per ethical guidelines outlined in informed consent. Once participants sent approval via email, transcription data was then analyzed and coded, cross-checked with other participant transcriptions to examine participant correlations, and checked for field notes correlations. Pseudonyms were given to all participants involved.

RESULTS

The ethnographic data of this study was coded in two streams: website data analysis and participant interview data. Results were analysed and interpreted with the framework of Wenger's CoP and Burgess and Green's participatory culture within the explanation of the results. The pseudonyms given to participants were Caroline, Ken, Stewart, and Sandy.

Partial website analysis was restricted to coding information on pages involved in resource/knowledge sharing and communication. Websites were coded based on music therapy resources and information, ease of resource sharing, closed and open forums, target demographics, unique attributes compared to traditional forums, degree of anonymity, and themes of forum topics discussed amongst members and bloggers. The *Voices* unmoderated forum presented a unique opportunity to measure "lurking" as it kept track of posts viewed, replied to and written. The ratio of views to replies in April 2011 was 620.78:1, and in May 2011 it was 621.63:1 (range of replies/post=0-14; range of views=19-3909; median replies=1; median views=1236). Statistics show very passive activity/ "lurking" on

Voices unmoderated forum. Participant interview data fell into four themes: perceptions of music therapy as a CoP in a distributed community; music therapists as innovators and managing knowledge in a distributed community; varying perceptions of isolation in the music therapy community; and recognition of the potential of internet and CMC versus concerns that cause resistance to communication changes in the music therapy community.

DISCUSSION

The implications of this study for the music therapy CoP include awareness of how music therapists are currently using the internet/CMCs, and how we can create initiatives to improve/utilize the full potential of the internet regarding our professional, clinical and educational communication practices. Communication amongst the professional community can benefit and inspire the entire music therapy CoP, and internet, CMCs, and technology can be our medium. It became evident during this study that continued leadership/stewardship within the music therapy CoP is needed to continue to become more aware of our social interactions with each other, and how we can continue/create more positive community experiences through increased openness, rejuvenation, mentoring, new perspectives on the community, and continued and new leadership (Wenger, McDermott, & Snyder, 2002).

It is my hope that this study may lead to initiatives and research regarding community and clinical support, increased resource sharing and knowledge generative potential through the internet as a music therapy support tool, with the overall goal of increasing cohesiveness, knowledge, and cultural understanding within the music therapy community. Wenger, McDermott, and Snyder stated that "true globalization requires community" (2002, p.135). I posit that for a holistic community self-awareness fosters positive community change.

Acknowledgments
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Comparison of active music therapy and music listening on cognition and mood after stroke: Conclusions from the pilot study/*Heather Purdie Owens*

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Cognitive functions such as attention, memory, language, visual perception and executive functions may be affected after stroke. In addition, depression and low motivation may affect rehabilitation outcomes. Studies have shown that listening to music can have certain cognitive and psychological benefits after stroke. Other studies suggest that compared to music-listening, participation in active music therapy may have an even greater impact on cerebral plasticity in healthy adults. This pilot study aimed to compare the cognitive and psychological impact of listening to music and active participation in music therapy after stroke. Initial results suggest that subjects participating in active music therapy showed a slight improvement in selective attention and working memory over and above that of subjects in the music listening group. Recommendations and methodological issues will be discussed, and video extracts from the research study will be presented.

Keywords: stroke, cognition, mood, listening, rehabilitation

The cognitive and behavioural consequences of stroke are well documented and can affect a variety of areas: attention, memory, language, perception, executive functions. These cognitive difficulties are often aggravated by depression and low motivation (Lenzi et al. 2008). A recent study in Finland showed for the first time that listening to music can improve cognitive outcomes and mood after stroke (Särkämo et al, 2008). The results showed that verbal memory and focused attention improved significantly in the music listening group compared to a control group which listened to stories being read on CD and a control group with no intervention. The music listening group was also less depressed and less confused. This study shows that listening to music during the post-stroke period can enrich cognitive rehabilitation and improve mood.

Recent studies in the neurobiology of music show that musical stimuli activate several regions of the limbic system and increase the levels of melatonin and natural antibodies (Boso et al, 2006). Studies also show that music performance can improve cognitive results over and above music listening. In particular, a recent study of healthy subjects showed that sensorimotor-auditory training (learning to play piano) stimulates plastic changes in the auditory cortex. These changes were greater than those produced by auditory training alone (listening to piano music) (Lappe et al, 2008). It therefore seems that participation in musical activities effects

greater benefits to those obtained by simply listening to music. In people with stroke, participation in musical activities could therefore be more beneficial for rehabilitation than music listening.

The objective of the project was to evaluate if participation in musical activities as practiced in music therapy could significantly improve certain cognitive and behavioural outcomes in people with stroke. More specifically, we wanted to compare outcomes in two groups: an active music therapy group and a music listening group. Measurements of cognition and mood were taken before and after the intervention. The hypothesis was that active participation in musical activities would have greater benefits than listening to music alone.

METHOD

Participants

The study aimed to recruit 20 subjects aged 65 and over, 4-8 weeks post first stroke (left or right) at the Intensive Stroke Rehabilitation Unit of the Institut Universitaire de Gériatrie de Montréal. Inclusion criteria were the following: subjects should score an MMSE of 24 or more at admission, be able to give informed consent and not have had a history of significant cognitive deficits (e.g. Alzheimer's etc.). The two groups were to be matched for age, scolarity and musical training (ability to play an instrument). Patients were to be recruited gradually as they are admitted to the stroke unit. For this pilot study, we aimed to recruit ten patients in each group.

Materials

The pre- and post-test measures of cognition and mood were the following:

Cognition: Selective attention and inhibition process: Stroop Test; Selective attention: Bells Test; Mental flexibility: Conflictual Tapping Test; Working memory: Corsi numeric and visuo-spatial Test; Rapidity: Substitions WAIS
Mood: General Wellbeing Scale (Bravo et al, 1996); Quality of Life Questionnaire/D-QOL (Brod et al, 1999)

Procedure

Each subject accepting to participate in the project was individually tested before and after the intervention period by a neuropsychologist. Active music therapy and music listening were offered to subjects by the music therapist as they were recruited, over a period of eight months. Subjects were allocated in a quasi-random manner, taking into account the side of their stroke, age, scolarity, sex and musical training.

Active music therapy group: The intervention was offered for six weeks, twice a week for 45 minutes, in small groups of 2-3 people. Interventions were based on the active participation of subjects in musical activities (singing, playing percussion instruments). Increasingly complex musical challenges were proposed, using

rhythms and forms which were designed to improve attention and memory (e.g. increasing the number of notes to memorize and repeat, playing in polyphony and working on more complex rhythmic patterns). Familiar music was used as well as improvisation with a range of instruments.

Music listening group: The same procedure applied (group interventions for six weeks by a music therapist) but the intervention offered was organized music listening. Subjects were invited to bring their own choice of music or were offered a choice of traditional, classical, jazz, sacred or ethnic music. The control group listened to music but did not participate in instrumental or vocal activities.

RESULTS

The beginning of the study coincided with the H1N1 influenza outbreak in Canada (winter 2009), and difficulties in recruitment were exacerbated by an additional outbreak of gastroenteritis at the IUGM, resulting in the unit being closed. As a consequence, recruitment was delayed and the numbers of potential subjects was greatly reduced. Twelve subjects were recruited and began participating in the study. Of these, nine subjects completed the study, six in the active music therapy group, and three in the music listening group.
Table 1 (below) summarises the pre-test data concerning the age, scolarity and side of stroke of each subject.

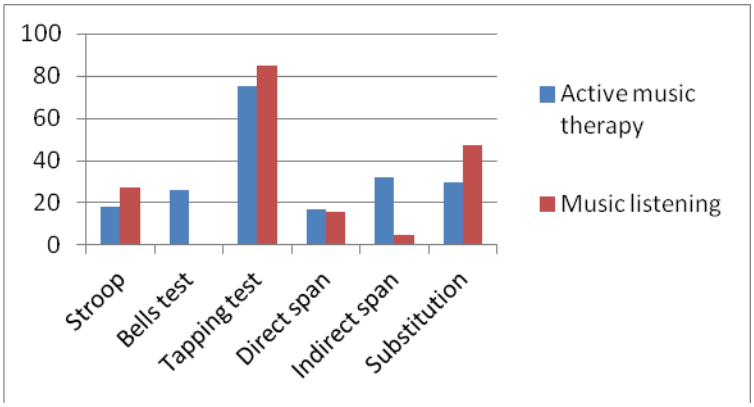
Table 1. Initial data at recruitment.

	Active music therapy	*Music listening*
Age	80.2 ± 4.2	84.5 ± 0.7
Scolarity	11.3 ± 4.0	12.3 ± 8.7
Right-sided stroke	3 (60%)	3 (100%)

Given the small number of subjects in each group, we decided to only carry out descriptive analyses. The calculation of the percentage of improvement was performed for each subject and for each measure (post-pre/pre x 100).

Whilst both groups appeared to show overall improvements in the cognitive tests, the participants in the active music therapy appeared to show greater improvements in the selective attention task (bells test) and in working memory (indirect span test) compared to the music listening group (see figure 1).

Figure 1. Results of attention and memory tests



The results for the psychological tests (wellbeing) showed slight improvements in both intervention groups (AMT:13.5; ML:13.9%). There was considerable variability in the results. Subjects with a left-sided stroke reported greater improvements in wellbeing (43.7%) compared to subjects with a right-sided stroke (3.7%), possibly due to the greater awareness of their need to rebuild their confidence after stroke.

DISCUSSION

In addition to the difficulties of recruitment explained above, other methodological issues arose during the pilot study. Several subjects began to participate in the study but were discharged from the unit before the end of the therapy. We were not able to follow-up with these subjects after their discharge, or to complete the interventions.

Other problems arose with the timetabling of the music therapy interventions, which were only permitted after 3pm on the unit. All patients on the rehabilitation unit are required to maintain an intensive and demanding schedule each day with physiotherapy, occupational therapy, speech and language therapy and psychology appointments taking priority, as well as other external hospital appointments. As a consequence, it was not possible to schedule music therapy interventions before 3pm, by which time subjects were often tired and expecting visitors and family. On several occasions, subjects were busy or not available to participate in the intervention.

In the active music therapy group, the following positive effects were noted by the music therapist and by the neuropsychologist. Subjects were attentive and concentrated on the tasks they were asked to perform. They were able to memorize sequences and melodic series or rhythms proposed by the music therapist, irrespective of their musical background and training. Subjects were able to master increasingly complex musical tasks, such as following changes in tempo or rhythm, and following specially adapted musical scores where they had to follow the timing of chord changes or learn melodies. Those experiencing speech and language difficulties such as aphasia worked on vocal exercises to improve communication. All subjects participated on the percussion instruments, stretching across to play the

strings of the autoharp with the affected arm, holding a plectrum, rotating the wrist with a cabasa, or working on a rebound action on the xylophone with the wrist of the affected arm. The motivation of all the subjects was particularly notable, as was the positive reward and reinforcement experienced by the participants when they succeeded in a task. They also encouraged each other mutually as the weeks went by. In a post-study questionnaire, subjects commented that they found that their participation in active music therapy was useful, they felt motivated to work and they had fun achieving rehabilitation goals through music.

The music listening group was based on the idea that the two interventions would be as closely matched as possible, with a 45 minute session offered in the company of the music therapist, but with no musical instruments and a short discussion at the end. The group was composed of a majority of music-lovers and amateur musicians with experience of classical music and a high level of scolarity. They talked about music they liked and brought their own CDs. The participants found it difficult to concentrate on listening to music for 45 minutes, without talking or being distracted. The atmosphere in the listening group was tense on occasions because of strong differences of opinion over musical preferences. It was therefore difficult at times to choose music that pleased everyone. The intervention was also less structured than in the active music therapy sessions. Individual music listening may have been easier to manage, but the study design required that subjects were in small groups and that the music therapist was present at all times.

Concerning design issues, the addition of a control group would have been preferable, but given the problems in recruitment, it was not feasible in this pilot study. A single-case design may have been more appropriate for a pilot study of this size. Ideally, a multi-centre study in several stroke units, which would give access to a greater number of subjects with stroke, and provide the possibly for including a control group would be preferable.

Recommendations

The results of this pilot study suggest that music therapy, in collaboration with other rehabilitation interventions, may be effective in enhancing cognitive, physical and psychological outcomes after stroke. Even though the results of the pilot project are not robust, the project demonstrated that music therapy was greatly appreciated by the participants, who were all highly motivated to participate, and could be a useful addition to the therapeutic environment. Music therapy, which aims to strengthen the participation of stroke patients and to improve their mood, their motivation and other cognitive functions, may also have a contributory effect on the outcomes of other rehabilitation interventions such as speech and language therapy and physiotherapy.

Despite the limited number of participants, due to difficulties in recruitment, and the inter-person variability of subjects, the results of this pilot study suggest that active music therapy may slightly enhance cognitive outcomes in people with stroke, over and above the results for subjects in the music listening group, in

particular, for outcomes such as selective attention and working memory. Subjects in both groups seemed to benefit psychologically from the interventions. At the end of the study, they remarked on how much they enjoyed working on rehabilitation tasks in a relaxed setting (memorizing sequences on the percussions instruments, working on communication through singing, participating on musical activities with their affected arm, appreciating making or listening to music in a group and reminiscing about musical memories together. Further research is needed to compare the effectiveness of active music therapy and music listening on attention and mood after stroke, preferably with a multi-centre study.

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A randomized controlled trial to assess the health benefits of music therapy for persons with Alzheimer Disease / *Kevin Kirkland[1], Susan Summers[2] & Robin Hsiung[3]*

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Evidence that music therapy provides enduring health benefits that last beyond the moment with all levels of severity of AD warrants further investigation (Koger, Chapin, & Brotons, 1999; Clair, 1996; Gerdner & Swanson, 1993; Crystal, Grober, & Masur, 1989; Fornazzari et al., 2006). Music's complexity and processing can involve and awaken untapped regions of the brain, influencing mood, behaviour, and mental acuity. Assessors were blinded when measuring outcomes and to the intervention employed, if any, that the subjects received. As part of the inquiry to scientifically test this premise, randomized controlled trials are being held at UBC Hospital's Clinical for Alzheimer Disease and Related Disorders (UBC-CARD) to study the effects of music therapy with this population by examining a variety of clinical aspects, including images of the brain. No study to date has looked for processing and changes in the brain. It has been hypothesized that music facilitates the neurogenesis, regeneration, and repair of neurons (Thompson et al., 2005; Sibler, 1999; Polk & Pertesz, 1993; Cuddy & Duffin, 2005). Experience-driven neuroplasticity appears to be particular to musical processing and skills. Therefore, we included fMRI measurements, hypothesizing that music therapy may improve activation of, and blood flow to, brain regions with musical capacities, thus resulting in measurable changes. This presentation walked through the process of how research was initiated, developed a music therapy protocol for it, and created and piloted a 41-item assessment tool. Subjects received individual music therapy twice a week for 4 weeks totalling 8 sessions.

Keywords: music therapy; Alzheimer Disease; randomized controlled trial; brain; memory

Our objective was to conduct a proof-of-concept RCT to determine the benefits of clinical and biological effects of 45-60 minute music therapy sessions held twice per week for 4 weeks for a total of 8 sessions per subject in 10 patients with a clinical diagnosis of mild to moderate Alzheimer Disease (AD). Because over half of persons with AD report one or more neuropsychiatric symptom, we planned to compare the cognitive and behavioural measurement before and after the music therapy

intervention vs. 5 control patients using 6 scales: 1) Neuropsychiatric Inventory (NPI), 2) Functional Rating Scale (FRS), 3) Alzheimer Disease Assessment Scale: cognitive subscale (ADAS-Cog), 4) Mini Mental State Examination (MMSE), 5) Cornell Scale for Depression in Dementia (CSDD), 6) Quality of Life in Alzheimer Disease scale (QOL-AD). We also measured baseline and post-intervention morning salivary (salivary is least invasive) cortisol levels to determine the change in biological stress response of music therapy. fMRI studies were included to assess areas of brain activation before and after intervention in order to correlate the cognitive changes and health benefits from the music therapy. Sessions were videotaped and a music therapy assessment tool for persons with AD was developed and completed each time. The music therapist followed a protocol aimed to stimulate neurocognitive abilities and affective responses through music-centered skills. Standard descriptive statistic was used to describe the baseline characteristics of the cohort. Paired t-tests were used to compare pre- and post-music therapy intervention measurements for statistical significance.

We hypothesized that music therapy has a beneficial effect on mood and stress, with measurable changes in clinical scales and hormone levels. Furthermore, we believe that the positive changes we expect to see in mood scales and stress levels will be matched by increased blood flow in specific brain regions in the with fMRI. The results will help us define protocols and evidence of music therapy's role in dementia management, and provide insight into the science of music processing in the AD brain.

METHOD

Participants

Ten subjects with mild to moderate AD were recruited from the UBC-CARD and consents were obtained. They were screened for suitability and randomly assigned to the music therapy intervention group and a control group receiving no music therapy intervention (the 'Waiting' group, who received the music therapy intervention after the first 5 had completed the course of intervention). Subjects included must have a clinical diagnosis of mild to moderate AD, good hearing abilities, and average music education of no more than 6 years. Excluded subjects were those with extensive musical training, who were contraindicated to receiving MRI, who could not produce an adequate saliva sample, or who had minimal behavioural complaints on the NPI.

Materials

Materials included: 1) assortment of percussion and tonal instruments; guitar; keyboard; CD player with specially made selections of assorted styles and energies of music; balloons; a hollow drum with song titles written on cards; scarves for dance/movement; music stand; camera for filming; Music Therapy Assessment Tool

for Persons with Dementia (a music therapy assessment prototype developed by Kirkland, Summers, Jacova, & Hsiung).

Procedure

Study Design: This is a proof-of-concept single-blinded randomized parallel-group controlled study to determine effects on clinical outcome measures in subjects with mild to moderate AD after a 4-week intervention of music therapy. Because the number of subjects that can be included in the study under this funding was small, our power to detect clinical effects was limited. We therefore also included biological outcome measures with stress hormones and an exploratory analysis of fMRI which may act as a more sensitive marker of physiological changes. These secondary outcomes will be used for exploratory, hypothesis-generating purposes.

Outcome Measurements:

1) **Primary Outcome:** The primary clinical outcomes included the change in NPI and FRS scores. We chose the NPI as the primary outcome measure because it is a well-validated scale that has been used in many clinical trials. Previous clinical studies of music therapy have suggested that behavioural improvement is the most frequently observed beneficial outcome (Raglio et al., 2008). We also use the FRS as a global outcome measure. It is a clinician-rated multi-dimensional scale with 8 domains including memory, social and occupational functioning, home and hobbies, personal care, language, reasoning, affect, and orientation, taking into account the subject's history, physical findings, and collateral information.

Biological outcome measures:

a. For each subject, we obtained a baseline resting state fMRI scan within one week before the start of the music therapy, and a follow-up fMRI scan within one week after the end of the 4-week intervention to compare the change in blood flow pattern.
b. Endocrinological stress was evaluated using salivary cortisol. High cortisol hormone levels are also correlated with high levels of stress. Saliva samples offer a non-intrusive way of gathering biological data (Strazdins, Meyerkort, Brent, D'Souza, Broom & Kyd, 2005).

Intervention: Five subjects were randomized to receive 45-60 minutes of individualized music therapy twice per week over a 4-week period vs. 5 subjects receiving usual care. This music therapy intervention is adapted from the protocol developed by Clair & Bernstein (1990) which consists of standard music-centred approaches successful for persons with dementia, including listening, reading, remembering, voicing, learning, playing, connecting, reciting, and moving. Musical choices were based on pre-treatment assessment of the subjects' historical backgrounds and individual preferences. The 5 subjects in the control group

received usual care with no music therapy. Sessions were conducted in a music therapy clinic room established at the UBC-CARD.

Statistical Analysis

Standard descriptive statistics were used to describe the baseline characteristics of the cohort. For the primary and secondary clinical outcomes as well as the hormonal levels, we used paired t-tests to compare the pre- and post-MT intervention measurements to assess for any statistical significance at a level of $p<0.05$.

PRELIMINARY RESULTS

Change scores (before and after music therapy) and (before and after waiting) were compared by paired t-tests. There is a trend of improvement in each of the measures but none of them are statistically significant, perhaps due to the size of the study (N=10). Improvements were shown across several scales in the music therapy group compared to those waiting for the music therapy intervention in the areas of depression, in the QOL-AD scale for both subject and caregiver raters, in the NPI, and in the MMSE where the mean improvement was 1.20 compared to -.30 in the waiting group. If this were a large group study, the MMSE change could be very meaningful statistically. A study with a larger sample size and longer duration of intervention is recommended. Outcomes of the piloted assessment tool and music therapy protocol were not available at press time, nor the fMRI scans or cortisol levels. Analysis is ongoing with the assessment tool and videotaped data, with implications for teaching and further research.

DISCUSSION

Although the scale of this study is small, the findings from this proof-of-concept study will have numerous important scientific as well as clinical implications. The results will allow us to evaluate the potential benefits of music therapy in an unbiased manner, which will provide evidence to guide the best clinical practice in the future. Successful interventions in AD care are important because it is estimated that at least 60% of individuals with AD or their caregiver report one or more neuropsychiatric symptom (Lyketsos, Sheppard, Steinberg, Tschanz, Norton & Steffens, 2001). In addition, costs of care in patients with AD are high and are largely dependent on the severity of dementia and the presence of behavioural disturbances (Jonsson, Eriksdotter, Kilander, Soininen, Hallikainen & Waldemar, 2006). Furthermore, to our knowledge, it is first instance in which concurrent clinical and biological effects of music therapy are measured in patients with AD. It will also be a necessary first step in the design of further experimental fMRI paradigms to examine the neuroanatomical substrate of music processing, and its relation to memory and other cognitive processes. The findings from this study will allow us to further develop studies to evaluate the most effective use of

therapeutic music interventions in the care and management of AD and dementia patients.

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Effects of caregiver-based educational music therapy on depression and satisfaction with life in acute care psychiatric patients / *Michael J. Silverman*

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The purpose of this study was to determine the effects of caregiver-based educational music therapy on acute care psychiatric inpatients and their caregivers using psychometric instruments during a randomized controlled clinical trial. Participants (n = 11 patients and n = 21 caregivers) were randomly assigned to one of three treatment groups: educational music therapy, education, or non-educational music therapy. The therapist's treatment notes from each session were thematically analyzed to provide a holistic interpretation of treatment. Participants in both education conditions had significantly higher perceptions of helpfulness than participants in the recreational music therapy condition. Although not significant, patient participants in the educational music therapy condition tended to have lower mean stress scores and higher satisfaction with life scores at posttest. Caregiver participants in the educational music therapy condition tended to have lower mean stress scores and higher satisfaction with life and perceptions of helpfulness at posttest. Emerging themes from qualitative analysis of therapist treatment notes included: 1) complexity of treatment; 2) action-oriented future dialogue; 3) structure; 4) treatment eagerness; 5) problem-solving techniques; 6) flexibility, and 7) enjoyment and appreciation. Caregiver-based educational music therapy may be an engaging and effective method to augment treatment for psychiatric consumers and their caregivers.

Keywords: caregiver; mental health; music therapy

Due to the importance of educating psychiatric consumers and their caregivers within the time restraints placed on acute mental health care providers and the non-music therapy literature supporting its implementation, it would seem appropriate to determine the efficacy of brief caregiver-based educational music therapy. Theoretically, this type of music therapy treatment might be considered insight music therapy with reeducative goals (Wheeler, 1983) or music in psychotherapy (Bruscia, 1998). Due to the support from evidence based treatment for psychiatric consumers, it seems that incorporating music therapy into educational sessions for psychiatric consumers and their caregivers deserves present day research attention. To date, there is no available literature concerning brief family-based educational music therapy for psychiatric consumers. This is a considerable gap in the literature

base that may restrict access to services for consumers and caregivers and improved care quality. Thus, while the literature supports psychoeducation and education, family-based psychoeducation, and brief treatment, these forms of therapy have not been systematically studied in the music therapy literature. The purpose of this study was to determine the effect of caregiver-based educational music therapy on psychiatric patients and their caregivers using psychometric instruments during a randomized controlled clinical trial and a three-month follow-up. Research questions were as follows:

1. How can brief educational music therapy be successfully applied to psychiatric inpatients and their caregivers?
2. Are there differences between educational music therapy, education, and non-educational music therapy in measures of depression and quality of life at immediate posttest and three month follow-up?
3. In order to better prepare future music therapists to provide brief educational music therapy to psychiatric inpatients and their caregivers, what themes emerged from the music therapist's treatment notes?

METHOD

Participants

Research participants were 11 inpatients and 21 visiting family members, relatives, or friends (for the purposes of this study, non-patient participants are referred to as *caregivers*). The researcher conducted the study on an acute care psychiatric unit. To be eligible for inpatient care on this unit, patients were required to have insurance. Patients typically remained on inpatient status for three to seven days. The unit was part of a larger University hospital in the Midwestern region of the United States. Participants volunteered to take part in the study and were not paid. Although all potential participants agreed to participate in the study, potential participants had the option to participate in the therapy session but not participate in the research. Patients who did not have caregivers visiting were excluded from the study. In an attempt to increase the treatment dose and be as inclusive as possible within the visiting caregiver parameters, participants were eligible for multiple sessions with the RT. However, in this case (n = 1), immediate posttest data were only collected after participants' initial session and follow-up data were not analyzed. As the literature suggests that multiple family psychoeducation can be effective (Dyck, Hendryx, Short, Voss, & McFarlane, 2002; Dyck et al., 2000) and in an attempt to be as inclusive as possible, multiple families were allowed to attend sessions. In the current study, multi-family treatment happened twice: once during a no-music educational session and once during a non-educational music therapy condition.

Separate analyses of variance (ANOVAs) were conducted to determine if there were differences between the three treatment groups in (1) the number of consumers taking part in each session who volunteered to be research participants,

(2) the total number of consumers in each session, (3) the total number of times consumers had been admitted to a psychiatric facility, and (4) their ages. Separate ANOVAs were conducted for patient participants and caregiver participants. No statistically significant between-group differences were found for any of these measures, all $p > .05$.

Materials

The Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is a 21-item self-report test that measures an individual's current level of depression. It takes approximately 10-min to complete and requires a fifth to sixth grade reading age to adequately comprehend the questions (Groth-Marnat, 1990). Participants respond to the 21 items by selecting those statements that reflect the individual's experiences over the past week on a 0–3 scale. In the case of the current study, the RT asked particpants to provide depression scores concerning how they currently felt. Higher scores indicate higher levels of depression. Beck, Steer, and Garbin (1988) reported high internal consistency with alpha components of .86 for psychiatric populations. A meta-analysis of studies on the BDI indicated a high content validity and validity differentiating between depressed and non-depressed people (Richter, Werner, Heerlim, Kraus, & Sauer, 1998).

The Satisfaction with Life Scale (SWLS) is a global measure of life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). Life satisfaction is an aspect in the more universal paradigm of subjective well-being. Research and theory from fields outside of rehabilitation have noted that subjective well-being consists of at least three parts: Positive affective appraisal, negative affective appraisal, and life satisfaction. Life satisfaction is differentiated from affective appraisal in that it is more cognitively than emotionally driven. It can be defined as a "global assessment of person's quality of life according to his chosen criteria" (Shin & Johnson, 1978, p. 478). The two-month test-retest correlation coefficient for the SWLS was .82 while the coefficient alpha was .87. The SWLS consists of five items positively worded on a 7-point Likert-type scale (from strongly disagree to strongly agree). The scores of these items were added together for a total SWLS score. A low score of 5 would indicate low life satisfaction while a high score of 35 would indicate high life satisfaction.

The posttest also contained questions concerning demographics and a free response question wherein participants were encouraged to write any comments about the session. There were three separate Likert-Type Scales measuring perception of helpfulness of the therapy, stress, and strength of relationship between the patients and caregivers. These scales were anchored such that 1 represented negative (not helpful, very stressed, weak relationship) and 7 represented positive (helpful, not stressed, strong relationship). The follow-up test was identical to the posttest but also contained questions to determine if the patients had been readmitted to a psychiatric facility and how psychoeduactional sessions they had attended since discharge.

Immediately after each session, the RT verbally processed the session with a colleague. Then, the RT composed detailed reflective treatment notes concerning the session for purposes of an eventual thematic analysis. This qualitative component was included in an attempt to provide a more thorough and holistic description of the treatment. The RT analyzed treatment notes by theme using procedures described in detail by Braun and Clarke (2006). These scholars recommended that thematic analysis be comprised of six phases: Familiarization of the data; generating initial codes; searching for themes; reviewing themes; defining and naming themes; and producing the report. The RT adhered to these phases during the repeated analyses of these data. The RT identified and established code categories and themes during repeated readings of the data, but not prior to these readings (Atkinson & Hammersley, 1998). In order to ensure trustworthiness of the themes, the RT consulted researchers not directly associated with the study. These researchers examined data and verified codes and themes (Bruscia, 2005; Maxwell, 2005).

Procedure

The music therapy intervention (Condition A) was an educational songwriting intervention concerning life after discharge. The active control condition (Condition B) was a non-music educational therapy intervention concerning life after discharge. The passive control condition was a non-educational music therapy session consisting of a music bingo game (Condition C). The RT developed scripts and tested them during related pilot studies on the same acute care psychiatric unit. All sessions began after orientation to the research and the explanation of and obtaining informed consent. After the informed consent process, the RT led the group in stating names and how people were currently feeling and began each treatment condition. During Conditions A and B, the RT provided participants a one-page handout with information regarding local support groups, family psychoeducation, and the National Alliance for the Mentally Ill.

RESULTS

Patients' perception of helpfulness was analyzed utilizing a one-way ANOVA. This test was significant, $F(2,10) = 7.75$, $p < .013$, partial $\eta^2 = .660$. Pairwise comparisons with Bonferroni adjustments for multiple analyses indicated significant differences between Conditions A and C ($p < .044$) and Conditions B and C ($p < .017$). Analyses of descriptive data indicated that participants in Condition B had the highest perceptions of helpfulness while participants in Condition C had the lowest. No other between-group comparisons reached significance, $p > .05$.

After repeated and thorough analyses of reflective treatment notes during multiple readings and trustworthiness checks, seven themes were identified according to the Phases for Thematic Analysis of Qualitative Data outlined by Braun and Clarke (2006). These themes were: 1) complexity of treatment; 2) action-oriented future

dialogue; 3) structure; 4) treatment eagerness; 5) problem-solving techniques; 6) flexibility, and 7) enjoyment and appreciation.

Table 1

Patient Descriptive Statistics - Immediate Posttest

Dependent Measure	Condition A: Educational Music Therapy			Condition B: Education (no music)			Condition C: Non-Educational Music Therapy		
	M	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*N*
Helpful	6.67	0.58	3	6.80	0.45	5	5.00	1.00	3
Stress	5.67	0.58	3	4.00	2.45	5	3.33	1.15	3
Strength	6.00	1.00	3	6.00	1.00	5	5.67	1.15	3
Satisfaction with Life	18.67	11.02	3	13.60	7.23	5	15.33	10.69	3
Depression	24.00	18.52	3	30.70	13.21	5	16.33	2.31	3

DISCUSSION

The purpose of this study was to determine the effects of caregiver-based educational music therapy on psychiatric patients and their caregivers using psychometric instruments during a randomized controlled clinical trial with a three-month follow-up. While the sample size is small and generalizations of quantitative results are premature, posttest results indicated that patients and their caregivers tended to have favorable experiences in educational music therapy sessions. While the RT evaluated the effects of brief educational music therapy, music therapy researchers have suggested that this is an important area as inpatients' lengths of stay are decreasing (Cassity, 2007; Justice, 2007; Thomas, 2007). In fact, Thomas (2007) recommended that music therapists "rethink and redevelop our conceptual models of treatment" (p. 125). The current study represents an innovative approach to music therapy treatment with psychiatric patients and their caregivers that is supported by non-music therapy psychosocial literature.

Overall immediate posttest results for patient participants tended to be slightly more positive concerning Condition A. Concerning stress, participants in Condition A tended to have the lowest mean stress scores while participants in Condition C had the highest. Concerning strength of family relationship, participants in Conditions A and B tended to have similar perceptions while participants in Condition C tended to have slightly lower perceptions. Additionally, Conditions A and B had significantly higher mean helpfulness scores than Condition C. Perhaps the participants in Condition C did not value their treatment as much as it was in the format of non-educational music therapy. Participants in Condition A had the highest satisfaction with life scores while participants in Condition B had the lowest. Participants in Condition C had the lowest depression scores while participants in

Condition B had the highest.

Thematic analyses of the RT's reflective treatment notes provided insights into educational music therapy with acute care psychiatric inpatients and their caregivers. The seven emerging themes (complexity of treatment; action-oriented future dialogue; structure; treatment eagerness; problem-solving techniques; flexibility, and enjoyment and appreciation) provide breadth and depth into the idiosyncraticies of this intricate type of therapy. Music therapy clinicians who are interested in providing this type of treatment should be familiar with these themes to provide competent treatment for acute care psychiatric patients and their caregivers. Psychiatric music therapists interested in providing caregiver-based psychoeducational treatment should also be aware of the intensity, complexities, dynamics, and unique aspects of treatment identified in the seven themes. Future quantitative research concerning these themes is certainly warranted to triangulate data.

The purpose of this study was to determine the effect of caregiver-based educational music therapy on psychiatric patients using psychometric instruments during a randomized controlled clinical trial and a three-month follow-up. While the sample size is small and generalizations of quantitative results are premature, posttest results indicated that patients and their caregivers tended to have favorable experiences in educational music therapy sessions. Themes from therapist treatment notes can be utilized to help clinicians provide competent services. Future research is warranted to determine effective psychosocial treatments for psychiatric patients.

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Effects of a single-session assertiveness music therapy role playing protocol for psychiatric inpatients / *Michael Silverman*

ABSTRACT

The purpose of this study was to implement and measure the effects of a single-session assertiveness music therapy role playing protocol for acute psychiatric patients. Participants (N = 133) were cluster randomized to one of three conditions: 1) Assertiveness Music Therapy; 2) No Music Assertiveness; or 3) Music No Assertiveness. Participants in both assertiveness conditions role played different commonly occurring scenarios at an inpatient psychiatric facility and in the community. There were no significant between-group differences in posttest quality of life, locus of control, or other subscales. However, participants in both assertiveness conditions tended to have slightly higher internal locus of control and overall quality of life scores than participants in the music no assertiveness condition. Additionally, the assertiveness music therapy condition had higher attendance rates than the other conditions. A higher percentage of participants from both the assertiveness music therapy and music no assertiveness conditions indicated they thought their session was the most helpful/therapeutic group therapy session in which they had participated; this was not the case for the assertiveness no music condition. Additional research is warranted to measure the effects of protocols that can help psychiatric patients generalize skills learned during inpatient treatment.

Effects of music therapy on change readiness and craving in patients on a detoxification unit / *Michael Silverman*

ABSTRACT

The purpose of this study was to determine the effect of a "rockumentary" music therapy intervention on readiness to change and craving in patients on a detoxification unit utilizing psychometric instruments in a randomized three-group design. Participants (N = 141) were cluster randomized to one of three conditions: rockumentary music therapy, verbal therapy, or recreational music therapy. All interventions were scripted and manualized during a posttest only design. Concerning readiness to change, there were significant between-group differences in Contemplation and Action subscales, with participants in the rockumentary and recreational music therapy conditions having higher means than participants in the verbal therapy condition. There were no differences between the two music therapy conditions concerning readiness to change variables. Although not significant, participants in both music therapy conditions tended to have lower mean craving scores than participants in the verbal therapy condition. Concerning Likert-type ratings of motivation to change, perception of helpfulness, and perception of enjoyment, participants in both music therapy conditions tended to have slightly higher mean scores than participants in the verbal therapy conditions. Participants' posttest written comments were positive, regardless of condition. Future research is warranted.

BIOGRAPHIES OF PRESENTERS

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