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THE EFFECTS OF MUSIC THERAPY TECHNIQUES ON

CLIENTS IN A SUBSTANCE ABUSE GROUP

(TITLE)

BY

MOYOSORE FABIYI

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

MASTER OF ARTS IN CLINICAL PSYCHOLOGY

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

2018

YEAR

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THE EFFECT OF MUSIC THERAPY TECHNIQUES ON CLIENTS IN A
SUBSTANCE ABUSE GROUP

A THESIS

SUBMITTED TO THE DEPARTMENT OF PSYCHOLOGY OF EASTERN ILLINOIS
UNIVERSITY AT CHARLESTON ILLINOIS

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN CLINICAL PSYCHOLOGY

BY

Moyosore Fabiyi

May 2018

ACKNOWLEDGEMENTS

I am grateful to God Almighty for giving me the grace to start and complete this study, I am thanking Him for his omnipresent help through all my struggles and challenges. He is worthy of my praise and to Him be the glory.

I would like to thank my thesis chair, Dr. Caridad Brito for her guidance and utmost support throughout the process of completing this thesis. You went above and beyond to encourage me as I started, and pushed me to finish well. I am grateful for your kindness, patience and teaching.

I would also like to extend my appreciation to Dr. Russell Gruber and Dr. John Mace for being a part of my committee. I am sincerely grateful to you for taking your time out to read my study and providing invaluable feedback that helped in the successful completion of my thesis.

Finally, this thesis would not have been possible without the love and support of my family, my parents, Mr. and Mrs. Fabiyi and my uncle, Dr. Moses Adeyanju. Thank you for being there all through the years and encouraging me to reach my goals. God bless you all.

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Abstract

The purpose of this study was to examine the effects of music therapy on clients with substance abuse history attending group sessions in a behavioral health facility. Specifically, the mechanism by which lyric analysis or the musical component may lead to positive therapeutic outcomes was examined. In order to assess the effectiveness of music therapy techniques, a comparison was made between conditions of music alone, lyric analysis alone and music with lyric analysis. One may be able to argue that the mechanism by which music therapy affects clients may lay within the music itself and clients listening to that music. However, if the effects of music+ lyrical analysis are similar to those of lyrical analysis alone, and both are different from music alone, one may be able to argue that the mechanism by which music therapy affects clients may lay in the analysis of the lyrics itself and not due to the actual music. The participants consisted of 5 individuals who were attending weekly substance abuse group sessions at a behavioral health facility. Data were obtained through a questionnaire, which measured participants' perceived level of effectiveness, level of connection to others, and participation. As predicted, results showed that participants rated effectiveness, connection, and participation significantly higher during the music with lyric analysis condition than the music alone and lyric analysis alone conditions. Possible explanations for the results, including limitations and recommendations for the future, and clinical implications of the results, are discussed.

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It has been thought that music can be a powerful tool in treating illness. Music has been said, and has been confirmed by neuroscience researchers, to affect our brain waves, which may then further affect our thoughts, feelings, and even behaviors. It has a way of getting us to reflect inwardly, of making us happier or more melancholic, or even of altering our planned actions. For these reasons, and others, it has been adopted in many therapeutic environments (Schafer, 2013). Its uses in therapy vary from the informal to the formal—depending on the procedures and implementation used. Formal music therapy is a process where the client listens to music with a therapist and the music may be used as a form of relaxation and motivations as a bridge to evoke cognitive work, personal development and self-reflection. Informal music therapy on the other hand involves the use of music personally by anyone as a means of relaxation and self-care. (Formal music therapy has been used to improve self-reported changes in relaxation, mood/emotions, and thoughts about the self in a number of populations, such as psychiatric prisoner-patients (Thaut, 1989); and, has also been believed to be “instrumental in rescuing alcoholics,” where musical instruments accompanied by singing has been implemented in treatment centers for alcoholism (Miller, 1970). Few techniques available when using music therapy formally, such as songwriting, recreational music therapy, lyric analysis, and improvisation. It is in lyric analysis where a lot of research has focused and which seems most promising when formally applying music therapy in therapeutic environments; thus, this study examines the impact of lyric analysis on clients’ group therapy outcomes.

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Lyric analysis, according to research conducted by several music therapists and other related researchers, has been found to be the most common technique used in music therapy (e.g., Gardstrom, 1996; James, 1988; Jones, 2005; Silverman, 2003; Silverman, 2007), and it has been established by the American Music Therapist Association (AMTA) as an evidenced based practice. Lyric analysis is a music intervention that aims to accomplish individualized goals within a therapeutic relationship; by doing so, it further aims to provide individuals the opportunity to address the physical, cognitive, emotional, and spiritual aspects of recovery. And, such intervention may be particularly effective in substance abuse treatment. So, what is lyric analysis in music therapy? It is defined as the expansion from existing songs or lyrics to any broader use, individualized topics, or generalized discussion. Lyric analysis uses live or recorded music to have clients first listen to the lyrics of a song and then proceed with discussion and counseling. During the discussion and counseling phase(s), topics may focus on personal situations with questions about stressors, loneliness, isolation, coping skills, supports, and healthy alternatives to maladaptive behaviors (Silverman, 2010).

Whereas there exists a plethora of findings and articles about the positive effects that music therapy has on certain client populations, there are, however, limited studies revealing what particular components of music therapy, let alone lyric analysis, produce those positive effect in clients—that is, its underlying mechanism is unclear. In fact, researchers investigating psychotherapy still cannot provide an evidence-based explanation for how or why even our most well studied interventions [e.g., Cognitive Behavioral Therapy (CBT), Acceptance and Commitment Therapy (ACT) or Mindfulness Based Cognitive Therapy (MBCT)] produce therapeutic change in clients;

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so, it is not surprising that we have yet to understand the mechanisms by which music therapy, and lyric analysis more specifically, produces its positive outcomes. One possible explanation may be that it is not the “music” per se that leads to positive outcomes, but rather it is the way it engages the client in emotional and cognitive reflection. It would seem that limiting the description of music therapy to only instances where musical events are present might not adequately communicate the beneficial results of treatment (Kazdin, 2007); that is, music therapy may need some inclusion of verbal therapy frameworks (such as that found in lyric analysis) in order to be deemed effective. For this reason, formal music therapy seemingly borrows from already established theories and more recognized traditional therapies.

There are some speculations as to what mechanisms do contribute to changes observed in formal music therapy interventions. Corsini (2008), in an attempt to describe music therapy using borrowed and accepted therapeutic factors, outlined nine commonly accepted mechanisms for therapeutic change: Universalization, Insight, Modeling, Acceptance, Altruism, Transference, Reality testing, Ventilation and Interaction. These mechanisms were adopted to further describe how music therapy triggers engagement, motivation, participation, change, symptomatic relief, and improvement of illness management in psychiatric patients. One of the more promising mechanisms is *universalization*; this is where clients become aware that other people have similar problems and situations to those that they have; this awareness, is a cognitive factor that is thought to lead to change in traditional verbal therapy (Thomas, & Silverman 2007). For instance, when patients share their problems and reasons for being admitted to a hospital, they often realize that they are not alone and that their situations—while

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certainly unique--often have shared or parallel aspects to those of others; that is, patients are able to listen to their peers, who tend to have and share similar problems and situations (Silverman, 2007).

Still, the specific components of music therapy that bring about therapeutic benefits remain unclear. For instance, could lyric analysis *alone* (i.e., without actually *listening* to music) be an effective option for some clinical populations or is there something about the listening component of music therapy that contributes the universalization and self-reflective processes? In as much as lyric analysis has been found to be the most effective technique of music therapy, researchers have yet to show what component of music therapy that produces an effective result.

The purpose of this study was to examine the effects of music therapy on clients with substance abuse history attending group sessions in a behavioral health facility. Specifically, the mechanism by which lyric analysis may lead to positive therapeutic outcomes was examined. Thus, the contributions of the audio and verbal components of music therapy was examined by exposing participants to music therapy sessions where they were exposed to three conditions of music alone, lyric analysis alone and music with lyric analysis. Thus, a non-parametric one-way analysis of variance with repeated measures design was implemented with 5 participants attending a substance abuse group at a behavioral health center. Data were collected through a questionnaire that assessed factors such as, perceived level of effectiveness of the therapy session, perceived connection to others, and likelihood of participating in future therapy sessions. In as much as previous studies similar to this one have measured effectiveness, attendance and how clients have felt supported by others, during music therapy sessions, no study has

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made a clear distinction between what part of its musical or lyrical components bring about some positive response.

Literature Review

In order to have a basic understanding of alcohol/substance abuse, addiction and treatment, this writer presents details in this review consisting of the prevalence of alcohol and substance use, and definitions of psychoactive substances, addiction and its causes. Treatment modalities are also discussed, focusing on how intervention for addiction has evolved all through the years, its costs, and how music therapy interventions have played their role in addiction recovery.

Prevalence of Alcohol and other drugs

Addiction and substance abuse remain major social concerns in contemporary society. People are constantly finding new and innovative ways to achieve “better living through chemistry” and, with the advancement of technology, drugs are becoming more addictive dangerous, and problematic to the mental health field and to society in general (Hopkins, 1998). Increasing drug and alcohol abuse is a dangerous trend in the United States; according to the National Institute on Drug Abuse, nearly 2.1 million hospital Emergency Department visits in 2009 were the result of drug abuse. An estimated 5,475 people die each year in the U.S. as a direct result of drug abuse (Evans, 1998). It is estimated that at any point in time, between 2 and 10% of American adults either abuse or are addicted to illegal drugs (Doweiko, 2002).

An estimated 2.1 million people in the United States had a substance use disorder related to prescription opioid pain medicines in 2016. However, only a fraction of people with prescription opioid use disorders receive specialty treatment (17.5 percent in 2016)

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(SAMHSA, 2016). Drug abuse represents an overwhelmingly dangerous trend with prescription drugs being a major culprit at this age level (Manchikanti, Fellow, Allinani, & Pampati, 2010; Weigel, Donovan, Krug, & Dixon, 2007; SAMHSA, 2010). The problem with most of these trends is the ever-increasing accessibility to prescription drugs, and their use for reasons other than the prescribed treatment. Research clearly states that parents, educators, and other health professionals need to be cognizant of the fact that “when prescription drug abuse occurs before age 16, there is an increased risk for addiction and abuse of psychotherapeutic drugs later in life” (Jones, Fullwood, & Hawthorn, 2012, p.13). Jones et al. (2012) also state prescription drug abuse as a major social problem and concern for counselors. According to the American Psychiatric Association (2013), it is the most prevalent mind disorder, encompassing some 40 percent of the diagnoses in the DSM-V. Inaba and Cohen (2011) call it the number one continuing health problem, as well as the number one prison problem in the United States.

SAMHSA (2008) found that adolescents are at the greatest risk for prescription drug abuse than at any other time in their lives. The number of teens and young adults (ages 12 to 25) who were new abusers of prescription painkillers grew from 400,000 in the mid-'80s to 2 million in 2000 (SAMHSA, 2008). Drugs can affect the central nervous system and it is this system that helps us gather and process information from the outside world. It is also responsible for our emotional and physical responses to our environment. Scientists have made great advances in understanding brain function and as a result, a number of drugs have been developed to treat such conditions as depression and anxiety

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(Hunter, 2013). Hunter also mentions that while these prescription drugs can improve the patient's quality of life, the misuse of these drugs can have just the opposite effect.

A 2014 study at Harvard and Northwestern University on 18-25 year-olds found that even those who smoked only a few times a week had significant abnormalities in the brain areas controlling emotion and motivation. Three other separate studies in the U.S., Australia and New Zealand for heavy users found that their IQ's fell by 7-8 points. Although many have come to the conclusion that marijuana is not a gateway to other drugs, research shows that teens who use marijuana -especially younger aged ones- are statistically more likely to go on to use other drugs (Beiter, 2014).

The challenges of distinguishing between causality and correlation should not preclude the need to examine other facts of drug use. Data from 2012 show that while 6.6% of college graduates are current users of drugs, the numbers are 9.8% for those with only a high school degree, and 11.1% for those who didn't finish school. (SAMHSA, 2011).

Similarly, the rate of drug use for unemployed adults was 18.1%, twice as high as for those with jobs (8.9%). For those workers who do use drugs, strong correlations were found with absenteeism and chronic health problems. Experts estimate that health care is 300% higher for regular drug users, who are also one third less productive than non-users. And because drugs make learning more difficult, employee training takes longer and adds further to employers' costs.

Treatment for addiction is extremely expensive. The National Treatment Improvement Study, commissioned by the Center for Substance Abuse Treatment, estimates that long-term residential treatment costs an average of \$49/day for 140 days,

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or approximately \$6800/ episode. Shorter-term, more intensive treatment is estimated to cost \$130/day for 30 days, approximately \$4000/episode (Uziel-Miller, Lyons, & Rowland, 1999). It has been suggested that the annual financial impact of substance-use disorders in the U.S. (including Alcohol and tobacco) is \$510 billion (Evans, 1998).

Addiction and Drug Definition

Drug addiction is a chronic disease characterized by compulsive, or uncontrollable, drug seeking and use, despite harmful consequences and changes in the brain, which can be long-lasting. These changes in the brain can result in harmful behaviors seen in people who use drugs (SAMHSA, 2014). Psychoactive substances are defined specifically as chemicals that affect the central nervous system, altering the user's thoughts, moods, and or behaviors. And, the fifth edition of the Diagnostic and Statistical Manual of Mental disorders (DSM-5) categorizes psychoactive substances into 10 separate classes: alcohol, cannabis, caffeine, hallucinogens (with separate categories for phencyclidine and other hallucinogens), inhalants, opioids, sedatives, hypnotics, and anxiolytics, stimulants (amphetamine-type substances, cocaine and other stimulants), tobacco, and other or unknown substances (APA 2013). Each of these substances have unique properties and effects. Unfortunately, no single treatment modality or type of therapy has proven more effective than another in treating persons who are addicted to these substances. In fact, many physicians continue to view alcohol and illicit drug use as virtually untreatable (National Center of Addiction and Substance Abuse, 2000) and are ill-prepared to treat patients who are dependent on substances (Doweiko, 2002). The national success rate from drug rehabilitation programs is less than 10% and multiple

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treatments have become the accepted norm in substance abuse treatment (Uziel-Miller et al., 1999).

In understanding recovery and addiction, it is important to have some basic knowledge about the five stages of addiction recovery. "Motivation of addictive behaviors involves progression through five stages: pre-contemplation, contemplation, preparation, action, and maintenance. This is further discussed in details in the addiction process and recovery section. Individuals typically recycle through these stages several times before termination of the addiction" (DiClemente, Norcross, & Prochaska, 1992, p. 1102).

Process of Addiction and Recovery

Substance dependence is a cluster of cognitive, behavioral, and symptoms indicating that the individual continues use of the substance despite significant substance related problems" (p. 192). Thus, abusing drugs is often a maladaptive coping skill used to withdraw from the reality of intense pain, suffering, and frustration (Carson, Gertez, Donaldson, & Wonderlich, 1990). The person abusing substances is seen as a victim of destructive learning conditions as the behavior has been learned (Thombs, 1999).

In the (1) pre-contemplative stage of addiction, the addict does not see an issue with the addiction but usually feels pressure from friends, family, and society to change and seek treatment. This is the first step of recovery. (2) Contemplation is the stage in which the individual recognizes there is an issue but is still not ready to change. This could be visualized as the "on the fence" stage in which the participant is neither in a state of mind to change nor rejecting the issue of the addiction. (3) Preparation, the third stage to addiction recovery, is when the individual is not actively quitting but is fully ready to

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quit/change their addictive behavior and verbally processes the decision. (4) Action is the fourth stage in which the individual actively changes their addictive behavior for a brief amount of time. Action then morphs into the fifth stage, (5) maintaining, which is upholding sobriety and abstaining from the substance or addictive behavior for three to six months. Continuation of this for more than six months is considered termination. However, the stages described above only highlight how the process should work in theory

In reality, most substance abuse treatment programs are eclectic in theory and practice, and they include varying degrees of inpatient and out-patient services, 12-step program attendance, education, psychotherapy, family therapy, support groups, pharmacotherapy and so forth. This is partly because it is impossible for all patients in a facility to be at the same stage of addiction recovery. Whereas some may be pre-contemplating, others are ready for the action stage and others may be in the process of upholding sobriety. With psychoeducation, clients are taught about the various stages and are able to identify where they stand. Cognitive therapy is said to be compatible with any of these approaches (Newman, 2002). Many drug abuse patients attend support groups, have had inpatient detoxification, and take medication. The special strengths that cognitive therapy adds to these approaches are its emphasis on identification and modification of beliefs that exacerbate cravings, amelioration of negative affective states (e.g., anger, anxiety and hopelessness) that often trigger drug use and teaching patients to apply cognitive and behavioral skills and techniques to become and remain drug-free.

Research on Alcoholic Abuse and Treatment

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Miller and Hester (1980; 1986) have conducted exhaustive reviews of the alcoholism treatment literature. These authors examined nine major classes of interventions, four of which were pharmacotherapy, psychotherapy or counseling, Alcoholics Anonymous and alcoholism education. The other five were seen as less commonly employed approaches which included family therapy, aversion therapies, operant methods, controlled drinking and broad spectrum treatment. Miller (1986) concluded from reviews that alcoholism treatment is best approached as two-stage process, requiring different interventions at each stage. The first set of interventions should be focused on changing drinking behaviors to abstinence or moderation (e.g. behavioral self-control training). The second set of interventions should be focused on maintenance of sobriety (e.g. social skills training in order to increase confidence in relating to drug-free people). Miller and Hester (1986) further pointed out that traditional inpatient treatment programs were very expensive. Concurring in this, McLellan et al. (1992) note that standard detoxification and “28-day programs” (in spite of their high costs) are insufficient to deal with long-term issues. Clearly, to help drug and alcohol patients deal with more enduring issues, these treatments need to be supplemented with ongoing outpatient treatment that focuses on attitude change and skills acquisition. In a critical review of the research literature on treatment for alcohol problems by the National Academic Institute of Medicine Committee (1990), the committee discovered that interventions included “a broad range of activities that vary in content, duration, intensity, goals, setting and target population”. The committee’s assessment was that “no single treatment approach or modality has been demonstrated to be superior to all others”.

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These findings coupled with those of Miller and Hester (1986) make it apparent that there is still a profound need to effective alcoholism treatment interventions (Newman 2002).

The Process of Universalization in Therapy

Universalization in therapy is where clients in group therapy become aware that other people have similar problems and situations to those that they have. That realization engages a number of other processes.

Insight. This superior awareness may help them to have enhanced perspectives concerning their thoughts, feelings, and behaviors. Regardless of specific music therapy intervention, patients can have insights into their own thoughts, feelings, and behaviors within a music therapy session. Insight does not have to be interpreted from a classical psychoanalytic perspective, as people from various theoretical orientations frequently use the term (Silverman, 2007).

Modeling. Purposeful observation of other people can help clients. Clients can model behaviors and affective states of both peers and therapists. As patients who genuinely desire to change tend to be engaged in and motivated for treatment, they also tend to seek effective ways of living. Music therapists can model healthy living habits, including diet, exercise, use of positive coping skills, adhering to pharmacological treatments as prescribed, spending time with supportive friends and family members, wellness, stress management, and balancing and prioritizing responsibilities. Whereas these ideas may be potentially powerful when modeled by the music therapist, they may be even more influential when modeled by a patient's peers who are also inpatients at the hospital. As patients typically relate to and understand their peers' situations due to aspects of universality, they may perceive that their peers' behaviors, affects, and

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cognitions are more realistic and applicable models than a therapist's. Thus, by reinforcing patients' positive behaviors, the music therapist can facilitate the use of patients as peer models (Silverman, 2007).

Acceptance. When the client feels unconditional positive regard, specifically from the therapist, she or he is more likely to change in psychiatric group therapy sessions, the music therapist should be accepting of the patient's lyrical, melodic, and harmonic suggestions, interpretations of the music, musical and nonmusical choices, and improvisations. As patients may feel intimidated by the music therapist's level of musical training and ability, it is especially important to have unconditional positive regard for the patient's musicality, regardless of preference, level of training or knowledge, and performance (Bloch & Reibstein, 1963).

Altruism. Change may result when the client is aware that she or he is the recipient of the therapist's (or another group member's) care. Change can also result from the sense of providing the care to others and feeling that one is helping others. Another positive aspect of group therapy is the ability for patients not only to relate to one another, but to also help each other. While music therapists are typically quite aware of the "helping high" they may receive while helping others during treatment, patients may not be as aware of this phenomenon. Thus, it is the responsibility of the music therapist to recognize when a patient helps another patient and to verbally reinforce it, ensuring the patient feels a sense of accomplishment from the altruistic behavior. As anecdotal evidence supports the idea that psychiatric patients display altruistic behaviors during music therapy sessions, the music therapist should actively seek, identify, and reinforce these behaviors to make sure patients are aware of them (Crouch, 1981).

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Transference. Transference is the emotional bond that forms between the client and therapist. Bonds can also form between clients in group therapy sessions. Although the term originated from psychoanalytic and psychodynamic orientations in which transference was defined as the unconscious redirection of feelings from one person to another, transference can also be defined in a trans-theoretical manner. Regardless of philosophical orientation to music therapy treatment, a bond develops between the client and therapist throughout the music therapy process. Clients often recognize aspects of universality and altruism and may “bond” during group music therapy sessions. Psychiatric consumers may feel a shared closeness after musical improvisation or songwriting with the therapist, peers, or even the music itself (Becker, 1972).

Reality testing. Change can be a result of clients experimenting with new behaviors in the security of a therapy session, especially while receiving support and feedback from the therapist and peers. Music therapists can provide psychiatric patients with opportunities to experiment with novel musical and nonmusical behaviors that can augment illness management and recovery knowledge and skills. It may be that musically demonstrating a new behavior is less intimidating and can be used as a successive approximation to an ultimately nonmusical demonstration of the behavior (Silverman, 2007).

Ventilation. Change can be a result of catharsis. This factor pertains to statements attesting the value of self-expression or displaying emotions in a context where a client feels accepted. Music therapy can be used for cathartic means such as self-expression and ventilation. Patients can express themselves musically without the potential intimidation of verbal interaction or the negative consequences. As recognizing emotions and affective

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states can be an important objective for self-monitoring, music may be an ideal medium for learning about emotions and how to effectively identify, express, manage, and modify them (Corsini & Rosenberg, 1955).

Interaction. Clients can improve when they are able to admit to the therapist or peers in the group that they do indeed have a problem. Patients are unlikely to change if they do not sincerely believe they have a problem warranting the effort required for change. This theory is supported by the well-established trans-theoretical stages of change model. A potential advantage of music therapy is that a patient might relate to a character in a song. The patient might indicate that the character in the song—and herself or himself—needs to change her or his behaviors, as status quo behaviors had previously resulted in re-hospitalization due to stopping prescribed medication and psychotherapeutic regimens. Thus, through a dialogue of why the character in the song needs to change, the patient indicated that she or he can relate to the character in the song and also needs to change. (Corsini, 2008; Corsini & Rosenberg, 1955).

Patients are unlikely to change if they do not sincerely believe they have a problem warranting the effort required for change. This theory is supported by the well-established transtheoretical stages of change model (Silverman, 2009). The model explains professionally facilitated and self-initiated change and often focuses on a progression through five stages: pre-contemplation, contemplation, preparation, action and maintenance (Prochaska & DiClemente, 1986). Thus, depending on what stage of change a psychiatric patient is in, the music therapist can work toward identifying factors highlighting the need for change.

Formal Music Therapy

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Formal music therapy as described by the American Music Therapy Association (AMTA), the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. Formal music therapy can be considered one of the creative art therapies and, depending upon the clinical setting and other therapeutic programming, is often conceptualized as a complementary or alternative therapy. Of all the creative arts therapies, music therapy has the largest and most sophisticated research base (Silverman, 2015).

The earliest known reference to formal music therapy appeared in 1789 in an unsigned article in a Columbian Magazine titled “Music Physically Considered” (AMTA, 2017). In the early 1800s, writings on the therapeutic value of music appeared in two medical dissertations, the first published by Edwin Atlee (1804) and the second by Samuel Mathews (1806). Atlee and Mathews were both students of Dr. Benjamin Rush, a physician and psychiatrist who was a strong proponent of using music to treat medical diseases. The 1800s also saw the first recorded music therapy intervention in an institutional setting. In the 1940s, three persons began to emerge as innovators and key players in the development of music therapy as an organized clinical profession.

Why it works—Underlying Mechanism. Some studies on music therapy have found numerous benefits for substance use disorder patients. For example, songwriting and lyric analyses are related to positive emotional change in patients (Baker et al., 2007; Jones, 2005), drumming is associated with relaxation and can be useful for patients who have experienced repeated relapses (Winkelman, 2003), and activities in music therapy (e.g. movement to music) are associated with a decrease in anxiety, depression, anger,

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and stress, although data suggests that no one activity is more important than another (Cevasco, Kennedy, & Generally, 2005). In addition, music therapy is positively related to a willingness to participate in substance use disorder treatment (Dingle, Gleadhill, & Baker, 2008). While music therapy is growing in popularity, a comprehensive meta-analysis concluded that the overall database is not adequate to establish music therapy as an evidence-based practice (Silverman, 2010), with the majority of studies being descriptive (Silverman, 2009).

Research suggests how art and music therapy has been used alongside with Motivational Interviewing (MI) (a therapeutic style that addresses client ambivalence and seeks to enhance clients' motivation for change) and Motivational Enhancement therapy (MET) (which is a specific application of Motivational Interviewing that promotes client engagement in treatment) (Aletraris et al, 2014). Art and music therapy can be used toward all of these goals. Research has argued that art therapy employs “active, mind-body strategies” (Holt & Kaiser, 2009) that fit well with the principles of MI/MET (Holt & Kaiser, 2009). Specifically, art therapy complements the MI/MET framework, as it utilizes the same cognitive processes of valuing, choosing, and deciding (Horay, 2006). It can be used to engage clients and enhance internal motivation for change through the creation of imagery (Holt & Kaiser, 2009). Research on music therapy over the past several decades has shown that this type of treatment can also increase client motivation and engagement (Blackett & Payne, 2005; Brooks, 1973; Cevasco et al., 2005; Murphy, 1983), and facilitate the exploration of emotions (Baker et al., 2007; De l'Etoile, 2002; Ghetti, 2004; Jones, 2005; Soshensky, 2001), in their assessment of the utilization of correlates of art and music therapies in a national sample of substance use disorder

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treatment centers, found that the percentage of patients in a program who were adolescents was positively associated with offering music therapy and percentage of patients who were women was positively related to offering both art and music therapies. Recent research suggests that using music therapy with hospitalized youth offers them a safe way to internalize a healthy self-image alongside their patient identity (O Callaghan, Dun, Baron, & Barry, 2013). Their finding that an increase in the percentage of adolescent patients is associated with offering music therapy demonstrates how treatment centers may be accommodating their adolescent population with a treatment model that better serves their needs (Vourakis, 2005).

In a study of the effect of music therapy techniques among patients who are dually diagnosed with a substance use disorder and a mental disorder, measured participants' attendance rates, satisfaction with sessions, how well they were able to express themselves and how well they felt supported by other group members. This result only showed significant differences in attendance rates while the other measures were not significant (Davis, 2008). Cognitive behavioral therapy (CBT) approaches to treatment of substance use disorder (SUD) have emphasized the need for clients to explore emotional regulation and experiential avoidance. Another study aimed to determine whether music therapy programs situated within a CBT framework facilitated the exploration of emotions in 24 adults with SUD attending an open group CBT program. In a 7-week trial, the impact of a single music therapy session on participants' emotional experience was assessed. Results indicated that music therapy sessions facilitate the experiencing of predominantly positive emotions, and that these were experienced to a moderate or high

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degree. Participants reported that music therapy was beneficial in allowing them to experience emotions without the need for substance use (Baker et al, 2007).

Formal vs. Informal Music Therapy. A common misperception is that music therapy is merely listening to recorded music. This simplistic perception is incongruent with the clinical objectives that music therapists formulate. In psychiatric settings, music listening may even be contraindicated as it may not support relational abilities (Mossler, Assmus, Heldal, Fuchs, & Gold, 2012). Additionally, Silverman and Leonard (2012) found psychiatric patients had higher attendance, durational attendance (i.e., how long the patients remained in the sessions), and perceptions of treatment during *active* music therapy sessions (using interventions including songwriting, lyric analysis, recreational music therapy, and rhythm-based percussion interventions) than psychiatric patients who participated in sessions where they listened to recorded music (i.e., passive music listening).

Approximately 20% of respondents to the 2011 AMTA annual membership survey indicated they worked with the mental health population (AMTA, 2011). Although music therapists can practice at the bachelor's level, many of these clinicians have master's degrees in music therapy or a related field (Silverman, 2007). Whereas these therapists typically work in group-based settings, it is not uncommon for music therapists to treat psychiatric consumers individually (Silverman, 2007). One of the advantages of having a music therapist on staff is that she or he can address a variety of goals and clinical objectives, including coping and leisure skills, social supports, self-expression, symptom management, psychosocial and pharmacological treatment compliance, and skills for community reintegration, illness management, and recovery.

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Moreover, researchers have found that music therapy may be a way to engage psychiatric patients with low therapy motivation in treatment (Mossler, Assmus, Haldal, Fuchs, & Gold, 2012). Because music is something that most people enjoy and to which they can relate, music therapy is often found more enjoyable to clients than other, more traditional therapies. A study of 27 patients hospitalized on a psychiatric ward in New Orleans evaluated music therapy compared to other treatment modalities. Music therapy was rated significantly more pleasurable than other therapies offered (Heaney, 1992). Music therapy has also been used to improve self-reported changes in relaxation, mood/emotions and thoughts about self in psychiatric prisoner-patients (Thaut, 1989). Individuals who have psychiatric diagnoses have also benefited from music therapy in a group format. One study was conducted to assess the influence of a music therapy activity on interpersonal skills of adult psychiatric patients. A significant increase in peer acceptance, group cohesiveness, and general interpersonal relationships was found when comparing group guitar lessons to the control group (Cassity, 1976).

Lyric Analysis. A variety of music therapy techniques have been used including lyric analysis, song writing, improvisation, and drumming. Jones (2005) compared the use of song writing and lyric analysis techniques to evoke emotional change in a single session with people who were chemically dependent. Lyric analysis may allow individuals to relate and empathize with the song's principle character and in doing so, project their own feelings. Although not statistically significant, music therapy techniques increased feelings of joy and acceptance and decreased feelings of guilt, blame, and fear. Seventy-five percent of the participants in this study found music therapy to be an effective tool for recovery. Musical improvisation is another treatment modality

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commonly used in this setting. Therapeutic behavior patterns addressed in an improvisation session include confrontation of low frustration tolerance, conformity through a creative experience, interaction to combat isolation, validation of self-esteem, and release of tension to support treatment in rehabilitation (Murphy, 1983). Drumming circles have also been used as complementary addition therapy, especially for repeated relapse and when other counseling modalities have failed (Winkleman, 2003).

Psychiatric music therapists often implement lyric analysis interventions (Silverman, 2007, 2009a) to address a variety of clinical objectives. Silverman (2009c) used a lyric analysis of “Don’t Stop” (recorded by Fleetwood Mac) to teach illness management skills to acute psychiatric inpatients and found patients made more in-depth and personalized verbalizations during the lyric analysis condition than during the verbal psychoeducational active control condition without music. In an attempt to determine what songs music therapists used for various clinical objectives, Silverman (2009d) conducted a descriptive study of psychiatric music therapists’ use of lyric analysis interventions. “Lean on Me” was the most commonly used song while change was the most frequently cited clinical objective. Interested clinicians are directed to Stanley and Jones (2008) for a list of songs, organized by counseling topic. Ideally, these interventions should begin with live music and then proceed to a conversation concerning the song and how patients may relate to, perceive, or interpret the lyrics. However, there are situations and circumstances in which recorded music may be superior, more appropriate, and even more therapeutic (Silverman, 2009d).

Benefits. Silverman (2015) in his study to determine the effects of music therapy on drug avoidance self-efficacy in a randomized three-group wait-list control design did

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not find a between-group significant difference. In as much as his results did not reach significance, participants in the music therapy condition tended to have higher mean drug avoidance self-efficacy scores than participants in the verbal therapy and wait-list control conditions. Participants in the verbal therapy condition tended to have minimally higher drug avoidance self-efficacy scores than participants in the wait-list control condition. He speculated that music therapy might be a psychosocial intervention for enhancing drug avoidance self-efficacy even within the temporal limitations of a single treatment session. As previous non-music therapy researchers have found drug avoidance self-efficacy to be an important treatment component for prevention relapse, these results may be clinically relevant for interventionists working in substance abuse treatment facilities. Gallagher and Steele (2002) also described how music therapy services can benefit individuals who are dually-diagnosed in a Substance Abuse/Mental Illness program. A service model was provided using music therapy for individuals in an outpatient abstinence-based program structured on the 12-step principles of Alcoholics Anonymous. In this study, the authors suggested that music therapy can be an effective and important component to the treatment of those who have dual-disorders. Many clients expressed that music therapy was one of their favorite groups and became an important part of their recovery, providing effective coping skills for stress management, mental health stability and relapse prevention.

Another study focused on determining if the use of music therapy as a component of a group CBT treatment program for substance misuse will engage patients' participation. The researchers were interested in whether the patients would attend the sessions and, if so, what their perceptions of the music therapy sessions would be.

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Although no preference for any of the music therapy interventions was found, the results appear encouraging for music therapy. The data revealed that participants enjoyed music therapy and found it to be therapeutically effective, no matter what particular type of intervention was used. Additionally, formal music therapy was rated by participants as helpful in addressing specific treatment areas more consistently than other groups. Although there were no statistically significant differences between interventions, participants consistently rated music therapy interventions as very high concerning enjoyment and therapeutic effectiveness. Some participants even attempted to extend the scale past 25 by writing in their own numbers to more adequately depict their positive feelings concerning music therapy (Dingle, 2008).

In summary, the studies reviewed show that there is a considerable lack of quantitative research in music therapy. Although music therapy interventions such as lyric analysis and song writing have shown to be effective, not a lot of studies have attempted to evaluate the perceived effectiveness of these commonly practiced music therapy techniques.

The current study examined the contributions of the audio and verbal components of music therapy by exposing participants to music therapy sessions where they listened to three songs and analyzed lyrics (music+lyric analysis), simply analyzed the lyrics of another set of three songs, and simply listened to three songs (music only).

Hypothesis. It was anticipated that, overall, perceived effectiveness, perceived connection to others, and likelihood of participation would be higher in the music with lyric analysis group than the lyrical analysis group or the music w/out analysis group.

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If listening to *music+ lyrical analysis* affects clients beyond lyrical analysis alone or listening to music alone (informal music therapy), one may be able to argue that the mechanism by which music therapy affects clients may lay within the music itself and clients listening to that music. However, if the effects of music+ lyrical analysis are similar to those of lyrical analysis alone, and both are different from music alone, one may be able to argue that the mechanism by which music therapy affects clients may lay in the analysis of the lyrics itself and not due to the actual music.

With more effective coping skills, individuals may be less likely to have a relapse. With more individuals in control of their substance abuse issues, society at large will certainly benefit. There will be less people in the community who unable to control themselves. Greater understanding of how music therapy may impact the therapeutic process will can be greatly impactful.

Method

Participants

The participants consisted of five individuals (4 men and 1 woman) with substance abuse history who are were attending weekly substance abuse group sessions in a small community in rural central Illinois. All participants were Caucasians, the ages of the men were 62, 33, 36 and 28 whereas the woman was 52. The facility was a governmental agency behavioral treatment center. The group room at this center can hold a maximum number of 15 clients. No deception was used; risk was at most minimal. The effect of the procedure did not cause any physical or social/economic harm to participants.

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The Clinical Director at this facility was informed of the study and consent to carry out the study was obtained. Informed consent was obtained from each participant prior to the start of the study, no new participants were added to the study. Careful steps regarding clients' confidentiality were maintained, such as keeping the records of clients' informed consent separated from their actual responses and coding each client with a number to track their longitudinal participation. Four of the participants were already in weekly group sessions together and a fifth member had just joined in the past week. The researcher introduced the study with a recruitment letter written by the researcher. The researcher then met with these participants individually in order to go over any questions they may have had.

Design

This study is a 1-way within-subjects experiment with 3 levels. The independent variable was the music therapy with three levels which were: music with lyric analysis (i.e., music+lyrics), lyric analysis without listening to the music (i.e., lyric analysis alone), and music alone (i.e., no lyrical analysis; music w/out lyrical analysis).

Materials & Procedure

This researcher used a total of nine songs in this study. The themes of the songs selected were similar in terms of lyrical content about substance abuse, addiction and recovery. The songs that were used for the experiment were similar in terms of the length of lines and theme. A computer, connected to a speaker, was used to play the audio components of the study.

A 17-item questionnaire was developed to assess the participants' perceived levels of effectiveness, participation and perceived connection to others. Items were

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scored from 1 to 10, Questions that were asked ranged from how the participants felt about each session, their thoughts about each session and likelihood of participating in future sessions and recommending others.

An online randomization software was used to determine the presentation order for the three conditions. The same software was also used to randomly assign the order of the three songs to be used for each session.

The Lyric Analysis Alone Session lasted for an hour. To start the session, the researcher explained what lyric analysis was to the group and then shared the sheets containing the lyrics of the song “It Ain’t the Whiskey” by Gary Allan. Participants took a couple of minutes to read through the lyrics and the researcher followed up with questions pertaining to the lyrics of the song. The researcher first asked if any participant could share their own perspective on the lyrics, this stimulated discussions as they had varied interpretations of what the lyrics could mean. The researcher also followed up with questions on how they can relate to the songwriter in terms of their own use. This further led to more discussions. This same process was done for the next two songs, which were; “The More I drink” by Blake Shelton and “Welcome to wherever you are” by Bon Jovi, respectively. After the session was complete, the researcher handed out the questionnaires for each participant to fill out.

The second session was the following day and participants were involved in the music alone session. The three songs for this session were: “One day at a time” by Joe Walsh, “Desperado” by the Eagles and “An Old Friend of Mine” by Joe Nichols, respectively. During this session, the researcher started by debriefing the group on the

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activity and later played the songs for the participants to listen to. After this was done, the participants filled out the questionnaire.

The third session was the following week where participants participated in the music and lyric analysis session. The songs used in this session were “Sober” by Kelly Clarkson, “That’s why I’m here” by Kenny Chesney and “Recover” by Natasha Bedingfield, respectively. During this session, the researcher started by debriefing on what the session was about. The researcher then handed out sheets containing lyrics of the first song and played the song. While the song played, the researcher instructed the participants to pay close attention to the lyrics and to point out any line of the song that meant anything to them. After the song ended, the researcher asked participants on their thoughts and interpretations about the song. This stimulated discussions as they had varied interpretations of what the lyrics could mean. The researcher also followed up with questions on how they can relate to the songwriter in terms of their own use. This further led to more discussions. This same process was done for the next two songs.

Results

Responses to the questionnaire items were summed up across exemplars in each condition, for each participant; a total score was calculated for each participant, along with sub-scores for effectiveness, connection, and participation. A Friedman Test was carried out on mean ranks for each condition to test differences in perceived connection to others, perceived effectiveness, and participation, because of the small size and heterogeneity of variance. A one-way (i.e., music condition) repeated measures analysis of variance (ANOVA) was also conducted on effectiveness, participation and connection ratings. A Spearman rank order correlation was further conducted to see if there was a

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relationship across the three sub-scores of effectiveness, participation, and connection.

All tests were evaluated at an alpha level of .05.

The mean ranks for the three conditions differed significantly from each other for perceived effectiveness, $\chi^2(2, N = 5) = 8.40, p = .02$. The mean rank for effectiveness during lyric analysis alone was 4.56, the mean rank for effectiveness during the music alone session was 6.31 and the mean rank for effectiveness during the music with lyric analysis was 8.68. When connection was measured, the mean rank for lyric analysis alone was 5.92, the mean rank for music alone was 6.96 and the mean rank for music with analysis was 8.92. During the measurement on participation, the mean rank for lyric alone was 6.72, the mean rank for the music alone session was 6.08 and the mean rank for music with analysis was 8.56. The ANOVA on the effect of music condition on effectiveness was also significant, $F(2, 8) = 16.12, p = .002, \eta_p^2 = .80$. Bonferroni corrections post-hoc tests indicated that participants perceived the music + lyric analysis session significantly more effective ($M = 8.68, SD = .60$) than the lyric alone session ($M = 4.56, SD = 2.32$), but not the music alone ($M = 6.31, SD = 1.605$) session; perceived effectiveness for music alone and lyric alone sessions were not found to be statistically significant from each other (see Figure 1).

The mean ranks for the three conditions differed significantly from each other for perceived connection, $\chi^2(2, N = 5) = 7.60, p = .02$. Mean rank for the lyric alone was 1.40, the mean rank for music alone was 1.60 and the mean rank for music with analysis was 3.00. The ANOVA on the effect of music condition on connection was also significant, $F(2, 8) = 13.10, p = .003, \eta_p^2 = .77$. Bonferroni corrections post hoc tests indicated that responses during the music + lyric analysis were significantly higher ($M =$

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8.92, $SD = 0.83$) than responses during the lyric alone session ($M = 5.92$, $SD = 1.92$), but not the music alone ($M = 6.96$, $SD = 1.97$) session; perceived connection for music alone and lyric alone sessions were not found to be statistically significant from each other (see Figure 1).

The mean ranks for the three conditions differed significantly from each other for perceived participation, $\chi^2(2, N = 5) = 8.40, p = .02$. The ANOVA on the effect of music condition on connection was also significant, $F(2, 8) = 6.49, p = .02, \eta_p^2 = .62$.

Bonferroni corrections post hoc tests indicated that responses during the music + lyric analysis were significantly higher ($M = 8.56$, $SD = 0.75$) than responses during the lyric alone session ($M = 6.72$, $SD = 1.68$), but not the music alone ($M = 6.08$, $SD = 2.02$) session; perceived connection for music alone and lyric alone sessions were not found to be statistically significant from each other (see Figure 1).

The Spearman rank order correlation was conducted for each condition of lyric alone, music alone and music with lyric analysis, results showed a significant relationship among effectiveness, participation, and connection across the music alone and music with lyrics conditions. Specifically during the music condition, the relationship between effectiveness and participation was .90 ($p=.04$); the relationship between effectiveness and connection was 1.00 ($p=.00$); and, the relationship between participation and connection was .90 ($p=.04$). During the lyric alone condition, the relationship between effectiveness and participation was .70 ($p=.18$); the relationship between effectiveness and connection was .80 ($p=.10$); and, the relationship between participation and connection was .50 ($p=.39$). During the music with lyrics condition, the relationship between effectiveness and participation was .80 ($p=.10$); the relationship between

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effectiveness and connection was 1.00 ($p=.00$); and, the relationship between participation and connection was .80 ($p=.10$).

Discussion

It was anticipated that, overall, there would be a higher in level of perceived effectiveness, perceived connection to others, and participation in the music with lyric analysis group compared to the lyrical analysis group or the music only group. This hypothesis was supported.

It was found that when examining the effect of music therapy among a group of five participants who are attending a substance abuse group, participants rated the music + lyric analysis condition significantly higher than the lyrics alone session or the music alone session for all three perception measures: the effectiveness of the session, the connection felt to other participants, and the likelihood of participating in music + lyric sessions. It appears possible to argue that the mechanism by which the therapeutic effects music therapy affects clients may rely not just on the listening to music by itself or the analysis of lyrics alone but on the process of both listening to music followed by the lyrical analysis of the music.

Results from the correlation reveal relationships between effectiveness, participation and connection for the music alone and music with lyrics conditions only. There were no relationships in effectiveness, connection and participation for the lyric alone condition. This also supports the argument that music plays a very important role in the effects of music therapy. It also suggests that the concept of effectiveness, participation and connection to others is not necessarily a contributing factor during lyric analysis.

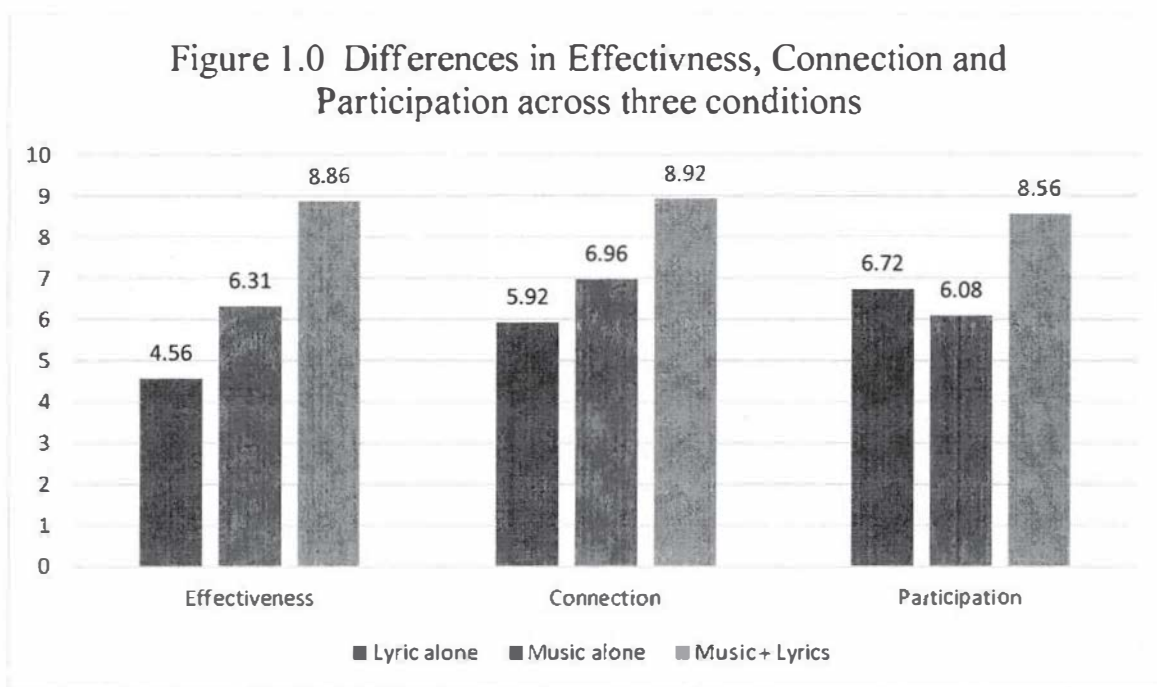
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Results corroborate the findings by Davis (2008), who examined the effects of music therapy among patients who are dually diagnosed with a substance use disorder and a mental health disorder. His results, when comparing the use of music therapy techniques of song selection and lyric analysis to a more traditional, non-music approach, was shown to be considerably higher during the music condition compared to non-music; Davis measured participants' feelings of relatedness, helpfulness, enjoyment, accomplishment, expression, insight, and being supported. The current study shows that perceptions of session effectiveness, feelings of connectedness, and likelihood to want to participate in similar future sessions are also higher when participants experience music + lyrical analyses sessions.

The dependent variables, effectiveness, participation and connection to others were measured because of the important role they play in the *universalization* process. This process was observed when the participants discussed during the lyric analysis and music with analysis conditions. Participants found that their responses and ideas were almost similar and could easily relate to the others.

Limitations

One major limitation to this study is the small sample size that was implemented, although these participants were the only individuals appropriate for this study which were available to this researcher at the time, there may have been stronger results if there were two groups available to split into control and experimental conditions. Due to this constraint, the experiment focused on one group of individuals, and a counter-balanced design was utilized.



References

- Baker, F. A., Gleadhill, L. M., & Dingle, G. A. (2007). Music Therapy and emotional exploration: exposing substance abuse clients to non-drug induced emotions. *The Arts in Psychotherapy*, 34, 321-330. <https://doi.org/10.1016/j.aip.2007.04.005>;
- Becker, B. J. (1972). The psychodynamics of analytic group psychotherapy. *American Journal of Psychoanalysis*, 32, 177-185. [doi/abs/10.1177/0533316415580500](https://doi.org/10.1177/0533316415580500)
- Blackett, P. S., & Payne, H. L. (2005). Health Rhythms: A preliminary enquiry to group drumming as experienced by participants on a structured day group therapy program for substance misusers. *Drug Education Prevention Policy* 12, 477. [/doi/abs/10.1080/09687630500342881](https://doi.org/10.1080/09687630500342881)
- Bloch, S., Crouch, E., & Reibstein, J. (1981). Therapeutic factors in group psychotherapy. *Archives of General Psychiatry*, 38, 519-526. [doi/abs/10.1177/1046496404270261](https://doi.org/10.1177/1046496404270261)
- Carson, D. K., Gertez, L. M., Donaldson, M. A., & Wonderlich, S. A. (1990). Family-of-origin characteristics and current family relationships of female adult incest victims. *Journal of Family Violence*, 5, 153-171. [doi/10.1177/1077559503257104](https://doi.org/10.1177/1077559503257104)
- Cassity, M. D. (1976). The influence of a music therapy activity upon peer acceptance, group cohesiveness and interpersonal relationships of adult psychiatric patients. *Journal of Music Therapy*, 8, 66-76. [doi=10.1.1.1013.8827](https://doi.org/10.1.1.1013.8827)
- Cevasco, A. M., Kennedy, R., & Generally, N. R. (2005). Comparison of movement to music, rhythm activities and non-competitive games on depression, anxiety and

The Effects of Music Therapy

anger in females in substance abuse rehabilitation. *Journal of Music Therapy*, 42, 64-80. doi/abs/10.1177/0305735617743103

Corsini, R. J. (1955). Mechanisms of group psychotherapy. *Journal of Abnormal Social Psychology*, 51,406-411. doi/abs/10.1177/1046496491224004

Corsini, R. J., & Rosenberg, B. (1955). Mechanisms of group psychotherapy. *Journal of Abnormal and Social Psychology*, 406-411. doi/abs/10.1177/1046496491224004

DiClimente, C., Norcross, J., & Prochaska, J. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist*, 47,1102-1114. doi=10.1.1.320.9241

Doweiko, H. E. (2002). *Concepts of chemical dependency (5th ed)*. United States: Brooks/Cole & Thomas Learning.

Dumont, F. (2008). Introduction to 21st-century psychotherapies. In R. J. Corsini, & D. Wedding, *Current Psychotherapies* (pp. 1-14). Belmont: Brooks/Cole.

Evans, W. N. (1998). Assessment and diagnosis of the substance use disorders (SUDs). *Journal of Counseling and Development*, 76,325-333.

Gallagher, L. M., & Steele, A. L. (2002). Music therapy with offenders in a substance abuse/mental illness treatment program. *Music Therapy Perspectives*, 20:117 – 22. doi 10.1080/08897070802418485.

Gardstrom, S. (1996). The Impact of group music therapy on negative affect of people with co-occurring substance use disorders and mental illness. *Music Therapy Perspectives*, 3, 116-126. doi:10.1080/08098131.2015.1084027

The Effects of Music Therapy

Heaney, C. J. (1992). Evaluation of Music therapy and other treatment modalities by adult psychiatric inpatients. *Journal of Music Therapy*, 29(2), 70–

86. doi:10.1016/j.aip.2003.08.004.

Holt, E., & Kaiser, D. H. (2009). The first step series: Art Therapy for Substance abuse treatment. *The Arts in Psychotherapy*, 36, 245-250.

Hopkins, G. L. (1998). Why people use drugs. *Vibrant Life*, 29(2), 70-86.

doi://10.1002/9781119165590

Horay, B. J. (2006). Moving towards gray. *Art Therapy in ambivalence and substance abuse treatment*, 23, 14-22. doi/abs/10.1080/07421656.2006.10129528

Hulley, S., Cummings, S., Browner, W., Grady, D., & Newman, T. (2007). *Designing Clinical Research*. Philadelphia: Williams & Wilkins. doi: 9781608318049.

James, M. R. (1988). Music therapy and alcoholism Part II: Treatment Services. *Music Therapy Perspectives*, 65-68. doi: 10.1093/mtp/5.1.65.

Jones, J. D. (2005). A Comparison of songwriting and lyric analysis techniques to evoke emotional change in a single session with people who are chemically dependent.

Journal of Music Therapy, 42, 94-100. /doi/abs/10.1177/0305735613498919

Kazdin, A. E. (2007). Mediators and Mechanisms of change in psychotherapy research.

Annual Review of Clinical Psychology, 3, 1–27.

doi:10.1146/annurev.clinpsy.3.022806.091432.

The Effects of Music Therapy

Lubrosky, L., McLellan, A. T., Woody, G. E., O'Brien, C. P., & Auerbach, A. (1985).

Therapists success and its determinants. *Archives of General Psychiatry*, 42,602-611.doi: 4004503

Miller, A. S. (1970). Music Therapy for alcoholics at a Salvation Army Center. *Journal of Music Therapy*, 7, 136-138. doi/full/10.1080/08897070802418485

Mossler , K., Chen, X. J., Heldal, T. O., & Gold, C. (2012). Music Therapy for people with Schizophrenia and Schizophrenia-like disorders. *Cochrane Database of Systemmatic reviews*, 12, 1-68. doi:10.1002/14651858.CD004025.pub3.

Murphy, M. (1983). Music therapy: a self-help group experience for substance abuse patients. *Music Therapy*, 1,52 – 62.doi:10.1080/09595230701829371.

O Callaghan, C., Dun, B., Baron, A., & Barry, P. (2013). Music's relevance for children with cancer: Music Therapists' qualitative clinical data mining research. *Social Work in Health care*, 52(2-3), 125-143. doi/full/10.1080/00981389.2012.737904

SAMHSA. (2014). *Behavioral Health Trends in the United States: Results from the 2014 National Survey on Drug Use and Health*. US: DHS.

Silverman M, J. (2003). Music Therapy and clients who are chemically dependent: a review of literature and pilot study. *The Arts in Psychotherapy*, 273-281.doi: 247201550

Silverman, M. (2007). Evaluating current trends in psychiatric music therapy: A descriptive analysis. *Journal of Music Therapy*, 44, 388-414.

The Effects of Music Therapy

- Silverman, M. J. (2010). Applying levels of evidence to the psychiatric music therapy literature base. *Arts in Psychotherapy, 37*,1-27.doi: 232388317
- T, S. (2013). From the functions of music. *Music and Psychology, 37*,279-300.doi: 23964257
- Thaut, M. (1989). The influence of music therapy intervention of self-rated changes in relaxation.affects, thoughts in psychiatric prisoner-patients. *Journal of Music Therapy, 155-166. /doi/10.1177/0306624X13511587*
- Thombs, D. L. (1999). *Introduction to Addictive Behaviors: 2nd Edition*. NY: Guilford Press.doi 02784-000:
- Uziel-Miller, N. D., Lyons, J. S., & Rowland, B. (1999). A safe haven: An innovative approach to residential treatment of substance abuse. *American Journal of Chemical Dependency Treatment, 89*(9), 1430-1431. doi/abs/10.1111/j.1521-0391.1998.tb00466
- Vourakis, C. (2005). Admission variable as predictors of completion in an adolescent residential drug treatment program. *Journal of Child and Adolescent Psychiatric Nursing, 18*(4), 161-170. doi/10.1111/j.1744-6171.2005.00031
- Winkleman, M. (2003). Complimentary Therapy for Addiction: "Drumming out Drugs". *American Journal of Public Health, 93*(4), 647-651.doi: 1447805

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Appendix - Questionnaire

Survey

For each of the following, think about the session you just experienced. For each question, circle the number that best represents your response

To what extent do you feel that issues of addiction were dealt with in this session?	Not dealt with at all	1	2	3	4	5	6	7	8	9	10	A great deal
How successful was the session in getting you to think about your own addiction?	Not very successful	1	2	3	4	5	6	7	8	9	10	Very successful
How much did this session help further motivate you to change?	I don't feel motivated	1	2	3	4	5	6	7	8	9	10	I feel very motivated
How helpful was this session in continuing to modify your addiction behaviors?	Not helpful at all	1	2	3	4	5	6	7	8	9	10	Extremely helpful
How much do you feel as though you accomplished something this session?	Accomplished very little	1	2	3	4	5	6	7	8	9	10	Accomplished a great deal

How well do you feel you were able to express yourself?	I was not able to express myself at all	1	2	3	4	5	6	7	8	9	10	I was able to express myself fully
How successful was the session in allowing you reflect on your addiction experiences?	Not very successful	1	2	3	4	5	6	7	8	9	10	Very successful
How well did you feel supported by others during the session?	I did not feel supported at all	1	2	3	4	5	6	7	8	9	10	I felt highly supported
How successful was the session in allowing you to see your addiction experiences in those of others?	Not very successful	1	2	3	4	5	6	7	8	9	10	Very successful
How much similarity did you see in your situation compared to that of others?	Very little	1	2	3	4	5	6	7	8	9	10	A lot

Overall, how successful would you say the session was in getting you to participate?	Not very successful	1	2	3	4	5	6	7	8	9	10	Very successful
How much do you feel you contributed during this session?	No much	1	2	3	4	5	6	7	8	9	10	A lot
Compared to other sessions, how much did you participate during this session?	Much less during this session	1	2	3	4	5	6	7	8	9	10	A lot more during this session

The Effects of Music Therapy

How much has this session motivated you to participate more in your addiction treatment?	Much less during this session	1	2	3	4	5	6	7	8	9	10	A lot more during this session
If you could choose, what is the likelihood of you choosing this type of session in the future?	Not at all likely	1	2	3	4	5	6	7	8	9	10	Very likely

How much did you enjoy this session?	Very little	1	2	3	4	5	6	7	8	9	10	A lot
How highly likely are you to recommend this specific type of session to someone else?	Not at all likely	1	2	3	4	5	6	7	8	9	10	Very likely

Participant: 1 2 3 4 5