

Full-Length Article

Music Therapy with Addiction and Co-Occurring DisordersVictoria P. Vega¹¹ Loyola University New Orleans, College of Music and Fine Arts, United States of America**Abstract**

Music Therapy has been shown to be beneficial for psychiatric populations. It is only natural to consider that music therapy would benefit addicted clients who often have a co-occurring mental health disorder. This article includes a review of the limited studies addressing addicted clients with co-occurring disorders, and additionally provides an analysis of the music therapy interventions utilized in these studies. The author utilized the search engines of MEDLINE PsychInfo., Ebsco, and Elsevier utilizing the key words music therapy with addiction, substance abuse, substance dependence, poly-substance, dual diagnosis, co-occurring disorders and mental illness, over a 35 year time frame and identified 7 significant studies.

Keywords: *music therapy with addiction, substance abuse, substance dependence, poly-substance, dual diagnosis, co-occurring disorders and mental illness*

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Mental health practitioners have shown increasing awareness that persons with addiction disorders have a high incidence of co-occurring mental health disorders and other comorbidity. The Center for Substance Abuse Treatment (CSAT) defines Co-Occurring Disorders (COD) as, “when at least one disorder of each type can be established independent of the other and is not simply a cluster of symptoms resulting from (a single) disorder” [1]. The National Survey on Drug Use and Health (NSDUH) estimates that close to 8 million adults have co-occurring disorders in the United States [2].

Substance abuse and substance dependence are antiquated terms. Substance use disorders is the current designation and is defined by the severity levels of mild, moderate, or severe, according to *The Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition (DSM-5). Substance use disorders occur, “when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home.” The DSM-5, further states that, “a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria” [3].

Substance abuse is known to affect cognition, executive function and behavior. To further complicate matters, genetic factors, stress, physical or sexual trauma can predispose a person for addiction to substances and the development of mental illness. Additionally, some people use substances to self-medicate to alleviate depression and anxiety. Often, persons with co-occurring disorders are more likely to be living on the street, in prison, have physical illnesses, may attempt to commit suicide and die from one or more of these factors [4].

A National Survey on Drug Use and Health (NSDUH) completed in 2014 revealed that 7.9 million adults in this country are diagnosed with co-occurring disorders. There are marked differences between men and women who suffer with addiction and co-occurring disorders [5]. The NIH has indicated that women diagnosed with an addiction disorder are twice as likely to be diagnosed with a mood or anxiety disorder than men. For a man suffering with an addiction, an antisocial personality disorder is the most prevalent co-occurring mental illness.

Literature Review

There is a dearth of research regarding music therapy treatment with substance use and co-occurring disorders. What has been reported in the literature is described in the following 7 research studies.

Bednarz and Bekkel, 1992 in “The role of music therapy in the treatment of young adults diagnosed with mental illness and substance abuse” [6] looked at the role of music-therapy with young adults with schizophrenia, schizoaffective and bipolar disorders with a concurrent diagnosis of substance abuse or dependence, Treatment consisted of using the five stages of dual diagnosis treatment 1) engagement 2) crisis

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intervention 3) stabilization 4) active treatment and 5) recovery. Music therapy interventions were matched to each treatment level to support recovery. The interventions were; 1) music discussion 2) music instruction 3) participatory group 4) music listening and 5) expressive music. The researchers concluded that music therapy aided in “engaging clients in treatment; prevented and assessed crises, developed group cohesion, enhanced social skills and coping skills, facilitated expression of recovery issues and feelings and provided assistance in relapse prevention” [6].

Gallagher and Steele, 2002 in “Music Therapy with substance offenders in a substance abuse/mental illness treatment program” [7] looked at clients diagnosed with schizophrenia, schizoaffective disorder, thought disorders, and substance abuse. Treatment consisted of a client’s music preference questionnaire during the first session so that the (client-preferred) music could be used throughout treatment. The 5-faced Happy/Sad Faces Assessment Tool [8] was used as the check-in and closure to each session. After the check-in, clients engaged in a variety of music experiences such as instrument playing, music assisted relaxation, music games, and song writing. Researchers concluded that clients experienced positive outcomes in participation quality and level and also in affect and mood.

Cevasco, Kennedy, and Generally, 2005 [9] looked at females diagnosed with substance abuse and mental illness. The study compared the effectiveness of music therapy interventions of movement-to-music, rhythmic activities and competitive music games. Movement-to-music entailed locomotor movements such as stepping, sliding and moving feet in a grapevine configuration. Non-locomotor movements, where the feet were planted included; body percussion, stretching, and Line and Latin dance movements. Movements could be executed in standing or sitting and props such as scarves, balloons and paper plates were used to enhance several movements. Rhythmic activities included African hand drumming, call-and-response, music reading using the Kodaly method, instrument passing, Orff rondos, improvisations and auditory/visual short-term memory recall. Competitive games included; name-that-tune, discrimination of rhythms in songs, playing notated rhythms and identifying topics embedded within song lyrics. The clients were assigned to 2 teams. Their correct answers were given points and the team with the most points was the winner. All music used was mostly popular music from artists such as Billy Joel, Ray Charles, and Hank Williams Sr. The 10 female participants engaged in music therapy interventions twice weekly for 6 weeks in duration. The pre-post-test measures used were the State-Trait Anxiety Inventory and the Novaco Anger Inventory Short Form. Although there were no differences in the effectiveness of one music therapy intervention over another, depression, stress, and anxiety, anger reportedly decreased as a result of the music therapy interventions. Other positive factors that occurred as a result

of the client’s participation in music therapy included positive interactions, problem solving, sober fun, group cohesion and support.

Smith (2005) in ‘Creating a “Circle of Song” within Canada’s poorest postal code’ [10] looked at the unique treatment program called the “Circle of Song” where clients diagnosed with substance abuse, mental illness and/or HIV participated in music therapy interventions focused on songwriting and recreational music jam sessions. Peer leaders were chosen by the staff members based on their dedication to the project, self-awareness, and their willingness to support peers and work with program staff. The peer leaders facilitated native aboriginal drumming, singing and story telling. All music was improvisational in nature and incorporated life issues such as addiction, illness, relationships, and mortality. The project culminated in recording a Compact Disc at a recording studio with professional musicians. The Circle of Song Project was successful in connecting the participants with the larger music community over the two-year project’s span.

Albornoz (2011) in “The effects of group improvisation music therapy on depression in adolescents and adults with substance abuse” [11], Used improvisational music therapy methods with a group of adolescents diagnosed with substance abuse and depression. Participants were randomly assigned to the music therapy and standard treatment groups or the standard treatment program. Adolescents engaged in referential and non-referential improvisation using a variety of percussion instruments. Each session began with either free discussion or free improvisation. An Artistic Music Therapy model developed by the researcher incorporated dance/movement, drama, psychodrama, poetry, or art coupled with music. After a three-month treatment period, adolescents who participated in music improvisation exhibited a significant decrease in depression as measured by the Hamilton Rating Scale for Depression.

Kaser (2011) in “Singing in the recovery model with a chronic mentally ill offender” [12], reported on a case study using a music therapy treatment model with a male diagnosed with polysubstance dependence, schizoaffective and anti-social personality disorder who was an inmate at an adult forensic mental health facility. The client first sporadically engaged in small group music improvisations utilizing drums, xylophones and various percussion instruments. Each improvisation began with silence followed by group members engaging in a non-referential improvisation. Each session commenced with a short discussion for clients to give suggestions on improving the music making and therefore their experience. As the client’s consistent participation increased, he began engaging in karaoke in the evenings. Treatment goals focused on self-integration, positive social interactions, decreasing agitation, stress and anxiety. In the reported 12-month treatment period, the client developed more meaningful peer relationships, was able to express his

emotions through music and showed negative behavior decreases in agitation and anxiety.

In a more recent study, Gardstrom and Diestelkamp in “Women with addictions report reduced anxiety after group music therapy: A quasi – experimental study” [13], looked at women with co-occurring anxiety and substance abuse disorder, engaged in instrumental and vocal referential and non-referential music improvisation. The authors focused on women, with a belief that they may be more susceptible to depression and anxiety disorders and as such are inclined to self medicate, using substances. Participants began their sessions with a musical emotional check-in. They were then given the choice to engage in Bruscia’s [14] defined composition, receptive, improvisation or recreation methods. Sessions were flexible but began with each woman musically expressing her current emotion, on a frame drum. Session closure always included verbal processing and sometimes included a musical component of singing a chant with a positive affirmation. The researchers employed a 7-point Likert scale that participants completed pre- and post-treatment to indicate their level of anxiety. Of the women who confirmed that they had anxiety before the sessions began, 84.6% indicated a decrease in anxiety post treatment. Participants’ verbalized comments during sessions that they valued music therapy treatment and that it gave them an avenue for an emotional catharsis. Additionally, the women found that they had increased self-realization, group cohesion and that participation gave them a sense of hope.

The above literature review empathizes client goals in the domains of education, social, emotional and behavior. With the exception of one study [11] all research was done with adult clients. The following table highlights these music therapy client goals:

Table 1

Educational Goals
Increase Decision Making Skills (9, 11)
Promote Healthy Lifestyle (9)
Social Goals
Increase Leisure Skills (6, 7, 9)
Increase Awareness of Others (6, 7, 10, 11, 12)
Increase Socialization Skills (6, 10, 11, 12, 13)
Relapse Prevention (6, 7, 9)
Increase Support & Group Cohesion (6, 7, 9, 11, 12, 13)
Increase Insight to Illness(s) (11, 13)
Develop Rapport & Sense of Community (9, 10, 11)
Foster Peer Acceptance (10, 12)
Values Clarification (10, 12)
Increase Receptive & Expressive Language Skills (9, 12)
Emotional Goals
Increase Self-Esteem (6, 9, 10, 11, 13)
Identify & Express Feelings (12, 13)
Process Feelings (6, 7, 13)

Decrease Anxiety (11, 12, 13)

Increase Coping Skills (7, 9)

Behavioral Goals

Increase Self-Discipline (6, 10)

Increase Anger Management Skills (12)

Increase Stress Management Skills (12)

Increase Assertiveness Skills (9, 10)

Increase Treatment Compliance & Motivation (7, 10)

Music Therapy Interventions:

In reviewing the limited music therapy literature on addictions and co-occurring mental illnesses, the most prevalent music therapy interventions are music songwriting and music improvisation. The structures for music songwriting is that clients first make a decision on a topic, compose the lyrics and then choose the genre of music to support the theme and lyrics. Another avenue for music composition is for clients to take a known song and substitute lyrics for their own that highlight important recovery themes [7]. Music improvisation varied from free improvisation to thematic improvisations on rhythm instruments. Common themes were addiction, depression, illness, love, loss and death [7, 10, 12]. For some, music improvisation was simply clients adding a rhythmic aspect to familiar tunes, while others participated in drum circles [7]. Additional structured improvisations utilized African hand drumming, call and response drumming and Orff rondos [9, 12].

The second most frequent music interventions used with this clinical population is music performance, competitive musical games and music listening. Music performance gave individuals autonomy as they were given the choice of singing, rhythmic instrument playing or performing a solo. Individuals were also given the choice of performing alone or in a group. Some performances were recorded in the clinic arena or in a professional recording studio [6, 10]. Another performance rendition is to encourage clients to perform familiar music using the Omnichord, Drum machine, guitar, choir chimes and/or rhythm instruments. Still, another is to provide clients an opportunity to participate in an evening leisure karaoke group [12]. Competitive games have also been used with this clinical population. In this intervention, clients were divided into two or more groups where music and themes are related to recovery and relapse prevention. Games were adapted from traditional games such as Jeopardy [7]. Therapeutic music listening can take on several forms. Clients can be presented with preferred music and observed for their reactions to the music and for what mood is evoked when listening to a particular selection. Varying musical genre’s can be presented and the actual musical elements and lyrics discussed with regard to positive and negative preferences. This supports the goal of accepting other’s preferences that may be different from your own. Other times, the group that mimics the group’s identity can choose music. Finally, discussions can be

facilitated to explore the effect of music on client's behavior [6].

Less common, as reported in the literature, is music instruction, movement to music and music for relaxation. Music discussion typically employs popular songs written about topics such as addiction and mental health. Another avenue to facilitate creative sharing is inviting clients to bring music and/or written prose/readings to the group and relaying their significance to peers [7]. Music instruction on percussion instruments, keyboard or guitar, can support healthy leisure skills [6, 7, 9]. Movement to music included traditional Latin and line dances to free movement. Props such as scarves and balloons were used to augment the body movements [9]. Music for relaxation is the least used music intervention reported in the literature for this clinical population. Music for relaxation can take on a major or minor role in client treatment. As a major role, deep breathing and progressive muscle relaxation can aid in stress reduction and promote a healthy lifestyle [7]. As a minor role, music relaxation has been used at a session's closure to transition clients from music therapy departure and for reflection of the session's occurrences.

Music Therapy research in addictions and co-occurring mental illness is limited. To date, there are 5 quantitative studies, one case study and one descriptive study on the subject. In reviewing the limited music therapy studies undertaken with this clinical population, all therapeutic interventions utilized music and verbal therapy. One study incorporated poetry and another movement-to-music interventions but none engaged clients in music and art interventions. I have found that using all modalities, re; music, movement, poetry and art to be extremely effective when working with persons with co-occurring disorders. I will outline how I have incorporated this integration of modalities in my practice.

Musical murals is an intervention that may provide an interesting and refreshingly reflective avenue for clients to increase decision making skills, increase group support and cohesion and identify and express feelings. Here, clients are first presented with a variety of music genres. This is determined through the clients check-in where they state their preferred musical genre and more specifically their favorite single artist and/or group. They choose one as a group and create a mural while their chosen music is playing. Another adaptation is to introduce clients to several music selections with a variety of genres and tempos. Again, the music selections are determined by the clients stated preferences during check-in. On a large butcher-block paper, clients are invited to draw symbols, pictures, or abstract pictures using different art mediums such as colored pencils, markers and paint. Verbal processing questions focus on what colors were chosen and why. Other questions focus on what symbols and feelings emerged as a result of this experience.

In the past-present-future intervention, goals based on the literature reviewed might focus on increasing insight to client's illness(s), developing a rapport and/or a sense of community. Clients are asked to choose song titles that represent their past, what they are experiencing currently, and what they hope for their future. Clients are then asked to draw pictures or use collage to express their past-present-future. They are then asked to support their art with a variety of different sounding rhythm instruments such as; hand drums, ocean drums, chimes, maracas, or rain sticks. Finally, clients decide what movements would support their art such as lyrical movements or hand jives. After each client has performed for group members, processing questions focus on what of their past would they like to delete, what would they want to keep? Additional questions are what are they accomplishing in the present and what are their hopes for the future.

Mask making is yet another vehicle to identify and express feelings and may be advantageous in fostering peer acceptance and to allow clients to process feelings about themselves. In this intervention, clients listen and engage in a lyric discussion to a song such as Cyndi Lauper's "True Colors." Clients create a mask of their true colors and couple music, sound and movement to represent their mask. Processing questions can include what masks do we wear for all to see and what mask do we hide? A further question may be, for example: "if you could create a new mask, what would it be?"

The music therapy literature is seemingly limited in research regarding addictions and co-occurring disorders. With the exception of one study, the research reflects findings in just an 8-year time span. The most recent research was 3 years ago, and yet, the incidence of use and abuse of drugs is rising [3]. The research strongly indicates that there are differences between women and men with regard to addictions and accompanying mental illness, yet, there are only two studies focusing on the needs of women and none with men. One reason that there is at least some research with women suffering from addictions and co-occurring disorders is that sometimes, women are placed in residential treatment centers where they can also live with their children. Men and women most often have different needs with regard to recovery. Therefore, it would be prudent to further investigate music therapy use for both women and men to determine the most effective treatment protocols.

This article provided some of the recommended music therapy experiences that have been utilized by music therapists working with this clinical population. The music therapy research for people with addictions and co-occurring disorders is slim. This may perhaps be due to the fact that many treatment centers do not have separate units for dual diagnosed patients. Therefore, there is a tendency for research to be reported with those with just mental illness versus those suffering from the combination of addictions and co-occurring disorders [15]. Others, mention addictions and

co-occurring disorders within their research but focus on the treatment of the mental illness or on an addiction other than substance abuse [16]. Due to the complexity of this clinical population, treatment is difficult due to their diverse needs. It is my hope that the future work in this area will continue and be reported in the literature.

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Biographical Statements

Dr. Victoria Policastro Vega is an accomplished music therapy clinician, educator, and lecturer. She received her bachelor's degree in music education from West Virginia University. Dr. Vega received her master's in music therapy from Loyola University New Orleans. Dr. Vega completed her doctorate at Temple University where she studied under Dr. Kenneth Bruscia. She is the third person to receive her Ph.D. in music therapy in the nation. She has worked at several hospitals and rehabilitation centers in the New Orleans area, working primarily in neurology. Dr. Vega has delivered several sessions and workshops at music therapy and psychiatric regional and national conferences, as well as at several regional universities. Dr. Vega's research interests are music therapy with neurologic disorders, professional burnout and personality. Dr. Vega is the recipient of the AMTA regional "Excellence in Music Therapy" award in 1998 and the "National Presidential Award" in 2006. She was coordinator of the Music Therapy Program at Loyola from 2000-2013 and currently serves the College of Music and Fine Arts as its' Associate Dean.