

Assessment of Music Therapy as a Therapeutic Intervention Method in Children

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Abstract—Music has played an important role as an art throughout human history, to reduce stress and to soothe the mind. In addition, the researcher stated that even in ancient times, music was an important source for physical, psychological and sociological development of human nature. Currently, a considerable amount of researchers state that music is one of the most important devices which is used by several therapists, psychologists and psychiatrists as a therapeutic intervention. The aim of this work is to analyse music therapy as a therapeutic intervention method in children. Firstly, this intervention method will be defined, and then the main techniques and principles of music therapy will be discussed. Finally strengths and limitations of this intervention method will be discussed by analysing some academic evidence from a variety of research studies.

Index Terms—childhood education, music, therapy, therapeutic intervention

I. INTRODUCTION

MUSIC therapy was first accepted in the 1950's as an intervention method [1], and the National Association for Music Therapy (NAMT) first defined it as: "Music therapy is the use of music in the accomplishment of therapeutic aims: the restoration, maintenance and improvement of mental and physical health" [2]. However, according to Bruscia [2] although music has been used over the last thousand years as a therapeutic method, and although nowadays it is accepted as an individual intervention method, it is still in the process of developing, because it has been an individual method for less than a century. Moreover, Bruscia [2] stated that music therapy definition of NAMT is not a universal definition, and he added the definitions can differ according to the cultures, beliefs and traditions of the places where the patients are assessed [3]. Therefore, Bruscia believes that music therapy is a combination of varied disciplines around music and therapy.

According to Berger [4], clients may develop their musical abilities by attending music therapy sessions; however, this is not a major concern of this therapy. The researcher states that the primary aim is to provide patients with an appropriate treatment method and to increase their functional ability. Therefore, music therapy is widely used in varied places such as; psychiatry clinics, prisons, special schools and child developmental centres amongst others

[3]. In previous work, De Sousa [5] stated that there are five types of intervention methods for this therapy, and the next part of this work will offer insight into these therapeutic methods.

De Sousa's first method, which is called the contemplative method, helps clients by combining music and art efficiency. Before the session starts, the therapist prepares the details about the music such as the biography of the composer or the place which the lyrics mention. De Sousa [5] stated by using data from Schmolz [6] that the aim of the contemplative method is to reduce agitation and sadness. The second therapeutic method is the combined music method, which is used for treatment of psychological and physiological disorders [5]. In addition, this method combines the treatment of music and the other therapeutic methods such as hypnosis, cerebral electro-sleep therapy and behavioural therapies. De Sousa names the third method as the executive music therapy method, which refers to individual or group performance such as playing a music instrument or singing a song. Moreover, Keen [7] stated that this method is the most appropriate one for the patients, who have to stay in the hospitals or prisons very long time.

De Sousa expresses, the creative music method is the fourth therapeutic method, which requires producing music with patients. Additionally, O'Callahn [8] believes that composing or writing songs gives the patients an opportunity to have a form of catharsis. Therefore, the researcher believes that this method might be one of the most appropriate ones for adult therapies [8]. As De Sousa [5] stated in his previous work, the fifth intervention method is the executive iatro-music therapy. According to the researcher, this method considers the treatment of children, who are diagnosed with autism spectrum disorder (ASD).

The methods of music therapy can differ according to patients and the frequency of disorders. Accordino, Comer and Heller [9] in their previous work stated that varied therapeutic methods can be used in the treatment process of children with autism. For instance, melodic therapy, rhythmic dance therapy, creative music therapy and iatro-music therapy are the most appropriate therapy methods for autistic children. When taking Accordino et al.'s [9] statements in to account, it is obvious that there is not only one common method in the treatment process of music therapy, in addition it can be said that this process can differ from patient to patient.

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It is believed that therapeutic interventions of music not only help disabled children with their social life, but also help them to learn new skills and concepts from daily life [10]. For instance, London Nordoff Robbins Music Therapy Institute explored that pentatonic music helps people to strengthen their resolution mechanism and also increase their self confidence [4]. Therefore, the institute decided to use pentatonic music in the treatment and education process of autistic children. Berger [4] expresses that music therapy is one of the most appropriate methods for children with mental disability, and this method comprises a safe and enjoyable place for these children, therefore it helps to increase their passion for learning.

The most important advantage of this method is to provide a safe place for children with mental disability, where they can play, sing and contact each other such as playing a game with their family members. In addition, it can be said that music therapy is one of the most convenient methods for development of communication skills within autistic children. Duffy and Fuller [10] state that many autistic children cannot speak meaningfully and most of them have serious communication problems. Sometimes, the speech can range from complete silence and go through murmuring, screaming, crying or strange voices which come through the [10]. However, Berger believes that music therapy is an efficacious method for these children and with the help of this technique; it is possible to make progress in the communication skills of these children [4].

Brunk [11] expresses that music therapy is an irreplaceable way to communicate with autistic children, and this communication should be formed by playing a variety of music instruments. When the tones of a well known song provide a consistent, stable, predictable and safe place; the live music prepares a comfortable place for these children with its melodies, harmonies and rhythms. Brunk [11] believes that music provides an unlimited flexibility with its melody, and sometimes these melodies are shaped by children. Thus, songs start to reflect both the emotions and feelings of children. According to Brunk [11], one of the most important therapeutic characteristics of music is that, it is a remarkable device with its sound, which captivates the attention of children. As stated by Brunk [11], "The rhythm of music provides a focal point for attention. Providing a steady beat may help a child organize his or her environment. Changing a rhythm to match a child's level of activity may help a child stay with a longer task."

Baker and Wigram [12] express that an important communication device for children who have language and speech difficulties, is to sing a song. They describe singing activities as the first step of music therapy interventions. The researchers emphasize the importance of song writing for music therapy, and they claimed that there are three main steps for song writing:

- The songs must be written in a monotonous style
- The song must have a catchy tune and memorable words and phrases, which are related to the target subject.

- The lyrics of the song must be in a simple and plain form, which is related to vocabulary of patients.

In addition, they state that the lyrics of songs must consist of logo words and all the words must relate to each other. Moreover, Baker and Wigram [12] believe that it is quite important to be able to create a story by using lyrics.

According to Berger [12], music therapy can be used as an appropriate intervention method even for the treatment process of attention deficit and hyperactivity disorder (ADHD), Down's syndrome (DS) and dyslexia amongst others. Additionally, the researcher states in his previous work that music therapy is not only an efficacious intervention for autistic children; it is also used as an alternative method for children who have ADHD and behavioural disorders. Moreover, Berger [4] expresses that it is also used as one of the most convenient methods for the development of cognitive, motor, emotional, and social skills in adults. Moreover, Pavlicevic and Ansdell [13] in their previous work stated that the music therapy can be used for treatment of several mental health disorders even in adults. For instance, learning disabilities, Alzheimer disorder, mood disorders, anxiety disorders, sleeping disorders and depression could be good examples as some of these illnesses. According to Pavlicevic and Ansdell [13], the group music therapies are the most appropriate ones for the patients with mood disorders, depression and anxiety disorders, since the group therapies give them an opportunity to create something by collaborating with each other. Thus, these patients are able to cope with their feeling, and they start to feel in safe hands again [13].

II. SOME EVIDENCE FROM ACADEMIC STUDIES

Kaplan and Steele [14] in their previous work attempted to find out whether music therapy affects the treatment process of children with autism spectrum disorder (ASD). They assessed 40 participants, who receive treatment for ASD. The researchers stated in their work that their primary goals to have an improvement in the treatment process of autistic children such as 41% in communication abilities, 39% in behavioural and psychosocial aspect, 8% in cognitive development and 7% in musical development. Kaplan and Steele [14] attempted to reach these targets in one year, and 77% of children have improved within one year with the help of music therapy.

Furthermore, Trevarthen, Aitken, Papoudi and Robarts [15] stated that music therapy has a primary role in the treatment process of autistic children such as improvement of their social interaction and emotional connection. The researcher summarized that music therapy supports the development of social behaviours, environmental conscious, vocalization and imitation and the attention span of autistic children [15].

In 2005, Kim [16] attempted to demonstrate whether or not producing music decreases the anxiety frequency of children, who take piano lessons. In this study, the researcher has assessed six participants by using an anxiety scale through "pre test post test" method. The research findings showed that there is a significant relationship between producing music and decreasing anxiety level.

Moreover, Kim added that this method can even be used for controlling the anxiety level of adults [16].

Since the 1990's, several researchers [17], [18], [19] have realised that music therapy is an appropriate treatment method for children; therefore, they started to examine significance of this relationship within adults [20]. Cassity and Cassity [17] attempted to analyse whether or not music therapy is an appropriate method for the psychiatric treatment process of adult patients. The researchers assessed 200 patients from 65 psychiatry clinics. The research findings indicated that the first patient group which attended the music therapy sessions made more progress than the second group which had standard care for their mental health problems. As a result of this, Cassity and Cassity [17] demonstrated that music therapy is an adequate intervention method for the treatment process of psychiatric disorders in adults.

In their previous studies, Talwar et al. [18] evaluated the effects of music therapy on schizophrenia. In this study, the researchers assessed 115 participants, who are treated with usual schizophrenia treatment methods. The experimental group had 12 weeks individual music therapy plus standard care. The control group only had standard care for schizophrenia. Then, the obtained results from the experimental group were compared to the control group. The research findings indicated that the experimental group made more progress than the control group, and the researchers demonstrated that music therapy can be used in the treatment process of patients with schizophrenia [18].

According to Hsu and Lai [21] music therapy is an adequate method even for the treatment process of major depression. Therefore, the researchers in their previous work attempted to find out whether or not this method can be used for treatment of depression. The researchers measured the depression level of patients, who were being treated in psychiatry clinics, by using the "Zung Depression Scale" [22] through pre test post method. The research findings supported the positive effects of music therapy and statistically significant differences between music and the control groups are indicated.

Raloff [23] stated that music therapy is an adequate method in the treatment process of sleeping problems. In his previous works, the researcher attempted to examine this hypothesis on sleep apnoea disorder (Sleep apnoea is a disorder in which people have one or more pauses in breathing while they sleep [24]). As an experimental group fourteen volunteers comprising of young people, were assessed by using music therapy over six months and eleven participants were assessed as a control group. The experimental group joined in therapy sessions six days a week by playing a musical instrument. The control group hadn't been to any sessions, they had just continued their usual treatment. The research result showed that the participants of the experimental group made progress at the end of the six months, when compared to the control group; and thus, Raloff [23] provided evidence for his hypothesis. When taking the whole of these research results into consideration, it is obvious how music therapy is an

adequate intervention technique, which supports the other treatment methods of psychology and psychiatry sciences.

III. STRENGTHS AND LIMITATIONS OF MUSIC THERAPY

According to Maranto [3], music therapy can be performed in several places such as clinics, houses, gardens, hospitals, even in prisons. The only important criterion is having a comfortable place and an appropriate music therapist. The researcher stated that patients can be assessed in their homes as an individual, or they can join the therapy groups in clinics or they can establish their own therapy group. Moreover, as the Nordoff Robbins Music Therapy School states, the therapy timing and cost plan can be organized according to patients' families [25]. When taking these statements into account, it is obvious that the accessibility of music therapy is one of the most important strengths of this therapeutic intervention.

The other strength of this therapeutic method refers to the age of the participants. According to Duffy & Fuller [10], since music therapy contains a variety of activities; such as dancing, singing and playing an instrument, these activities might be appropriately open for all ages and all children. For instance; infants can only listen to music, the children between the ages of 2-6 can sing, dance and play some of the instruments such as drums, which are easier to play comparatively, and the children from the age of seven can easily accompany all the music therapy processes such as an adult music therapy process. In addition, Duffy and Fuller expresses that mentally disabled or autistic children can accompany this therapy sessions as much as their potential allows them [10].

In literature, only a limited amount of research has been found which attempted to present the negative aspects of this therapeutic intervention. For instance, Kain et al. [26] previously stated that the "music therapist" is an affective factor in the treatment process of the whole disease. In their work the researchers attempted to find out whether or not music therapy is an effective therapeutic method on anxiety disorder. The findings of this study demonstrated, it is an effective method; however, the researchers added that the anxiety frequency of patients, who are treated by using music therapy, can differ from therapist to therapist. Although the same procedures are performed by the two anxiety groups, intergroup findings were different. Therefore, Kain et al. expressed that although music therapy can decrease the anxiety frequency, accomplishment of this therapeutic intervention will depend on therapists' abilities. Moreover, the American Cancer Society [27] stated that when music therapy is controlled by the professional therapist, it increases in many ways the life quality of patients with cancer. On the other hand, they claimed that "Musical intervention by untrained people can be ineffective or can even cause increased stress and discomfort" [27].

IV. CONCLUSION

In conclusion, this work attempted to critically evaluate music therapy as a therapeutic intervention by first defining

this method, then analysing main techniques and principles of music therapy. Finally, it attempted to demonstrate what appropriate therapeutic model it is by handling some academic studies. Over the past years, music has been used as a form of communication between people, and currently it is used by therapists as a therapeutic intervention method, which can be used for the treatment process of patients. As Maranto [3] stated in his previous work, there is no doubt that music therapy is one of the most appropriate methods which supports the functionality of other psychiatric and psychological treatment processes.

However, Bruscia [2] states that since it is a newly founded therapeutic model; it still has some unanswered questions about the therapy process and therapists such as their primary role in intervention process. According to Bruscia [2], there are several questions requiring an answer such as: should a music therapist be a clinician, musician, therapist or psychotherapist? Which music education is better; classical or popular? Should a therapist focus on being performer or an improviser? When taking these questions into account, it has been agreed that it is necessary to conduct new research to gain a better understanding of this intervention.

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