

Relation between Music and Mental Health: A Conceptual Review

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Abstract

The present paper studied with an objective of finding out relationship between music and mental health, based on reviewing documents and research studies conducted in India and abroad. It is found from various references that music has relationship with human from its existence. It is found in the Veda, in ancient Greek and Roman mythology and other religious scriptures.

Due to complexities in the society, issues of mental health become very crucial. Poor mental health is the reason of serious mental health problem, behavioral problem, even social crime. Both psychological and clinical research proved that music has relation with human emotion and mood because musical vibrations have relationship with human body and mind affecting the cognitive process in the brain and can reduce stress, anxiety, depression and other mental health related problems. Natural standard research reported that there is strong scientific evidence supporting the use of music therapy for mood enhancement, anxiety and stress relief. Studies have proved that music has the ability to bring about a change in mood, mental health emotional expression. So music has psychological relation making significant management of mental health.

Keywords: *Mental health, music therapy, psychology, cognitive, behavioral.*

Introduction:

Music is a universal human phenomenon across time, language and culture. It is believed that its origin is from primitive age through imitating natural sounds, bird's songs, calls of animals, sounds of waves etc. It can be considered a universal truth that human being has a natural instinct to respond to sound right from its evolution. Not only the human being, even animals have the same instinct. Man reacts to different types of sound in different ways. Some sounds frighten them, some kinds of sound surprise them, and some bring joy, happiness, sadness, and different mental and emotional state in them. This implies that sound has a direct impact on the mind and mood of both human and nonhuman being.

Music is a universal language and it influences all levels of human existence. It is a medium for communication, which can be both pleasant and healing experience (Sharma 2013). Ordinarily, it can be presumed that music in general is an organized sound to produce different melody to

express certain mood or emotion. The Concise Oxford Dictionary 1992, defines music as the art of combining vocal or instrumental sound (or both) to produce beauty of form, harmony, expression and emotion. Nizame et al. (2014) quoted the definition of Goodman as Music is the art of sound in time, expressing ideas and emotions in significant forms through the elements of melody, harmony and color. He used mental health professionals certain statements and point of view like “Music energizes mood,” “Music is a great stress buster,” “Music drives away blues,” “Music soothes souls,” states the impact of music on human mental health. From ancient time the relation of music with human life is prevailing. Music has been used as a means of communication and healing since the beginning of mankind (Carroll 2011).

In today’s context issues of mental health have become very crucial. We know the co-existence between sound mind and sound body. In many cases, ill mental health becomes the reason of poor physical health. According to WHO (2001), mental health disorder accounts about 12% of the global burden of diseases. Not only are the diseases, the social crime also increasing day by day which has become a great concern for the society. According to Dr. Arun Kumar Suri, this is because of deteriorating mental health. It is obvious that neither the current educational system nor health care system has helped people to maintain sound psychological health. He added that mental health is as important as or perhaps more important than physical health. Diseases of the mind can affect the body in the long run resulting in psycho-somatic disorder. Mental health is widely recognized as an important aspect of overall health and wellbeing. It is related to both subjective experiences such as thoughts and feelings, as well as observable behaviors, all three of which are now understood by modern science to be a reflection of brain function (U.S. Department of Health and Human Services, 1999).

Mental health problem is addressed and treated broadly in two methods – pharmacologically or clinically, which means through medication, and psychosocially which means through psychological counseling. Music therapy as an intervention for mental health problem has become now very popular and successful across the globe. It is a harmless method both pleasing and without any side effect. The idea of music therapy has emerged from the relation of music with mental health and general health. The present paper would review various researches to establish this relationship.

Historical Perspective of Music and Mental Health:

We find ample references of the relation of music with mental health from ancient time, prominently in the Veda (4000BC – 1000BC). According to Deekshitulu (2014), the ancient system of Nada Yoga of the time of *Tantras*, has fully acknowledged the impact of music on body and mind. In Biblical times it is said that David had played the harp to free King Saul from a bad spirit. According to ancient Greek records the great Greek philosopher and mathematician Pythagoras provided a new foundation for theorizing about the effects of music on the soul and its impact upon the emotions of the listener. Greek and Roman mythology mentions Apollo as the god of music and healing (Kent 2006). The great Greek philosopher Plato (428-347 BC) stated that music gives wings to mind and consider that music played in different modes would

arouse different emotions. Much ancient is the association between music and mind which can be dated back to the Vedic age, where attempts are made to relate the seven basic notes of music and the eight basic moods identified in the Indian drama theory (Nizame et al. 2014). From ancient time or from the evolution of music, it is considered an emotional pursuit. During 600 BC, ancient Greek priest used music to evoke specific emotions, build character and restore order between the body and soul (Carroll 2011). Plato in his book 'The Republic' expressed that "Music moulds character, when modes of music change, the fundamental laws of state change with them." He added that "Music is medicine to the soul and justice is to the soul as health is to the body. Through music, the soul learns harmony and rhythm and even a disposition to justice". (Carroll 2011). According to a Friday review of The Hindu published online on 29th March 2017, music therapy is said to have been practiced from Biblical times. Aristotle described music as a force that purified emotions. Hippocrates, father of modern medicine, was said to have been playing music to treat his mental patients. It further added that sound beyond certain decibels can send some psychiatric care. At a later stage up to the modern time the established relationship of music with physiological and psychological aspects gave birth to use of music as therapy in formal practice. It has now become popular in research, clinical practice and as a distinct branch of knowledge.

Music and Mental Health:

If we observe carefully, we find that right from the birth, human activities are to certain extend musical and rhythmic. For example, crying of a child, talking, breathing, walking etc. It is because musical vibrations have relationship with human body and mind. Deekshitulu (2014), pointed out that the power of musical vibrations is connected in some manner on all things, all beings in the universe and on all plants in existence. The human nerves incessantly vibrate in a specific rhythmic pattern and disturbance in their rhythmic vibrations is the root cause of disease. The musical notes restore their normal rhythm, thereby bringing about good health.

Music has an effect on human brain. According to Sanivarapu (2015), music has the power to quench mental anguish, and it is that form of art, which is very easily accessible and has instantaneous effects on one's mind and added that music is the language of emotion, and no art arouses emotions so deeply as music. Various clinical studies and techniques like EEG and MRI have been used to establish the effect of music on human brain. According to Dr. Suri, listening to music involves many brain activities. Research shows that music has significant effect on our body and mind. Bansal (2002) stated that the impact of music could be easily gauged on emotions and thereby on mind, it can be used as a tool believed to control the physiological, psychological and even social activities of the patients. Puja Sharma (2013), in a blog Music Body and Mind, stated that music stimulates pituitary gland, whose secretions affect the nervous system and the flow of blood. She added that listening to music helps control negative aspects of our personalities like worry, bias and anger; it can help cure headache, abdominal pain and tension.

Gupta et al. (2005) conducted an experimental study to find out psychological response to instrumental music with the help of great flute maestro Pt. Hari Prasad Chaurasia playing flute in Raga Desi-Todi to the samples for 30 minutes for a period of 20 days for assessment of depression and four components of anxiety. The pre and post test scores showed a significant decrease in these psychological traits. Different types of music leave different types of neurological and biological impacts affecting the mental health. Ulbricht (2013) in her blog remarked that types of music differ in the types of neurological stimulation they evoke. For example, classical music has been found to cause comfort and relaxation while rock music may lead to discomfort.

Various researches found out that music has a capacity to affect the cognitive process in the brain and can reduce stress, anxiety and other mental health related problems. Thoma, M. V. et al. (2013) referred a number of research in his meta-analysis, 'The Effect of Music on Human Stress Response' and quoted that as listening to music has the capacity to initiate a multitude of cognitive processes in the brain, it might be assumed that music also influences stress-related cognitive processes and, as a consequence, physiological responses. Previous investigations found reductions in perceived levels of psychological stress, increased coping abilities, or altered levels in perceived relaxation after listening to music in the context of a stressful situation. He added that another line of research has focused on the effects of music on anxiety, which may be considered an adaptive response to the experience of stress. Given that music listening can trigger activity in brain regions linked to the experience of (intense) emotions, listening to music might also modulate anxiety levels induced by the experience of stress. Indeed, a decrease in anxiety after listening to music is the most consistent findings reported in field studies with patients and laboratory-based studies. On the other hand Srivastav et al. (2006) found out that psychological effect of music, the most pronounced ones are on the behavior and temperament of the individual. Emotions, feelings and thoughts have been reported to be greatly influenced by music listening. Emotional experience derived from music has a powerful effect on the formation of one's moral and intellectual outlook. Music activities enhance imagination and creative thinking. Chan et al. (2011) in his article referred to the theory of Music, Mood and Movement (MMM) to explain how music might affect human psychological response, which proposes that music produces the psychological response of altered mood. The result of another study by Kotwal et al. (1998) indicated that the background Indian Classical Music is efficacious in reducing psychological distress during a gastroscopic examination and suggested that music could be applied to other medical situations as well, which tend to generate undue psychological stress and anxiety.

Nizame et al. (2014) in his review paper focused on involvement of various brain regions in different aspects of music processing. Reflecting on the relationship of music and the brain he stated that history of the relation between music and the mind is skewed to the effects of music on one function of the mind – emotion. He mentioned that human nervous system processes music in different ways – perceptual processing, emotional processing, autonomic processing,

cognitive processing and behavioral or motor processing. These statements clearly establishes the relationship of music and mental health. There is strong scientific evidence supporting the use of music therapy for mood enhancement and anxiety and stress relief according to Natural Standard research (<http://www.naturalstandered.com/databases/hw/all/patient-musictherapy.asp>). Labbe et al. (2007) made a study and result indicated that listening to self-selected or classical music, after exposure to a stressor, significantly reduces negative emotional states and physiological arousal compared to listening to heavy metal music or sitting in silence. In a study conducted by Seinfeld et al. (2016) found a significant increase in state anxiety was found between pre and post assessment in the silence group, but not in the music group, indicating that post stress recovery was faster in the musical group, which suggest that music can ameliorate the subjective anxiety produced by fear of heights.

Music as Alternative Cure of Mental Health Problems:

Using music as an alternative cure has a long history. It is known that music has a close association with human life and their emotional expression, healing and communication. Music is probably the oldest tool in medicine and has recently received considerable attention, allowing music to be studied with the same methodological rigor as conventional interventions. (Babikian et al 2013). Today, music therapy is widely used as a cure for both physical and psychological problems as an alternative to clinical therapy. Dr. Suri is of the opinion that like body the mind also needs regular cleaning. Mind pollution is more dangerous than air pollution, water pollution or food adulteration. Our classical music can act as soap, deodorant and perfume for the mind and listening to classical music regularly and contemplating on the meaning of song can bring about a transformation in our personality.

Osmer (2006), in his paper *Raga Chikitsa and Raga-Ragini Vidya*, highlighted the use of music for the purpose of healing. He pointed out the role of western research in understanding the effect of music on human mind and stated that in general western music therapy techniques seem to fall into categories of using sympathetic vibrations and / or harmonics to achieve desired mental state of activity or to use the emotional responses of musician the mind as a form of therapy or to explore the relationship of the ear, brain and mind. Some Indian ragas when sung well said to have caused rains, eased disturbed persons, and even led to crops and cattle giving a better yield. Bagchi (2003) even stated that Saint Musician Thyagaraja is said to have brought a dead person back to life with Bilahari Raga, and Muthuswamy Dikshitar cured stomach aches with his Navagraha Kritis. Apparently some ragas are earmarked for the nine emotions or 'Navarasas'; some ragas, claim musicians, have healing effects as these nine emotions rule our body and mind.

Puja Sharma (2013) mentioned some of the ragas which have therapeutic impact on mental health, such as raga *Malhar* pacify anger, excessive mental excitements and mental instability; raga *Saurat* and raga *Jaijaiivanti* have also been found effective in curing mental disorders and calming the mind; raga *Hindola* helps sharpening the memory and focusing mental concentration. Different researchers have given account of how classical music has impact on

improving mental health and used as therapy. Sarkar et al. (2015) has mentioned three key areas of therapeutic use of music. These include i) pain, anxiety and depression, ii) mental, emotional and physical handicaps, iii) neurological disorders and mesothelioma. Sairam (2004) found out that ragas could work as a complementary medicine by stimulating the moods and controlling the brain wave patterns. According to a music review article published in The Hindu dated 29/05/2017, it is said that thirteenth century Arab hospitals had music rooms attached where mental trauma of soldiers in war fields was addressed by performing music before them. Quoting Dr. Clive Robins and Dr. Oliver Sacks it says that if you can use music carefully, you can reach into child's potential development; it is a great tool of power in managing neurological disorders; music organizes cerebral function and this raga based approach broadly involves applications of musical pieces with a specific emphasis on *swara* patterns, embellishments and appropriate rhythms (<http://www.thehindu.com/features/Friday-review/music/healings-with-music/article3283502.ece>). The following is a brief account of different ragas having curative effect on various mental health related problems.

Ragas	Mental Health Related Problems
Bhimpalasi	Anxiety
Darbari	Insomnia, stress
Bageshree	Insomnia
Asavari	Lack of confidence, psychological disorders
Kafi	Tension, depression, anxiety and absentmindedness
Bilhari	Depression
Darbari Kanara, Khamaj and Puria	Tension
Punnagavarali and Sahana	Anger and Inner violence

Table 1: Ragas and their curative effects on mental health problem:

Source: Dikshitulu, B. (2014) and Sarkar, J. & Biswas, U. (2015)

Discussion:

The purpose of this study was to review the previous investigations and research studies and find out the relationship between music and mental health. The study revealed that music is associated with man right from the beginning of history of mankind with a relationship with body mind and various activities. Music is considered as expression of emotion. Bhadhuri (2002) in his paper observed that certain ragas do have a tendency to move the listeners, both emotionally as well as physically. An involuntary nod of the head, limbs or body could

synchronize with lifting tunes when played. This implies that it has the ability to regulate emotions. Sanivarapu (2015) recorded from various researches that music has a calming effect on listeners mind and healing effects on various psychiatric ailments. It also provides creative opportunities for self-expression. Expressive music activities enhance the positive self-image and improve coping stress. Researchers across the world came out with their findings that music has an impact on human body mind and spirit. Levitin & Tirovolas (2006) reported that use of music gives the clients/patients holistic pleasure and experience of cohesion in their mind and body, and provided them with general sense of well-being. Studies have proved that music has the ability to bring about a change in the mood, mental status and emotional expressions. Pathak (1969) stated that depending on its nature, a Raga could induce or intensify joy or sorrow, violence or peace, and it is this quality which forms the basis for musical application. It is observed that both human and non-human instinctually respond to any sound around in different manner. Different types of music in terms of its tune, rhythm and lyric gives different impact on brain affecting the mental health. Music has a physiological base to influence the brain and biological stress response domain. In a study, Jane (2005) observed that Indian music rhythmically vibrates the tissue membranes of the ear and, relaxes the nerves and muscles beneath the temple and in the brain; as a result of which the sensory and motor systems are energized and activated.

During last two decades, researches brought about evidences of successful musical intervention in psychological wellbeing in both clinical and non-clinical set up and found out that singing, listening, improvising, composing and other musical activities improve mental health condition of people suffering from mental health problem. This fact establishes the positive relationship between music and mental health.

Conclusion:

Music is not only a means of entertainment, but it has a reasonable impact on the mind body and spirit of human being. It is a universal global phenomenon that has an emotional, psychological and physiological relation with people signifying management of mental health. History suggests its use from human existence. Researchers, psychologists and doctors have been successfully using music for research and psychological intervention for people suffering from mental health problem. Since human being in general is associated with music consciously or unconsciously, and it has a therapeutic property, it can be used for better management of mental health. There is scope of further research to establish the relation between music and mental health to come out with some concrete suggestions.

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