

An Achievement of Music as a Therapeutic Tool

Abstract

Music is a powerful tool which can, among other things, shape emotion, influence moods and provide a cool atmosphere. In this materialistic age music has become commercial in various environments: spas and massage facilities, hotels, lounge bars, some shopping malls etc. It make customers feel good and healthy. Relax daily is a growing portfolio of soothing music for the mind, body and soul. The origins of studying the mind and music can be attributed to the Otolaryngologist, Alfred A. Tomatis believed that music serves as a tool that heals many of the physical illness of his patients.

Keywords : Music, Therapy, Remedy, Stress

Introduction

There has been a hoary tradition in India of music as a holistic therapy for human ills, with emphasis on a spiritual dimension including behavioural psychology. Studies indicate that the ability to understand emotional messages in music starts early, and improves throughout child development. Studies investigating music and emotion in children primarily play a musical excerpt for children and have them look at pictorial expressions of faces. These facial expressions display different emotions and children are asked to select the face that best matches the music's emotional tone ¹.

An infant is often exposed to a mother's speech that is musical in nature. It is possible that this motherly singing allows the mother to relay emotional messages to the infant ². Infants also tend to prefer positive speech to neutral speech as well as happy music to negative music. It has also been posited that listening to their mother's singing may play a role in identity formation. Findings showed that music was good for develop knowledge of emotions during childhood³

Music may not only bring to light new emotions, but connect listeners with other emotional sources. Music serves as a powerful cue to recall emotional memories back into awareness. Because music is such a pervasive part of social life, present in weddings, funerals and religious ceremonies, it brings back emotional memories that are often already associated with it. That is why Indian classical music is referred to as Therapeutic Yoga or Nada Yoga which means sweet and melodious sound ⁴. This concept, has got corroboration in the 'String Theory'⁵ of Modern Science, which postulates that the vibrations of the ultimate particles called Music is universal, as it has a universal appeal. William Shakespeare wrote that those 'not moved by the concord of sweet sounds' were fit for 'treasons, stratagems and spoils'.⁶The power of music was tellingly described by poet William Congreve thus:
'Music hath charms to soothe a savage beast. To soften rocks or bend a knotted oak.

Music promotes a sense of well-being and happiness in as well as in animals⁷

Scientifically, it is known that specifically structured sounds such as in a raga stimulate the brain cells. The characteristic pattern of notes in every raga evoke a specific emotion, because the raga vibrates at a certain level, depending upon; (a) its Swaras (b) its Arohana and Avarohana (the ascent and the descent of the swaras in the scale) (c) its Jeeva swaras, which are emphasized while singing or playing the raga; and (d) the kind of ornamentations used. It is well known that a mellow music in the background helps concentration in studies. It is known to reduce fatigue at work, as evidenced by farm workers, boatmen and loadpullers singing happily in unison while working. By bringing the vibratory levels the physical, mental, emotional, and spiritual dimensions of our existence to ideal, balance levels, music boost the natural calming and healing the body – senses- mind- intellect- spirit complex.

Specific emotions are also supposed to be induced by individual ragas. By way of examples, among Carnatic ragas, Anandbhairavi is



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known to reduce high blood pressure. This is mentioned in a manuscript titled 'Raga Chikitsa' originally found in the Saraswati Mahal Library in tanjore (now Tanjavaur), which dealt with the various ragas that could be used for curing specific ailments.

Among Hindustani ragas, it is believed that Kafi evokes a cool, soothing emotion; Pooriya Dhanasri stabilizes the mind; Mishra Maand is refreshing, Bageshri induces a feeling of calmness; Bhupali cools down high blood pressure; Bahar relieves insomnia and Chandrakauans helpful for heart ailments.

The first technique for Stress Relief is Dr. Harry Henshaw's⁸ relaxation music, relaxing music and sleep music. The second holistic treatment technique for relieving stress has to do with using positive affirmations and relaxation music. The third holistic treatment technique for stress relief involves the use of hypnosis or hypotherapy recordings. All these techniques are proven alternative therapies that have repeatedly worked to help people live life in a more positive, healthy manner and as a result relieve stress. Some of the measurable effects on the body of using relaxation music and sleep music are lowering blood pressure, regulating heart rate and breathing, improving health. Some of the psychological effects of using relaxation music and relaxing music are feeling calmer and serene, more peaceful and much more relaxed⁹.

Music is a powerful tool which can, among other things, shape emotion, influence moods and provide a cool atmosphere. In this materialistic age music has become commercial in various environments: spas and massage facilities, hotels, lounge bars, some shopping malls etc. It make customers feel good and healthy. Relax daily is a growing portfolio of soothing music for the mind, body and soul.

Music has always been known to affect listeners. There are countless of examples demonstrating the affect of music, and one of the oldest example occur in the Bible with king Saul asking David to play his harp in order to relieve him of his evil spirits. Music has the uncanny ability to making anyone either cry or laugh, and during the last twenty years, there has been a flurry of research to prove that music might in fact be used as a booster to one's mental prowess. Since the coining of the term "Mozart Effect,"¹⁰ there has been a serious attempt to understand the relationship between music and the mind, and to prove that listening to music can make listener smarter. Researchers use neurobiology, as the medium to discover the intricate relationship of music and the mind.

The origins of studying the mind and music can be attributed to the Otolaryngologist, Alfred A. Tomatis believed that music serves as a tool that heals many of the physical illness of the patients. For Tomatis, the ear works as machine that creates electric message for the brain, and the origins of these messages come from from the sounds the ear hear. From this theory about the ear, Tomatis developed the "Tomatis Method,"¹¹ which suggests listening to music with high frequency sounds in order to force the ear to produce

positive messages for the mind. Using the work of Tomatis as its foundation, the theory of the Mozart Effect emerged.

In 1993, three scientists Frances Raucher, Gordon Shaw and Katherine Ky emerged with the results of their study which showed that listening to Mozart increased participants IQ by 8 to 9 points. After listening to Mozart, the test subjects all improved their spatial reasoning abilities for 15 minutes, and this increased converted into iq increases. It is from this study, that the term Mozart Effect became popularize and used by companies in order to sell Mozart CDs to mothers wanting to make their children smarter.

Music therapy is well established in the West as a profession, with notable successes, but in India the use of music is mainly to treat handicapped persons and children with autism, learning or communication difficulties or emotional or behavioural problems such as aggressive behavior, the goal generally being improved social communication and social acceptability. The emphasis on harmony in the Western music and melody in the Indian music may have contributed to this difference in approach. Music should be pleasing to the ears. It elevates the entire personality to the cosmic healing forces, leading to the higher mental concentration and mental peace, better physical health and physical efficiency. And the ultimate reward is indeed the spiritual growth that music helped.

There are numerous studies placing people under PET scan while they listen to music. These PET scans prove that the left side of the brain in most people excels at processing rapid changes in frequency and intensity. The PET scans showed greater movement on the left side of the brain during fast tempo music. The scan also detected movement on both left and right side, which implies that both sides are necessary for the brain to analyze the music entirely. The front part of our brain, (frontal cortex) when working memories are stored, surprisingly showed a large amount of movement during the scans. This implies that memories are being resurfaced by the music. This movement in the frontal cortex might explain the emotions attached often to music. These movements that occur throughout the brain of the listener explain the increase the spatial reasoning in the 'Mozart Effect' because movement in the brain indicate an increase in brain activity, which in turn leads to a great spatial reasoning. This would also explain why the 'Mozart Effect' lasts for such a short time. Once the music ends, the stimulus for the creation of these harmonies leading of the movements in the brain as shown by the PET scans.

Music have always affected us, and now for the first time, there is strong, concrete data demonstrating how that happens. Music appeals to have the same power over us as any drug, but why? The current research attempts to explain the power of music, but what is the evolutionary process or reasoning behind it. Even the current research on the power of music need to be precise, there are a large number of studies that could not replicate the findings of Raucher,¹² Gordon Shaw¹³ and Katherine Ky.¹⁴ For

the time being, what is certain is that music does alter our brains by inciting hormonal activity, and this brings us one step closer to unlocking the power of music. Researchers have documented that listening to music can be effective for reducing pain in high-anxiety persons. Investigators discovered music can be used as a distraction and is effective among those who can easily become absorbed in cognitive activities. In the study, researchers from the 'University of Utah Pain Research Center'¹⁵ evaluated the potential benefits of music for diverting psychological responses to experimental pain stimuli. Accordingly, the key to successful pain control from this method would be the diversion task.

One hundred forty three subjects were evaluated for the study: They were instructed to listen to music tracks, follow the melodies, and identify deviant tones. During the music tasks, they were given safe, experimental pain shocks with fingertip electrodes. The findings showed that central arousal from the pain stimuli reliably decreased with the increasing music-task demand. Music helps reduce pain by activating sensory pathways that compete with pain pathways, stimulating emotional responses, and engaging cognitive attention. Music, therefore, provided meaningful intellectual and emotional engagement to help reduce pain. A surprising finding was that the music helped study subjects with high levels of anxiety about the pain. This finding was contrary to the initial prediction that anxiety would interfere with a prediction that anxiety would interfere with a subject's ability to become absorbed in the music listening task. The discovery that anxiety appears to aid engagement with a distraction is considered a new finding. Further, this implies that these personality characteristics should be considered when recommending engagement strategies for pain relief. Emotions are known to create physiological or bodily changes in a person, which can be tested experimentally. Some evidence shows one of these changes is within the nervous system.¹⁶ Arousing music is related to increased heart rate and music tension; calming music is connected to decreased heart rate and music tension, and increased skin temperature. Other research identified outward physical responses such as shivers or goose bumps to be caused by changes in harmony and tears or lumps-in-the-throat provoked by changes in melody.¹⁷ Researchers test these responses through the use of instruments for physiological measurement, such as recording pulse rate.

The expressive qualities of music have been studied for years, the foremost of which has been the expressions of emotions. Studies have shown that music is not emotionally expressive but that there is high agreement among listeners about what type of emotions is being expressed.

The ability to perceive conveyed emotions is said to develop early in childhood, and improve significantly throughout development.¹⁸ There are two schools of thought on how we interpret emotion in music. The Cognitivist approach argues that music simply displays an emotion, but does not allow for the personal experience of emotion to the listener.

Emotivists argue that music elicits real emotional responses in the listener.¹⁹

Music may not only bring to light new emotions, but connect listeners with other emotional sources. Music serves as a powerful cue to recall emotional memories back into awareness. Because music is such a pervasive part of social life, present in weddings, funerals and religious ceremonies, it brings back emotional memories that are often already associated with it. People are also known to show outward manifestation of their emotional states while listening to music. Studies using facial electromyography (EMG) have found that people react with subliminal facial expressions when listening to expressive music. In addition, music provides a stimulus for expressive behavior in many social contexts, such as concerts, dances, and ceremonies. Although these expressive behaviours can be measured experimentally, there have been very few controlled studies observed this behavior.

Music-induced emotions have shown promise as a therapeutic tool for various ailments. There is disagreement about whether music induces 'true' emotions or if the emotions reported as felt in studies are instead just participants stating the emotions found in the music they are listening to further research into a person's psychological and physiological responses to music should be determined in order to further develop our ability to use music as a therapeutic tool.²⁰

According to research, music therapy sessions may have the ability to help drug users who are attempting to break a drug habit. After a music therapy session, drug users reported being able to better feel emotions without the aid of drug use. Music therapy is also very pragmatic for people staying in a hospital for longer days due to illness. It motivates their morale and supports speedy recovery.

Music may serve as an emotional outlet for people with autism. While other avenues of emotional expression and understanding may be difficult for people with autism, music may provide those with limited understanding of socio-emotional cues a way of accessing emotion.²¹

Music is commonly used as a sound track for yoga classes. Whether it is East Indian Classical, Kirtan, ambient or Rock and Roll, many yoga teachers feel that music helps to bring their students to a Yogic frame of mind. Even for a home practice, many yogis prefer to have music playing in the background.

In my opinion, the music can reduce the number of mental distractions we experience. During yoga, music can serve to focus the wandering mind that is jumping around from thought to thought. Our consciousness, while not completely absorbed by yoga, has at least become somewhat more still. Our attention divides between yoga and the music.

In today's culture, with multitasking as a way of life, anything that reduces the number of items competing for our attention should be considered beneficial, using that point of view, a musical background really works out as an antidote and therapy.²²

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