

Effect of different types of Music on altering mood and relieving stress

Pooja*

*Dept. of Music, Rai Bahadur Multani Mal Modi Govt. Sen. Sec. School (3882),
Mahendergarh-123031*

**Author for correspondence: poojamoudgil2001@gmail.com*

Abstract

Music has long been recognized as a powerful medium for influencing emotions and mental well-being. Nowadays, the level of stress in youth is very high. For relieving stress, youth are taking the help of drugs which makes them addicted to drugs. Music can act as an alternative measure to relieve stress. This paper explores how different genres and types of music can impact mood and relieve stress. Through a review of existing literature and experimental studies, we examine the mechanisms by which music affects the brain and emotional state, the effectiveness of specific genres in alleviating stress, and the potential for music to be employed as a therapeutic tool.

Keywords: Stress, Mood, Music, Classical Music, Pop Music, Instrumental.

1. Introduction

Music is a universal aspect of human culture that transcends language and geography. Its ability to evoke emotions, memories, and even physical responses has made it a subject of interest in psychology and neuroscience. Stress, a common factor in modern life, can lead to numerous mental and physical health problems. This study aims to investigate the relationship between music and stress relief, focusing on how different types of music influence mood and reduce stress levels.

The rising trend of youth in India turning to drugs for stress relief highlights a critical social and mental health issue. Stressors such as academic pressure, unemployment, societal expectations, and personal challenges contribute to this behavior. Drugs may offer temporary relief but lead to severe long-term physical, emotional, and social consequences.

To address this issue, awareness campaigns emphasizing healthy stress management techniques, such as music therapy, physical exercise, mindfulness, and counseling, should be promoted. Access to mental health support systems must be strengthened to provide young individuals with sustainable coping mechanisms, reducing their reliance on harmful substances.

This paper focuses on the role of different types of music in relieving stress in youth. Different age groups of youth prefer different types of music. But one thing is common in all types of music that is they relieve stress by releasing Dopamine and Cortisol hormones associated with pleasure and stress biomarkers.

2. Mechanisms of Music's Influence on Mood and Stress

Music interacts with the brain through complex pathways, particularly involving the limbic system, which governs emotions. Key mechanisms include the release of mood altering hormones like dopamine and Cortisol.

2.1 Dopaminergic Activation: Listening to music can stimulate the release of dopamine, a neurotransmitter associated with pleasure and reward (Salimpoor et al., 2011). Dopamine is a neurotransmitter that plays a critical role in various physiological and psychological functions. It is often referred to as the “feel-good” hormone due to its association with pleasure and reward mechanisms. A few key effects of Dopamine on the body are, i) *Mood and emotional regulation*: Dopamine contributes to feelings of pleasure, motivation, and satisfaction. Imbalances can lead to mood disorders such as depression or anxiety, ii) *Cognitive functions*: It aids in focus, learning, and memory by enhancing neural communication in the brain, Iii) *Motor control*: Dopamine is vital for coordinating movement, with deficiencies linked to disorders such as Parkinson's disease, iv) *Reward system*: Dopamine reinforces rewarding behaviors, influencing habits and addictions, v) *Cardiovascular Function*: It helps regulate blood flow and influences heart rate, vi) *Hormonal regulation*: It modulates the release of other hormones, such as prolactin, impacting reproductive health, vii) *Stress and coping mechanisms*: Dopamine can reduce the perception of stress, acting as a buffer during challenging situations.

2.2 Cortisol Reduction: Cortisol is another mood-altering hormone-like dopamine that changes the mood of the therapist. Studies show that calming music can reduce cortisol levels, a biomarker for stress (Thoma et al., 2013).

2.3 Heart Rate and Breathing Regulation: Rhythmic and slow-paced music can align with and regulate physiological parameters like heart rate and respiration, inducing relaxation (Bernardi et al., 2006).

3. Results and Discussion

3.1 Effects of Different Music Genres

a) Classical Music

Often characterized by its soothing melodies and lack of lyrics, classical music has been widely studied for its stress-reducing effects. Research indicates that listening to compositions by Mozart or Bach can lower blood pressure and reduce anxiety (Linnemann et al., 2015).

b) Nature-Inspired Music

Music that incorporates sounds from nature, such as rain, water fall or bird songs/whispers, can promote relaxation and improve focus. The natural music created by music in forest, farms, river banks, ponds, lakes and sea shore are particularly effective in creating a calming ambiance and reducing mental fatigue (Loewy, 2015).

c) **Pop and Upbeat Music**

Upbeat music with positive lyrics can enhance mood and increase energy levels. However, its impact on stress relief is less consistent, depending on personal preferences (Saarikallio and Erkkilä, 2007).

d) **Instrumental Music**

Ambient and instrumental tracks are effective in reducing distractions and calming the mind, often used in meditation and yoga practices (Pelletier, 2004). Instrumental music is created using a variety of instruments, each producing unique sounds and tones. Here's a classification of different types of instrumental music instruments: i) *String instruments*: These instruments produce sound through the vibration of strings. Examples: Violin, Viola, Cello, Double Bass, Guitar, Harp, Sitar, Banjo, Mandolin. ii) *Wind instruments*: Sound is generated by the movement of air through tubes. Examples: Flute, Clarinet, Oboe, Bassoon, Saxophone, Piccolo. iii) *Brass instruments*: These rely on the vibration of the player's lips on a mouthpiece. Examples: Trumpet, Trombone, French Horn, Tuba, Cornet. iv) *Percussion instruments*: Percussion instruments produce sound by being struck, shaken, or scraped. Examples: Drums, Tambourine, Marimba, Xylophone, Triangle, Congas, Tabla. v) *Keyboard instruments*: These instruments use keys to produce sound, often combined with strings or pipes. Examples: Piano, Organ, Harpsichord, Synthesizer, Accordion. vi) *Electronic instruments*: These rely on electronic sound generation and manipulation. Examples: Synthesizers, Drum Machines, Theremin, Electronic Keyboards. vii) *Traditional and folk instruments*: These are specific to cultural and regional music traditions. Examples: Didgeridoo (Australia), Dhol (India), Balalaika (Russia), Koto (Japan), Bagpipes (Scotland).

e) **Heavy Metal and Rock**

Contrary to stereotypes, some studies suggest that heavy metal can have a cathartic effect, helping listeners process negative emotions and achieve emotional release (Sharman and Dingle, 2015). The stress-relieving properties of these genres are highly subjective.

f) **Cultural and Traditional Music**

Music rooted in cultural or spiritual traditions, such as Indian ragas or Gregorian chants, has been associated with meditative and healing properties (Rajan, 2014).

3.2 Factors Influencing the Effectiveness of Music

- a) **Personal Preference:** Individual taste significantly impacts how music affects mood and stress.
- b) **Context and Environment:** The setting in which music is heard can enhance or detract from its effectiveness.
- c) **Duration of Listening:** Short bursts of music may improve mood, while extended sessions are often needed for significant stress reduction.
- d) **Volume Levels:** Moderate volume tends to be optimal; excessively loud or soft music can be counter or over-productive.

3.4 Practical Applications

3.4.1 Therapeutic Settings:

Music therapy is increasingly used in clinical settings to address anxiety, depression, and PTSD (Bradt and Dileo, 2014). Personalized playlists can be designed to meet individual emotional needs. The therapist can finalize their playlist depending on which types of music he enjoys the most. But the playlist should be selected in such a way that it should have calm and soothing music. The sound of music should also be kept low. A high volume of music creates noise and that has a negative effect on the mind and body.

3.4.2 Workplace and Education:

Incorporating background music in offices and classrooms has been shown to improve focus and reduce stress (Hallam et al., 2002). The workplace to listen the music for relaxing mind and body should be selected in such a way that there should not be any disturbance.

3.4.3 Everyday Stress Management:

Developing playlists for relaxation or motivation can be a practical strategy for personal stress relief. Different playlists can be selected for morning, afternoon, and evening time. A listener should be very calm, relaxed, and mentally prepared to attentively listen to the music.

4 Conclusion

The type of music a person listens to can profoundly affect their mood and stress levels. While classical and instrumental music often emerge as reliable stress relievers, the subjective nature of music's impact highlights the importance of personal preference. The quality, pitch, and nature of music affect the behavior of the listener. Different types of music release different levels of hormones which swing the mood of the listener. Personalized playlists can be designed to meet individual emotional needs. The therapist can finalize their playlist depending on which types of music he enjoys the most. But the playlist should be selected in such a way that it should have calm and soothing music. The sound of music should also be kept low. A high volume of music creates noise and that has a negative effect on the mind and body. The workplace to listen the music for relaxing mind and body should be selected in such a way that there should not be any disturbance. Future research should focus on the long-term benefits of music-based interventions and the potential integration of music therapy into mainstream healthcare.

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Conflict of Interest Statement

It is hereby declared that there is no conflict of interest in writing this manuscript,

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