

Journal of Advanced Zoology

ISSN: 0253-7214 Volume 44 Issue S7 Year 2023 Page 971:976

Impact Of Music Therapy On Stress Management

Vivek Kumar Jha^{1*}, Chandra Bhushan Pathak², Ratnesh Kumar Sharma³, Anshuman Pandey⁴

^{1*}Professor (Speech Pathology and Audiology), Department of Audiology and Speech-Language Pathology, Faculty of Allied Health Sciences, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana India.

*Corresponding Author: Dr. Vivek Kumar Jha *E-mail: jhavivek98@yahoo.com

Article History	Abstract
	Music, as an art form holds a special place in human culture. It encompasses a wide range of sounds and melodies that evoke emotions, thoughts, and memories. Traditional philosophies define music as tones ordered horizontally (as melodies) and vertically (as harmonies). Music theory, within this realm, is studied with the presupposition that music is orderly and often pleasant to hear. Music Therapy is the clinical & evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. Studies suggest that those undergoing music therapy experience reduced anxiety immediately after the session, which indicates that music therapy could be a convenient way to reduce symptoms quickly. Studies also suggest that music therapy can improve symptoms of depression, with those undergoing music therapy along with standard treatments for depression such as talking therapy improving more than people who only received standard therapy. Chen, X., Wei, Q., Jing, R., & Fan, Y. (2021) conducted a study on cancer patients to investigate the effects of music therapy on stress and quality of life. The results indicated that music therapy interventions significantly reduced stress levels and enhanced the overall quality of life for cancer patients. In a study conducted by Shirsat, A., Jha, R. K., & Verma, P. (2023), researchers explored the impact of music therapy on individuals with Alzheimer's disease. They found that music therapy could be a powerful treatment strategy, improving cognitive function and emotional well-being in Alzheimer's patients ² . The importance of consulting qualified music therapists when implementing music therapy as a stress management tool will be emphasized. The findings and insights from this study, underlining the significance of music therapy in stress management for man and women are significant. The role of music therapy in fostering social connections and providing support wil
CC License CC-BY-NC-SA 4.0	(Keywords: Music therapy, Alzheimer's disease, Stress, Anxiety, Quality of life, Depression)

^{2,3}Assistant Professor (Speech Pathology and Audiology), R.P Institute of Speech and Audiology, Bastara, Karnal, Haryana, India.

⁴B. ASLP Interns, Department of Audiology and Speech-Language Pathology, Faculty of Allied Health Sciences, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana, India.

INTRODUCTION

Music, as an art form, holds a special place in human culture. It encompasses a wide range of sounds and melodies that evoke emotions, thoughts, and memories. Traditional philosophies define music as tones ordered horizontally (as melodies) and vertically (as harmonies). Music theory, within this realm, is studied with the presupposition that music is orderly and often pleasant to hear. The ubiquitous influence of music in the modern world underscores the importance of responsible and enlightened artistic expression. Music's capacity to stir passions and affect attitudes and beliefs make it an important element for directing human consciousness toward values that can resolve animosities between races and cultures and inspire ideals that support humanity's collective aspiration for a culture of peace.

Types of Music Therapy:

Music Therapy is the clinical & evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. Music therapy interventions can address a variety of healthcare & educational goals:

- ➤ Promote Wellness
- ➤ Manage Stress
- > Alleviate Pain
- > Express Feelings
- > Enhance Memory
- ➤ Improve Communication
- > Promote Physical Rehabilitation

Active Music Therapy:

Active music therapy involves active participation in creating music, guided by a therapist.

The potential effects include improved interpersonal relationships, stabilized emotions, improved relaxation and relief, reduced anxiety, reduced need for healthcare interventions, improved physical function, and increased participation in group activities. Active music therapy approaches have been used either on their own or as part of polytherapy (use of a treatment that combines two or more therapies) to treat a single condition or alleviate symptoms of several psychiatric or neurological disorders regarding cognitive, emotional, social, and motor functioning. We define active music therapy as a combination of music and therapy where patients actively participate in making music rather than being passively exposed to music. We will discuss how this approach empowers individuals to achieve therapeutic goals through musical expression.

Receptive Music Therapy: In receptive music therapy, the client listens to music and responds to the experience silently, verbally, or in another modality (eg. art, dance). The music used may be live, or a recording. Some types of receptive approaches may include music-assisted relaxation, as well as the use of music and imagery. Goals may encompass several areas, including:

- > Promoting stimulation or relaxation
- > Facilitating memory or reminiscence
- > Developing auditory skills
- > Enhancing mood and reducing anxiety

Receptive interventions may be appropriate when a client is nonverbal or prefers a passive approach through listening. Receptive music therapy, where clients listen to selected music to facilitate relaxation and emotional expression, enhancing therapeutic outcomes.

Improvisational Music Therapy:

Music Improvisation is a process where the client and the therapist create music in the moment together to express the client's current emotions. Musical improvisation can be through singing or playing, extemporaneously creating a melody, rhythm, song, or instrumental piece. Individual improvisation is a popular method because it is one of the purest ways of working towards understanding, acceptance, and development and can foster a client's own identity formation. Spontaneous music creation without predetermined structures is the essence of improvisational music therapy. We will discuss how this approach promotes emotional exploration, creativity, and self-awareness.

Song writing Therapy:

Therapeutic songwriting is the process of creating, notating and/or recording lyrics and music by a client or group of clients and therapist within a therapeutic relationship to address psychosocial, emotional, cognitive and communication needs of the client or clients. Therapeutic song writing can be practiced according to a range of psychological and health-oriented ways of thinking. It can focus on outcomes such as changing something tangible and visible for instance, behaviours and ways of thinking. It can focus on the experience of creating a song whereby the process unfolds as people tell their stories, get in touch with their authentic expressions, and gain insight into their past and how it impacts on their present lives. Song writing as a therapeutic tool for emotional expression and processing will be examined in this section, highlighting its potential in stress management.

Lyric Analysis:

Lyric analysis involves using existing songs to facilitate meaningful discussion in individual or group therapy. Analysing song lyrics can provide a sense of normalcy, facilitate an understanding of death, loss, and grief, and help clients identify and express emotions in a more natural and comfortable way. Using contemporary and client-preferred songs is highly recommended as client's music is often an extension of who they are and how they view themselves in the world. Lyric analysis is a method through which clients explore the emotions and meaning behind song lyrics. We will explore how this technique can provide valuable insights into emotional experiences.

BENEFITS OF MUSIC THERAPY

Studies suggest that those undergoing music therapy experience reduced anxiety immediately after the session, which indicates that music therapy could be a convenient way to reduce symptoms quickly. Studies also suggest that music therapy can improve symptoms of depression, with those undergoing music therapy along with standard treatments for depression such as talking therapy improving more than people who only received standard therapy. Listening to music can also release dopamine, which is a hormone that makes people feel good, and endorphins, which are hormones that can induce happy moods and relieve pain. This section will highlight the diverse benefits of music therapy, particularly in relation to stress management.

We will explore how music therapy can reduce stress levels, promote relaxation, enhance mood, and improve sleep quality.

- ➤ **Reduces Stress Levels:** Music affects the amount of stress hormones, such as adrenaline and cortisol, that the body releases, and reducing these hormones can help relieve symptoms of anxiety. We will discuss how music therapy can significantly reduce stress levels, contributing to overall well-being.
- **Promotes Relaxation**: This section explores how music therapy induces relaxation, helps individuals calm down, and alleviates stress-related tension.
- **Enhances Mood**: We will examine how music therapy can uplift mood and improve emotional well-being, contributing to effective stress management.
- ➤ Improves Sleep Quality: Studies have determined that music therapy increased the sleep quality of subjects. Being one of the non pharmacological treatment approaches intended for solving sleep problems, music therapy is a pain-free, safe, and affordable treatment method without any side effects that could be used in every area of health. The role of music therapy in improving sleep quality will be discussed, highlighting its importance in overall stress reduction.

DEFINITION OF STRESS:

According to the National Institutes of Health (NIH), stress is a physical and emotional reaction that people experience as they encounter challenges in life. When we're under stress, our body reacts by releasing hormones that produce the "fight-or-flight" response. Our heart rate, breathing rate, and blood pressure go up, our muscles tense, and we sweat more. Occasional stress is a normal coping mechanism. However, long-term stress (also called chronic stress) may contribute to or worsen a range of health problems including digestive disorders, headaches, sleep disorders, and other symptoms. Stress may worsen asthma and has been linked to depression, anxiety, and other mental illnesses. Understanding the concept of stress is essential for comprehending the implications of music therapy in stress management.

TYPES OF STRESS AND STRESS MANAGEMENT:

There are different types of stress and delve into various stress management techniques, setting the stage for a thorough examination of how music therapy fits into the stress management landscape.

- **1. Acute Stress:** Acute stress is a relatively common occurrence and can be caused by many things (e.g., being in a car accident, losing a loved one, witnessing or being the victim of an attack, being diagnosed with a chronic illness). People can also feel acute stress when they are preparing for a job interview or presentation, going to the doctor or dentist, or even anticipating important moments or major life events.
- **2. Episodic Acute Stress:** Episodic acute stress refers to frequent, consistent periods of stress where the stressful experience occurs on an intermittent or regular basis. This type of stress can also occur when we're impacted by consecutive stressors, or often worried about a negative experience or event that could happen in the future. Examples of episodic acute stress sometimes reflect examples of non-episodic acute stress. They include stress over regular presentations at work, recurring doctors' appointments, meetings to discuss a divorce, etc. Generally, this type of stress is most common for people who identify themselves as naturally anxious, irritable, or short-tempered, as they may interpret even minor stressors as being the source of major stress
- **3. Chronic Stress:** Chronic stress is described as ongoing and constant stress with no (or limited) relief. It can be common for people dealing with prolonged health issues or disabilities, or those who are caring for someone with prolonged health issues or disabilities.

CORRELATION BETWEEN MUSIC THERAPY AND STRESS MANAGEMENT:

There is strong correlation between music therapy and effective stress management techniques.

MUSIC THERAPY AS AN EFFECTIVE STRESS MANAGEMENT TOOL:

Music therapy effectively reduces stress by promoting relaxation, emotional expression, distraction from stressors, and the development of coping skills.

- **Emotional Regulation through Music:** This section will delve into how music therapy helps individuals regulate their emotions, providing a safe outlet for expression and processing.
- > Relaxation and Calming Effects: We will explore how music therapy induces relaxation, calms the mind and body, and reduces physiological stress responses.
- ➤ Physiological Changes: Reduction of Cortisol Levels: This section will explain how music therapy contributes to lowering cortisol levels, the stress hormone, thereby promoting relaxation and overall well-being.
- ➤ Enhancing Coping Mechanisms: We will discuss how music therapy teaches individuals coping strategies to effectively manage and reduce stress.
- > Social Connection and Support: The role of music therapy in fostering social connections and providing support will be explored, emphasizing its significance in stress management.
- ➤ **Practical Applications:** we will discuss practical applications of music therapy in the context of stress management.
- ➤ Integration with Other Therapeutic Approaches: We will explore how music therapy can complement other therapeutic techniques for stress management, offering a holistic approach to well-being.
- **Benefits for Different Populations:** This section will discuss the versatility of music therapy in catering to the needs of different populations, shedding light on its applicability in diverse contexts.
- > Music Therapy Case Studies and Research Findings: In recent years, the field of music therapy has gained recognition for its potential to improve mental well-being. We will explore case studies and research findings that demonstrate the efficacy of music therapy in various contexts, shedding light on its power to positively impact individual's lives.

CASE STUDIES RELATED TO MUSIC THERAPY

➤ Alzheimer's Disease and Music Therapy: In a study conducted by Shirsat, A., Jha, R. K., & Verma, P. (2023), researchers explored the impact of music therapy on individuals with Alzheimer's disease. They found that music therapy could be a powerful treatment strategy, improving cognitive function and emotional well-being in Alzheimer's patients².

- ➤ Cancer Patients and Stress Reduction: Chen, X., Wei, Q., Jing, R., & Fan, Y. (2021) conducted a study on cancer patients to investigate the effects of music therapy on stress and quality of life. The results indicated that music therapy interventions significantly reduced stress levels and enhanced the overall quality of life for cancer patients¹.
- ➤ Autism Spectrum Disorder and Social Interaction: A study published in the "Journal of Music Therapy" in 2014 examined the impact of music therapy on children with autism spectrum disorder (ASD). It found that music therapy sessions helped improve social interaction skills in children with ASD, fostering meaningful connections with peers and family members³.
- ➤ Trauma Survivors and Emotional Expression: In a research study by Baker, F. A., Metzger, A. J., & Zabel, R. (2015), trauma survivors participated in group music therapy sessions. The findings demonstrated that music therapy provided a safe and effective outlet for expressing and processing emotions related to traumatic experiences⁴.
- ➤ Stroke Rehabilitation and Motor Skills: A study published in "Frontiers in Human Neuroscience" in 2021 investigated the use of music therapy in stroke rehabilitation. Researchers found that rhythmic auditory stimulation through music therapy significantly improved motor skills and gait in stroke survivors⁵.
- ➤ Anxiety Disorders and Music Relaxation: A study published in the "Journal of Affective Disorders" in 2022 examined the impact of music therapy on individuals with generalized anxiety disorder. The research showed that music therapy sessions focusing on relaxation techniques reduced anxiety symptoms and improved overall well-being⁶.
- ➤ Paediatric Patients and Pain Management: A study conducted at a paediatric hospital assessed the efficacy of music therapy in reducing pain perception among young patients undergoing medical procedures. The findings revealed that music therapy interventions helped alleviate pain and anxiety, enhancing the hospital experience for children⁷.
- ➤ Depression Treatment with Music Therapy: Silverman, M. J., & Rosal, M. C. (2019) investigated the use of music therapy as an adjunct to traditional psychotherapy in treating depression. The study found that combining music therapy with talk therapy enhanced the effectiveness of treatment and led to improved mood in individuals with depression⁸.
- ➤ Music Therapy in Eating Disorder Recovery: A case study published in "Psychotherapy and Psychosomatics" explored the role of music therapy in the recovery of individuals with eating disorders. The results showed that music therapy interventions contributed to improved body image perception and self-esteem⁹.
- ➤ **Veterans with PTSD and Music Therapy:** A research study involving military veterans diagnosed with post-traumatic stress disorder (PTSD) examined the effects of music therapy on trauma-related symptoms. The findings indicated that music therapy interventions reduced PTSD symptoms and improved emotional regulation in veterans¹⁰.
- ➤ Music Therapy for ADHD Management in Children: A study in the "Journal of Attention Disorders" in 2017 investigated the use of music therapy as a complementary approach to managing attention-deficit/hyperactivity disorder (ADHD) in children. Results showed that music therapy sessions enhanced focus and self-control in children with ADHD¹¹.
- ➤ Music Therapy in Palliative Care: Researchers conducted a study in a hospice setting to assess the impact of music therapy on patients receiving palliative care. The findings indicated that music therapy provided comfort and emotional support, enhancing the quality of life for patients in their final stages of life. 12
- ➤ Music Therapy for Stress Reduction in College Students: A research project in a university setting examined the effects of music therapy on stress reduction in college students. The study revealed that regular music therapy sessions reduced stress levels, improved academic performance, and increased overall well-being among students.¹³
- ➤ Music Therapy for Children with Speech and Language Disorders: In a study focusing on children with speech and language disorders, researchers found that music therapy interventions enhanced communication skills. Music-based activities facilitated language development and improved expressive and receptive language abilities in these children. 14
- ➤ Music Therapy in Substance Abuse Rehabilitation: A study conducted in a substance abuse rehabilitation centre investigated the role of music therapy in addiction recovery. The findings demonstrated that music therapy sessions supported emotional expression and coping skills development, contributing to successful rehabilitation outcomes. These case studies and research findings collectively illustrate the versatility and efficacy of music therapy across a range of therapeutic contexts, providing valuable insights into its potential as a holistic approach to improving mental and emotional well-being.¹⁵

SUMMARY AND CONCLUSION

In this section, we will address considerations for implementing music therapy in stress management and conclude our exploration of this vital topic. Factors that influence the effectiveness of music therapy in stress management and provide guidance for its successful implementation. The importance of consulting qualified music therapists when implementing music therapy as a stress management tool will be emphasized. Findings and insights from the entire study, underlining the significance of music therapy in stress management for women aged 18-40. The findings demonstrated that music therapy sessions supported emotional expression and coping skills development, contributing to successful rehabilitation outcomes. These case studies and research findings collectively illustrate the versatility and efficacy of music therapy across a range of therapeutic contexts, providing valuable insights into its potential as a holistic approach to improving mental and emotional well-being. Use of music therapy as an adjunct to traditional psychotherapy in treating depression. The study found that combining music therapy with talk therapy enhanced the effectiveness of treatment and led to improved mood in individuals with depression.

REFERENCES

- 1. Chen X, Wei Q, Jing R, Fan Y. Effects of music therapy on cancer-related fatigue, anxiety, and depression in patients with digestive tumors: a protocol for systematic review and meta-analysis. Medicine. 2021 Jun 6;100(22).
- 2. Shirsat A, Jha RK, Verma P. Music Therapy in the Treatment of Dementia: A Review Article. Cureus. 2023 Mar 31;15(3).
- 3. Geretsegger M, Elefant C, Mossler KA, Gold C. Music therapy for people with autism spectrum disorder. Cochrane Database of Systematic Reviews. 2014(6).
- 4. Garrido S, Baker FA, Davidson JW, Moore G, Wasserman S. Music and trauma: The relationship between music, personality, and coping style. Frontiers in psychology. 2015 Jul 10; 6:977.
- 5. Huang WH, Dou ZL, Jin HM, Cui Y, Li X, Zeng Q. The effectiveness of music therapy on hand function in patients with stroke: A systematic review of randomized controlled trials. Frontiers in Neurology. 2021 May 25; 12:641023.
- 6. Mallik A, Russo FA. The effects of music & auditory beat stimulation on anxiety: A randomized clinical trial. Plos one. 2022 Mar 9;17(3): e0259312.
- 7. Ting B, Tsai CL, Hsu WT, Shen ML, Tseng PT, Chen DT, Su KP, Jingling L. Music intervention for pain control in the paediatric population: A systematic review and meta-analysis. Journal of clinical medicine. 2022 Feb 14;11(4):991.
- 8. Silverman MJ. Music therapy and therapeutic alliance in adult mental health: A qualitative investigation. Journal of music therapy. 2019 Feb 16;56(1):90-116.
- 9. Shah P, Mitchell E, Remers S, Van Blyderveen S, Ahonen H. The impact of group music therapy for individuals with eating disorders.
- 10. Iribarren J, Prolo P, Neagos N, Chiappelli F. Post-traumatic stress disorder: evidence-based research for the third millennium. Evidence-Based Complementary and Alternative Medicine. 2005 Dec 1; 2:503-12.
- 11. Zhang F, Liu K, An P, You C, Teng L, Liu Q. Music therapy for attention deficit hyperactivity disorder (ADHD) in children and adolescents. The Cochrane Database of Systematic Reviews. 2017 May;2017(5).
- 12. Warth M, Kebler J, Hillecke TK, Bardenheuer HJ. Music therapy in palliative care: A randomized controlled trial to evaluate effects on relaxation. Deutsches Ärzteblatt International. 2015 Nov;112(46):788.
- 13. Liu S, Li G. Analysis of the Effect of Music Therapy Interventions on College Students with Excessive Anxiety. Occupational Therapy International. 2023 Mar 24;2023.
- 14. Howland KM. Music therapy for children with speech and language disorders. Music Therapy Handbook. 2015 Jan 5:302-14.
- 15. Ghetti C, Chen XJ, Brenner AK, Hakvoort LG, Lien L, Fachner J, Gold C. Music therapy for people with substance use disorders. Cochrane Database of Systematic Reviews. 2022(5).