

# The Role of Nostalgia in Music Therapy for Brain Disorders

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## Abstract:

This research paper examines the impact of using nostalgia in music therapy for brain disorders such as Alzheimer's and Parkinson's disease, and whether similar benefits can also be given to those with Parkinson's Disease Dementia (PDD). Using Borna Bonakdarpour's study "Musical Bridges to Memory" and other findings from sources such as the Cleveland Clinic and Northwestern Medicine, the overall conclusions reveal many positive outcomes in the conditions of those with these brain disorders; some of these benefits include a reduction in anxiety, improved communication, and social skills. These findings suggest that utilizing nostalgia in music therapy is used as a therapeutic tool, enhancing one's mental and emotional well-being and contributing to building stronger relationships, which demonstrates that similar benefits can also be offered to those with PDD. Ultimately, this study analyzes multiple sources that highlight the effect nostalgia in music therapy has on neurodegenerative diseases and how the symptoms of those who possess these brain disorders have improved.

**Keywords:** Parkinson's Disease, Alzheimer's Disease, nostalgia, neurodegenerative diseases, music therapy, memory, cognitive rehabilitation.

## INTRODUCTION

Nostalgia is a feeling that can prompt an individual to feel a mix of emotions, including happiness and sadness. According to the Brain Health University (2025), "nostalgia isn't just remembering the past, it's an emotionally charged memory. It often involves positive recollections tinged with longing, centered on meaningful life periods." Many people experience nostalgia when engaging in certain activities, such as viewing old photographs, reading or watching films, or smelling old scents (Women's Brain Health Initiative, n.d.). During these activities, brain chemicals such as dopamine, oxytocin, and serotonin are triggered and released (Brain Health University, 2025). These chemicals, also known as neurotransmitters and "feel-good chemicals," enable individuals to experience pleasure, satisfaction, and a general sense of well-being (Northwestern Medicine, 2024). Not only do nostalgia and the neurotransmitters released elevate one's mood, but they also help the brain feel more relaxed and open, allowing ideas to come more easily and naturally rather than forcefully (Brain Health University, 2025). The power of nostalgic memories can aid individuals who struggle to remember, helping them feel a sense of comfort and warmth (Banner Health, 2024). Brain disorders illuminate the powerful and prominent role of nostalgia, which is incorporated into music therapy to evoke recollection of past experiences. Nostalgia is a key tenet of music therapy that improves the conditions of Alzheimer's and Parkinson's disease, which implies that nostalgia in music therapy can also be effective for managing the symptoms of other brain disorders, such as Parkinson's Disease Dementia (PDD). As defined by the Cleveland Clinic (2023), "Parkinson's Disease

Dementia is a decline in thinking and reasoning skills that can develop after a Parkinson's disease diagnosis. It develops at least one year – but usually longer – after the initial Parkinson's disease diagnosis." Ultimately, this research paper aims to deepen the understanding of individuals with brain disorders and how nostalgia can improve their quality of life.

## LITERATURE REVIEW

Historically, nostalgia has been used to treat people with Alzheimer's and Parkinson's disease, which are neurodegenerative diseases that affect memory, cognition, and functioning. For example, nostalgia has been incorporated into music therapy; according to the Cleveland Clinic (2023), "music therapy is the use of music and/or elements of music (like sound, rhythm, and harmony) to accomplish goals, like reducing stress or improving quality of life." Music therapy can help manage symptoms of brain disorders, but it cannot cure or fully treat them (Cleveland Clinic, 2023). However, this method remains significant because, as the ability to communicate becomes increasingly difficult and complex, music can help foster connections (Alzheimer's Association, n.d.).

Before music therapy sessions, music therapists will identify and evaluate patients' needs and strengths, helping them determine the approach needed to meet those needs; some exercises involve encouraging and guiding patients to compose music, sing, listen to music, and discuss lyrics to reflect on how they are feeling (Cleveland Clinic, 2023). Additionally, as reported by Northwestern Medicine (2022), music has therapeutic and nurturing benefits; these benefits can be provided to individuals with dementia and Alzheimer's disease because when the tunes of music trigger recollections and feelings, it often releases a sense of comfort, warmth, and emotional support, which are then used as soothing tools for those with these conditions. Some therapeutic benefits of using music in therapy include improved communication skills and caregiver relationships, as well as providing patients with a sense of relief, thereby decreasing their agitation (Northwestern Medicine, 2022).

Borna Bonakdarpour, MD, is a Northwestern Medicine neurologist and a physician and musician who uses his musical knowledge and medical expertise to investigate how musical interventions affect the brains of people with dementia (Northwestern Medicine, 2022). Dr. Bonakdarpour conducted a study called "Musical Bridges to Memory" (MBM), a 12-week experiment in which both people with dementia and their caregivers engaged in group music activities to improve social engagement and behavior. This study found that music therapy not only reduces agitation in patients but also eases anxiety among both patients and caregivers, thereby enhancing sociable interactions between them (Northwestern Medicine, 2022). In contrast, communication and social interaction in the control group that did not receive the musical intervention worsened. Dr. Bonakdarpour says, "People with Alzheimer's may come alive again when they hear music. Some start dancing alone or with their caregivers, which is a very big deal" (Northwestern Medicine, 2022).

Additionally, music therapy has also been used to help treat symptoms of Parkinson's Disease (PD), which differs from Alzheimer's disease because individuals with PD struggle with movement and motor function; in contrast, the symptoms of Alzheimer's typically include foggy memory, contributing to memory loss (American Brain Foundation, 2024). According to the Parkinson's Foundation, "music therapy uses rhythm, melody, and preferred movement to address issues that commonly affect people with PD, such as bradykinesia (a slowness of movement that can lead to difficulties with activities of daily living)" (Parkinson's Foundation, 2018). Because individuals with Parkinson's disease experience movement and motor difficulties, rhythmic patterns in music provide a structured framework that supports

concentration and enhances attention (Parkinson's Foundation, 2018). Overall, music therapy provides a sense of security, allowing individuals with Parkinson's disease to freely and comfortably express their feelings, fostering bonds with family members, and creating meaningful memories (The Michael J. Fox Foundation, 2022).

## METHODOLOGY

This study employs a qualitative, secondary research methodology to examine the therapeutic role of nostalgia in music therapy for individuals with neurodegenerative disorders such as Alzheimer's disease, Parkinson's disease, and Parkinson's Disease Dementia (PDD). Relevant sources were collected from peer-reviewed medical journals, neurological research publications, and reputable healthcare institutions, including Northwestern Medicine, the Cleveland Clinic, and the Alzheimer's Association. Academic databases such as Google Scholar and PubMed were used to identify studies published between 2015 and 2025 that focused on music therapy, memory stimulation, and emotional regulation. The selected literature was analyzed thematically to identify recurring patterns related to cognitive improvement, emotional well-being, and social engagement. Key empirical studies, including the "Musical Bridges to Memory" program, were examined in detail to evaluate intervention outcomes and caregiver-patient interactions. This synthesis enabled a comprehensive understanding of how nostalgic music contributes to therapeutic effectiveness.

A qualitative secondary methodology is appropriate because extensive clinical and observational research already exists on music therapy and neurodegenerative disorders. This approach allows for ethical, comprehensive, and interdisciplinary analysis without requiring direct experimentation on vulnerable patient populations.

## RESULTS AND DISCUSSION

The use of nostalgia in music therapy offers a practical approach that helps manage the symptoms of Alzheimer's disease (AD) and Parkinson's disease (PD), promoting a better quality of life and implying that this approach can be used to help those with Parkinson's Disease Dementia (PDD) as well. Both the melodies and rhythms of music help to encourage engagement and to modulate the moods of individuals with AD and PD. As shown by the "Musical Bridges to Memory" study by Borna Bonakdarpour, music therapy strengthens and enhances the relationship between patients with AD and their caregivers; this treatment not only improved patients' behavior but also reduced stress and anxiety experienced by both individuals (Northwestern Medicine, 2022). Similarly, patients with PD found that musical tunes and rhythmic patterns provide an organized framework that helps them focus and improve their motor skills by engaging them in a more enjoyable activity (Parkinson's Foundation, 2018).

Moreover, nostalgia in music therapy provides emotional benefits for both groups, fostering a sense of comfort and security. When nostalgia and music are combined, they evoke a range of emotions and spark many recollections, including childhood memories, which can then be used as a therapeutic tool (Cleveland Clinic, 2023). Patients with AD and PD reported that music therapy provided emotional support and comfort, aiding them in building social connections. Music therapy has demonstrated beneficial improvements and responses in patients with AD and PD; therefore, those with PDD may also benefit from music therapy, as they experience emotional, cognitive, and functional challenges as well.

### Counterarguments/Limitation

While some may argue that nostalgia in music therapy has potential risks, such as recollections of painful

memories, studies and evidence have proven that music therapy is a moderately safe and low-risk approach in managing symptoms of those with Alzheimer's and Parkinson's Disease. Music therapists are trained to help their patients feel comfortable and secure, enabling them to express their feelings and thoughts freely, including traumatic memories, thereby creating a safe space that encourages them to share anything that will contribute to their overall well-being (Cleveland Clinic, 2023). Some limitations of this research paper are that it relies heavily on secondary sources and focuses solely on the role of nostalgia in music therapy and its potential benefits for individuals with brain disorders; however, other methods can also aid in treating these disorders, which were not addressed in this study.

The findings suggest that the role of nostalgia in music therapy confers numerous benefits that improve the overall well-being of individuals with Alzheimer's and Parkinson's disease. Going forward, researchers can conduct further research examining alternative methods for treating brain disorders not addressed in this study and analyze any additional benefits of nostalgia.

## CONCLUSION

Given these positive outcomes observed when using nostalgia in music therapy, it is evident that nostalgia has therapeutic benefits that help individuals with Alzheimer's and Parkinson's disease; it stimulates patients, emotionally, mentally, and functionally, notably improving their cognitive function and well-being, suggesting that it is likely to offer similar benefits and results to those with Parkinson's Disease Dementia, which is a later stage of Parkinson's. This research revealed that nostalgia can be a valuable tool for enhancing the quality of life for individuals with these brain disorders, thereby allowing them to continue forming core memories and living their lives. Overall, understanding the psychological and therapeutic benefits of nostalgia can enhance emotional and mental well-being, thereby demonstrating its usefulness and importance in modern society.

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