



Effectiveness of Music Therapy in Treating Mental Health Disorders in Psychiatry

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ABSTRACT

Music therapy has gained recognition as a promising intervention for treating mental health disorders in the field of psychiatry. This review aims to provide a overview of effectiveness of music therapy in addressing various mental health conditions. The review examines relevant studies that investigate the impact of music therapy on symptom management, emotional well-being, cognitive function, and social functioning in individuals with psychiatric disorders. Established quality assessment tools were utilized to evaluate the methodological rigor and risk of bias in the included studies. The findings suggest that music therapy holds potential as a therapeutic approach for improving mental health outcomes. However, further research is needed to explore optimal music therapy techniques, dosage, and long-term effects. This review contributes to the existing evidence base and provides insights for clinicians, researchers, and policymakers in the field of mental health.

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Introduction

The present study aims to investigate the effectiveness of music therapy in the treatment of mental health disorders within the field of psychiatry (Gold et al., 2009). Music therapy, as a non-pharmacological intervention, has gained increasing attention as a complementary approach to traditional psychiatric treatments (Lloría et al., 2019). This introduction provides an overview of the research problem and outlines the objectives of the study (Hancock et al., 2001).

Numerous theoretical studies have explored the potential benefits of music therapy in mental health settings (Chen et al., 2016). According to Segall and Lorna E. (2018), music therapy has been shown to have positive effects on various psychological and emotional outcomes, such as reducing anxiety, alleviating depression symptoms, improving emotional regulation, and enhancing overall well-being. However, despite the growing body of literature on this topic, there is still a need for further investigation and synthesis of empirical evidence (Sousa & Voss, 2002).

The primary objective of this literature review is to critically examine the existing research on music therapy in the context of psychiatric treatment (McDermott et al., 2013). By systematically reviewing and analyzing relevant studies, this review aims to provide insights into the effectiveness of music therapy as an adjunctive intervention for individuals with mental health disorders (Jia et al., 2020). Additionally, the review aims to identify potential gaps in the literature and suggest areas for future research (Müller-Bloch & Kranz, 2015).

It is anticipated that the findings of this review will contribute to the existing knowledge base by synthesizing the available evidence and highlighting the potential benefits of incorporating music therapy into psychiatric treatment. The results of this study will inform clinicians, researchers, and policymakers about the efficacy and practical implications of music therapy in the field of psychiatry.

Method

This literature review adopts a systematic approach to gather, analyze, and synthesize relevant studies on music therapy in the field of psychiatry (Hanson-Abromeit & Sena Moore, 2014). The following sections outline the methodological framework employed in this review (Grant & Booth, 2009).

To ensure a comprehensive and rigorous review process, a systematic search strategy was developed in consultation with a qualified librarian (Gusenbauer & Haddaway, 2020). Electronic databases such as PubMed, PsycINFO, and Google Scholar were searched using a combination of keywords related to music therapy, mental health disorders, and psychiatry. Additionally, manual searches of reference lists from identified articles were conducted to identify any potentially relevant studies that were missed in the electronic searches (Bramer et al., 2017).

The inclusion criteria for selecting studies were as follows: (1) published in peer-reviewed journals, (2) written in English, (3) focused on the application of music therapy in the treatment of mental health disorders in psychiatric settings, and (4) reported empirical findings or outcomes related to the effectiveness of music therapy interventions. Studies that solely focused on other forms of therapy or did not meet the specific criteria were excluded from the review (Pham et al., 2014).

Upon retrieving the relevant studies, a systematic screening process was undertaken (Willett et al., 1986). Two independent reviewers screened the titles and abstracts of the identified articles to assess their relevance to the research objectives (Dickersin et al., 1994). Any discrepancies in screening decisions were resolved through discussion and consensus (Elwyn et al., 2006). Subsequently, the full texts of the selected articles were assessed for eligibility, and data extraction was performed using a standardized data extraction form (Kassam et al., 2013). The extracted information included details about the study design, participant characteristics, music therapy interventions, outcome measures, and key findings (Kamioka et al., 2014).

To evaluate the quality and assess the risk of bias in the included studies, established quality assessment tools, such as the Cochrane Collaboration's tool for randomized controlled trials and the Newcastle-Ottawa Scale for observational studies, were utilized (Farrah et al., 2019). The quality assessment was independently conducted by two reviewers, and any disagreements were resolved through discussion or consultation with a third reviewer (Alonso-Coello et al., 2010).

The results of the included studies will be synthesized using a narrative approach, highlighting the key findings, similarities, and differences across the studies (Siddaway et al., 2019). The effectiveness of music therapy interventions will be assessed based on various outcome measures, including changes in symptom severity, improvements in psychological well-being, and other relevant indicators (Dowson et al., 2019). Where appropriate, quantitative data will be analyzed and presented in the form of descriptive statistics or meta-analysis, if feasible (Rosenthal & DiMatteo, 2001).

The methodological rigor and transparency of this literature review are essential to ensure the reliability and validity of the findings (Boell & Cecez-Kecmanovic, 2015). By employing a systematic approach and adhering to established guidelines, this review aims to provide a comprehensive and objective synthesis of the available evidence on music therapy in the treatment of mental health disorders within the field of psychiatry.

Result and discussion

Data collected from the reviewed studies are presented and discussed in this section. The findings are analyzed in relation to the research question and objectives, and their implications for the field of psychiatry and music therapy are explored.

Figure 1. Co-occurrence of Keywords in PubMed Clinical Trials Registry (July 2023)

Table 1. Effects of Music Therapy on Specific Mental Health Disorders

Mental Health Disorder	Music Therapy Interventions	Findings
Anxiety Disorders	Group music therapy sessions for relaxation and stress reduction	Significant reduction in anxiety symptoms
Depression	Music-assisted relaxation exercises, songwriting sessions	Improvement in depressive symptoms
Post-Traumatic Stress Disorder	Individual music therapy sessions focused on trauma processing	Reduction in PTSD symptoms and improved coping
Bipolar Disorder	Songwriting and improvisation sessions, music listening	Reduction in manic symptoms and improved mood stability
Borderline Personality Disorder	Guided imagery with music, music improvisation	Improvement in emotion regulation and self-expression
Schizophrenia	Group music therapy sessions, music listening and discussion	Positive effects on symptom severity and social functioning

Table 2. Effects of Music Therapy on Specific Symptoms in Psychiatry

Symptoms	Music Therapy Interventions	Findings
Sleep Disturbance	Music-assisted relaxation, lullabies	Improved sleep quality and duration
Agitation	Calming music, rhythmic entrainment	Reduction in agitation and disruptive behaviors
Emotional Expression	Songwriting, improvisation, music listening	Increased emotional expression and communication
Cognitive Function	Music-based cognitive stimulation, memory exercises	Enhancement of cognitive abilities and memory
Social Interaction	Group music therapy sessions, music ensemble	Improved social skills and interaction
Self-esteem	Music-based interventions promoting self-expression	Boosted self-esteem and self-confidence

Table 3. Effects of Music Therapy on Medication Use and Treatment Adherence

Outcome Measures	Music Therapy Interventions	Findings
Medication Reduction	Music-based stress reduction techniques	Decreased reliance on medication
Treatment Adherence	Music-enhanced therapy sessions, personalized playlists	Improved attendance and engagement in treatment
Side Effects Management	Music interventions for pain relief and relaxation	Reduction in medication side effects
Treatment Satisfaction	Music-assisted psychotherapy sessions	Increased satisfaction with treatment

Table 4. Uppermost Recent Music Therapy Trial for Dementia Articles(August 2023)

Participants	Methodology	Results	Context	Updated
Patients living with dementia and their family caregivers	Randomized Controlled Trial	Statistical analysis plan developed for home-based interventions		May2023
Patients with dementia	Randomized Controlled Trial	Individualized music listening shows immediate effects on behavioral and psychological symptoms	Immediate effects	Mar. 2023
Prior Investigation	Cluster Randomized Controlled Trial	Inappropriate analysis due to nesting and clustering not considered		Feb. 2023
Patients with dementia and caregivers	Hybrid Type 2 Cluster-Randomized Effectiveness-Implementation Design	Home-based dyadic music-with-movement intervention is effective and feasible	Home-based	Aug. 2022

Residents with dementia and depressive symptoms	Cluster-Randomized Controlled Trial	Presentation of demographic and clinical profiles of residents	Australian private residential aged care	Jul. 2022
Nursing home residents with dementia	Pragmatic Trial	Personalized music reduces agitation and antipsychotic use	Nursing home	Jan. 2022
Patients with dementia in residential aged care, family members, care home staff	Cluster Randomized Controlled Trial	Therapeutic music interventions are effective from multiple perspectives	Residential aged care	Jan. 2022

Table 5. RIPPER: Sample Ratio and 0.9Purity & 0.25min(Prune Benefit)

<i>Rules [correctness: 573/727] [i]</i>	Prediction
<i>IF While working = Yes</i>	Improve
<i>IF Exploratory ≠ No</i> <i>& Depression ≠ Quintile 1</i> <i>& Primary streaming service ≠ YouTube Music</i>	Improve
<i>IF Frequency [Metal] = Sometimes</i> <i>& Frequency [Pop] ≠ Never</i>	No effect
<i>IF Frequency [Hip hop] ≠ Never</i> <i>& OCD ≠ Quintile 2</i> <i>& Frequency [Classical] ≠ Rarely</i> <i>& Frequency [Latin] = Never</i>	Improve
<i>IF Frequency [Pop] ≠ Never</i> <i>& OCD ≠ Quintile 4</i> <i>& Primary streaming service ≠ I do not use a streaming service.</i> <i>& OCD ≠ Quintile 3</i> <i>& Composer = No</i> <i>& Frequency [Latin] ≠ Very frequently</i> <i>& Fav genre ≠ Country</i>	No effect
<i>IF BPM ≠ Quintile 3</i>	Improve
<i>IF Depression = Quintile 1</i>	No effect
<i>IF Age = Quintile 3</i>	Worsen
<i>ELSE</i>	Improve

Conclusion and implication

In conclusion, this literature review has provided a comprehensive overview of the effectiveness of music therapy in treating mental health disorders within the field of psychiatry. The findings indicate that music therapy interventions have shown promise in reducing anxiety and depression symptoms, improving emotional regulation, and enhancing overall well-being among individuals with various mental health conditions. The main contribution of this review lies in its synthesis of existing empirical evidence, highlighting the potential benefits of incorporating music therapy as an adjunctive intervention in psychiatric treatment. By systematically reviewing and analyzing a range of studies, this review has shed light on the efficacy of music therapy and its relevance in addressing the complex needs of individuals with mental health disorders. The findings of this review have important implications for clinical practice. Music therapy can serve as a valuable addition to the existing treatment approaches in psychiatry, offering a non-pharmacological intervention that can complement traditional therapeutic methods. Incorporating music therapy into treatment plans may contribute to improved patient outcomes, including symptom reduction, enhanced emotional well-being, and

increased quality of life. Despite the valuable insights gained from this literature review, certain limitations should be acknowledged. First, the inclusion of only English-language studies may introduce potential language bias. Additionally, the heterogeneity of study designs and outcome measures across the reviewed studies may limit the comparability and generalizability of the findings. Further research employing rigorous methodologies, standardized measures, and diverse populations is warranted to strengthen the evidence base in this field. Future research should also explore the specific mechanisms underlying the therapeutic effects of music therapy in mental health settings. This may involve investigating the neurophysiological processes, examining the role of specific music genres or techniques, and identifying the optimal dosage and duration of music therapy interventions. In summary, this literature review emphasizes music therapy's potential benefits in reducing anxiety, alleviating depression, and improving emotional well-being, and underscores the potential of music therapy as a valuable therapeutic modality in the treatment of mental health disorders within the field of psychiatry. The findings support its integration into clinical practice and emphasize the need for continued research and collaboration between music therapists, clinicians, and researchers to further advance our understanding of the therapeutic benefits of music in mental health settings.

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