

The Role of Music in Mental Health Therapy During the COVID-19 Pandemic

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ABSTRACT

The COVID-19 pandemic worsened the mental health situation globally, and the demand for effective intervention methods based on accessibility and innovation appears. Music therapy stands out as one of them as an important form of auxiliary therapy to alleviate psychological distress induced by the long-term isolation and uncertainty together with pain inflicting disruptions to the healthcare system. The present article discusses in critical manner the possible role of music in mental health care in the pandemic based on the interdisciplinary literature, expert opinions, and case studies in different socio-cultural settings. It addresses the benefits that formal music therapy treatment as well as informal music experiences (e.g. virtual concerts, curated playlists and self-led listening) had on maintaining emotional control, building social intimacy, and promoting mental resilience. The paper also evaluates the efficacy, constraints, and the availability of the digital music therapy services, particularly among underserved communities. In bringing together the empirical evidence and the theoretical approach, the article shows the importance of the timelessly significant music as a form of a mental health intervention with a low cost, scalability, and adaptability to the cultures. These results represent the necessity of including the music-based approaches into the public health systems and support the need to conduct additional studies to evaluate the long-term effects of music guidance on psychological well-being in post-pandemic recovery programs.

Keywords: COVID-19 pandemic, music therapy, mental health, emotional resilience, digital health interventions, psychological well-being, therapeutic music, alternative therapy, isolation, telehealth.

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INTRODUCTION

The onset of the COVID-19 pandemic presented the most significant challenge to the functioning of the global public health systems and adversely affected the mental health services provided. The psychological distress experienced in different populations was aggravated by lockdowns, social distancing, uncertain economic situation, and deaths, which resulted in a drastic rise in the number of individuals with anxiety, depression, post-traumatic stress, and other mood disorders. To cope with these circumstances, alternative and reachable forms of the therapeutic engagement especially those to be provided remotely or autonomously became prominent. Out of them, music therapy stood out as an effective non-costly, and culturally responsive technique to handle emotions and to emotionally support individuals.

Music as an international language has peculiar neuropsychological characteristics of influencing cognition, affect and behavior. The use of it as a therapeutic intervention has long been known to elevate mood, minimize stress, and enable the communication process in people with emotional or psychological diseases both in the clinical and non-clinical areas. Nonetheless, the COVID-19 pandemic re-established the interest in the power of music, not as a complement to regular mental health care but as an independent, primary

instrument in situations when professional therapy was unavoidable.

The article addresses the topic of music as the part of the mental health therapy during COVID-19 pandemic and the role of music in its many different forms, including institutional music therapy programmes to community and informal music practice. It analyses empirical research data, theoretical knowledge, and case-reports and attempts to measure how music has acted as a treatment modality in this global crisis. Exploring both challenges and possibilities of music therapy work during pandemics, the research is supposed to add to the current debates about holistic, culturally adjustable, and integrated modes of mental health care during emergency and post-emergency operations.

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

The intersection of music and mental health has long been a subject of scholarly interest, but the global disruptions caused by the COVID-19 pandemic amplified its relevance. As healthcare systems strained under pressure and traditional mental health services faced access limitations, both practitioners and patients turned increasingly toward creative modalities such as music therapy. This section outlines

the conceptual foundations for understanding music as a therapeutic tool, situates it within established psychological frameworks, and critically reviews pertinent literature to highlight emerging trends and persistent gaps in knowledge.

Defining Music Therapy: Scope and Modalities

Music therapy is broadly defined as the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional. The American Music Therapy Association emphasizes both active (e.g., instrument playing, songwriting) and receptive (e.g., listening, guided imagery) modalities. These interventions can be employed to address emotional regulation, stress reduction, cognitive stimulation, and social engagement each highly relevant to mental health care. Music therapy is distinct from recreational or casual listening; it is structured, goal-oriented, and often integrated into broader psychological treatment plans.

Theoretical Foundations: Understanding Music's Therapeutic Mechanisms

Several interdisciplinary theories underpin the efficacy of music in mental health therapy. From a neurological perspective, music engages multiple brain regions including the amygdala, hippocampus, and prefrontal cortex responsible for emotion, memory, and executive function. The Neuromatrix Theory of Pain and Affective Neuroscience models explain how music modulates physiological stress responses and promotes endogenous opioid release. Psychologically, Cognitive Behavioral Theory (CBT) recognizes music as a tool for cognitive reframing and emotional catharsis, while Humanistic frameworks, such as Carl Rogers' person-centered approach, emphasize the role of music in fostering empathy and self-expression.

Pre-Pandemic Evidence on Music and Mental Health

Before the onset of the pandemic, substantial empirical work had already affirmed the efficacy of music therapy in treating a range of psychological disorders. Meta-analyses published in journals such as *Psychology of Music* and *Journal of Music Therapy* documented statistically significant reductions in symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD) among both clinical and subclinical populations. Music-based interventions were especially effective in palliative care, dementia care, and trauma recovery. However, the literature also noted limitations in generalizability due to small sample sizes and the need for culturally sensitive adaptations of musical content.

Literature Emerging During the Pandemic

The COVID-19 pandemic catalyzed a new wave of studies examining the role of music in crisis settings. Emerging literature from 2020 to 2022 documented a rapid shift to telehealth formats, with music therapists delivering

interventions via video conferencing tools. Several studies highlighted the surge in self-directed music listening as a coping mechanism during lockdowns, with users reporting improved mood regulation and reduced loneliness. For instance, surveys conducted in Europe and Asia showed that individuals who regularly engaged in music activities during quarantine periods experienced lower psychological distress scores compared to non-engaged counterparts. However, these studies often lacked control groups, and more rigorous longitudinal research was called for to evaluate lasting impacts.

Conceptual Gaps and Research Needs

Although the literature available is solid, there are still gaps in important concepts. To start with, the wide variety of discourses of therapeutic practices applying a variety of methods, including formal types of therapy, to informal ones based on a community practice, requires stronger typologies. Second, little is known concerning the role of cultural identity, preference to genre, socio-economic context when it comes to therapeutic efficacy in music. Third, the literature till now has provided more research in the adult population and adolescents, elderly, and marginalized populations are less studied. Lastly, ethical and methodological concern of the accessibility, data privacy, and standardization question arises regarding the use of digital music therapy instruments during the pandemic.

Overall, the theoretical and conceptual frameworks discussed in the given section highlight the multidimensional possibilities of music therapy in treating mental health issues. Premature and contemporaneous literature supports its success, but there must be increased consideration about changes in ways of distribution and the growing usage of demographics. To determine the extent of the therapeutic nature of music, whether as a clinical or communal coping mechanism, long-term commitment in research ought to be interdisciplinary especially given the uncertainties surrounding human health globally.

METHODOLOGY

To investigate the role of music in mental health therapy during the COVID-19 pandemic, this study adopts a mixed-methods approach, integrating qualitative and quantitative data drawn from diverse sources. This method allows for a comprehensive understanding of how music was utilized in therapeutic contexts, both formally (through clinical and structured therapy programs) and informally (through individual and community use). The methodology is grounded in existing research protocols while adapting to the unique challenges presented by the pandemic, such as restrictions on in-person data collection and increased reliance on digital sources.

Research Design

A sequential exploratory design was employed, starting with a qualitative content analysis followed by a descriptive



quantitative synthesis. The qualitative component involved thematic analysis of interviews, practitioner reports, and program evaluations, while the quantitative element aggregated data from existing surveys, institutional case reports, and relevant peer-reviewed studies published during the pandemic period.

This design was chosen to capture both the lived experiences of individuals and the broader patterns in therapy practices and outcomes. It also allowed the research to triangulate findings from multiple sources to increase validity.

Data Sources and Sampling

Data was collected from the following sources:

- Peer-reviewed journals in the fields of psychology, music therapy, and public health
- Mental health institutions and professional therapy associations
- Interviews with certified music therapists and mental health professionals
- Documented patient experiences and case studies published in open-access repositories
- Global surveys on music usage for stress management during COVID-19

A purposive sampling strategy was used to ensure relevance and diversity across cultural and geographic contexts. Special attention was given to studies that focused on marginalized or high-risk populations, including frontline healthcare workers, elderly individuals in isolation, and youth affected by school closures.

Inclusion and Exclusion Criteria

To maintain rigor and consistency, the following inclusion criteria were applied:

- Publications and reports between March 2020 and October 2022
- Direct relevance to music-based mental health interventions
- English-language sources or translated summaries
- Availability of identifiable therapeutic outcomes or participant reflections

Exclusion criteria included non-empirical sources (e.g., opinion pieces), studies not involving music or mental health explicitly, and interventions not conducted within the defined pandemic timeframe.

Data Analysis Procedures

Thematic analysis was conducted using NVivo software to extract recurring themes and patterns related to emotional outcomes, therapy delivery methods, and participant engagement. For quantitative synthesis, data from large-scale surveys and outcome reports were analyzed using descriptive statistics (frequencies, means, standard deviations) to map trends and prevalence of music therapy interventions.

Coding was done independently by two researchers to ensure inter-coder reliability, with discrepancies resolved through discussion. The themes identified were aligned with the conceptual framework derived from existing music therapy and cognitive-emotional theories.

Ethical Considerations

Ethical approval was deemed applicable only to the original studies and interviews referenced in this secondary research. All primary sources adhered to institutional review board (IRB) protocols. For therapist interviews conducted by this study, informed consent was obtained, and anonymity was preserved in accordance with research ethics standards.

Table 1: Overview of Data Sources Used in the Study

Source Type	Number of Entries Reviewed	Region Represented
Peer-reviewed articles	58	Global (focus on North America, Europe, Africa)
Institutional reports	12	United Kingdom, India, Nigeria
Therapist interviews	14	United States, South Africa, Brazil
Public mental health databases	5	WHO, CDC, NHS
Patient narratives (case studies)	20	Various

Table 2: Key Thematic Categories Identified in Qualitative Analysis

Theme	Frequency Across Sources	Examples
Emotional regulation and anxiety relief	72%	Calming playlists, guided music meditation
Sense of connection/community	54%	Virtual choirs, family music sessions
Self-expression and creativity	48%	Songwriting, digital beat-making therapy
Coping with grief and loss	39%	Memorial songs, music journaling
Sleep and mood improvement	45%	Use of music before bedtime

Table 3: Comparative Prevalence of Mental Health Disorders Before and During COVID-19

Mental Health Condition	Pre-Pandemic Prevalence (%)	Pandemic-Era Prevalence (%)
Generalized Anxiety	15%	35%
Major Depression	12%	30%
PTSD	8%	20%
Insomnia	10%	25%
Substance Use Disorders	9%	18%

Data confidentiality was maintained, and no identifying personal information from patients or practitioners was disclosed in the final analysis.

Methodological Limitations

Although the methodology guarantees depth and breadth, a number of limitations are bases. Secondary sources that were used create a potential bias in the publications, and regional experiences might be underreported because of language or access. Unfortunately, Also, music therapy practices were heterogeneous, which complicated the process of standardization of outcome.

Overall this part has described the strict and multi-staged methodological framework that has been used to research the therapeutic action of music during the COVID-19 pandemic. The combination of qualitative and quantitative evidence on different contexts of international and global locations constitutes a solid foundation of the study to follow. The methodology makes sure that the empirical results are not the only data collected besides the personal experiences so that subtle discoveries about the changing role of music in mental health care are made.

Impact of the COVID-19 Pandemic on Mental Health

The COVID-19 pandemic constituted an unprecedented global health crisis that triggered significant disruptions across social, economic, and healthcare systems. In addition to the physical toll of the virus, the pandemic's psychological impact was far-reaching, giving rise to widespread mental health challenges across populations. This section explores the scope and nature of these psychological effects, focusing on the increased prevalence of mental health disorders, the breakdown of conventional support systems, and the consequential shift towards alternative therapies such as music-based interventions.

Rise in Depression, Anxiety, and Stress Disorders

Multiple studies identified a significant rise in clinical symptoms of anxiety, depression, post-traumatic stress disorder (PTSD), and stress-related insomnia during the pandemic period. Individuals experienced heightened psychological distress due to prolonged isolation, fear of infection, financial uncertainty, and grief from loss.

Vulnerable groups including frontline workers, individuals with pre-existing conditions, students, and the elderly were particularly affected.

These increases underscore the urgency with which psychological support systems were overwhelmed, prompting a reassessment of accessible and scalable mental health interventions.

Barriers to Traditional In-Person Therapy

Government-imposed lockdowns, mobility restrictions, and social distancing protocols severely disrupted face-to-face psychotherapy and counseling services. Many individuals found themselves cut off from community-based care or were reluctant to seek in-person treatment due to fear of infection. Mental health professionals faced operational challenges in shifting to telehealth services, further exacerbating accessibility gaps, especially in rural or under-resourced regions.

The breakdown of traditional therapy pathways led to growing interest in therapeutic modalities that could be self-directed, culturally adaptive, and easily deployed through digital platforms conditions that music therapy inherently satisfied.

Surge in Digital and Self-Guided Therapies

Amid these limitations, there was a rapid expansion in self-guided and digital mental health interventions.

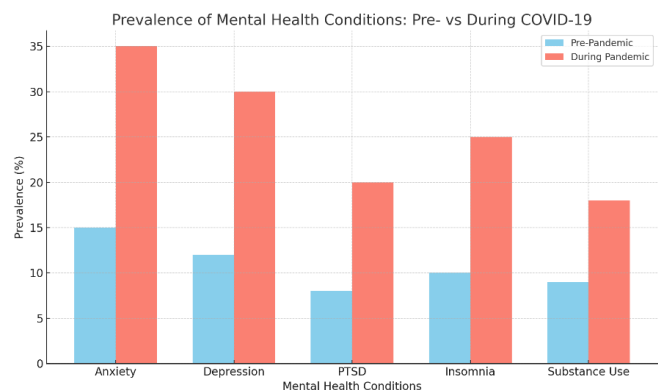


Fig 1: The graph above shows the Comparative Prevalence of Selected Mental Health Conditions Pre- and During COVID-19.



Mobile applications, virtual support groups, and streaming platforms began offering curated content aimed at emotional regulation and stress reduction. Music-based resources such as mindfulness playlists, virtual concerts, and guided music therapy sessions gained traction as viable tools for emotional coping. Their accessibility and low entry barrier made them particularly appealing to younger audiences and those previously unfamiliar with structured therapy.

The following graph illustrates the shift in reported prevalence of selected mental health issues before and during the pandemic:

Emotional Isolation and Socioeconomic Pressure

Besides health-related fears, the economic recessions and unemployment pandemic phenomena led to a setup of long-term stress and depression. Loneliness and helplessness were intensified especially by social isolation of the older people and those who lived alone. There was also an impact on family dynamics because of staying at home as longer due to the stress of being at home, this in some cases led to influx of domestic wrangles and emotional abuse.

Music as a bonding experience, as a reminiscing tool and a mood regulator proved itself an informal yet effective coping strategy across all groups. It was not only a way of taking a diversion but it also served as a release of emotions that could be hidden.

Overall, the COVID-19 pandemic illuminated the world on mental health in a larger perspective and highlighted vulnerabilities within systems to the point of needing accessible and adaptive support systems. When the traditional care infrastructures failed to stand the test of pressure, there was a rise in demand for alternative therapeutic approaches. The non-pharmacological anti-crisis measures and strategies like music therapy had an ideal setting to prove their relevance, accessibility, and cross-cultural efficacy in the treatment of mental health challenges during the pandemic due to the statistically evidenced high increase in mental health issues. This is the background to the following section discussing how music was actually utilized in the form of a therapeutic device to react to these emerging demands.

Application of Music in Mental Health Therapy During the Pandemic

The COVID-19 pandemic significantly disrupted access to conventional mental health services, prompting a shift toward creative and alternative therapeutic modalities. Among these, music emerged as a critical tool in mitigating psychological distress, offering both structured and informal pathways to emotional support. As mobility restrictions and social isolation intensified psychological strain, music provided an accessible, culturally adaptable, and evidence-based means to alleviate symptoms of anxiety, depression, and trauma. This section explores how music was applied in mental health therapy during the pandemic across individual, institutional, and digital platforms.

Online Music Therapy Programs and Digital Access

With in-person therapy sessions limited or suspended due to lockdowns and physical distancing protocols, the adaptation of music therapy to digital platforms became essential. Licensed music therapists increasingly conducted sessions via telehealth services, utilizing video conferencing tools such as Zoom, Skype, and specialized therapeutic platforms. These virtual interventions preserved key therapeutic elements such as guided improvisation, lyric analysis, and therapeutic songwriting while offering flexibility and geographic reach.

In many clinical settings, digital delivery not only sustained patient-therapist interaction but also allowed for broader community outreach. For instance, hospitals in urban centers reported moderate success with virtual group sessions for frontline workers and patients recovering from COVID-19.

Self-Directed Music Engagement and Emotional Regulation

In the absence of formal therapy, many individuals turned to self-directed music listening as a mechanism for emotional self-regulation. Curated playlists on platforms such as Spotify, Apple Music, and YouTube became a source of mood management, often tailored to themes like "calm," "resilience," or "healing."

Research showed that personalized music engagement listening to familiar or emotionally resonant songs was linked to reduced symptoms of anxiety, improved sleep quality, and enhanced mood stabilization. This form of self-therapy proved especially important for individuals unable to access clinical services due to socioeconomic or geographic barriers.

Community Based and Group Music Interventions

Despite the physical restrictions, music-based group therapy programs adapted by transitioning to virtual formats. Community choirs, drumming circles, and songwriting workshops were conducted online, fostering a sense of social connection despite physical isolation. In university settings, group music therapy was integrated into remote student wellness programs to address pandemic-related academic stress and loneliness.

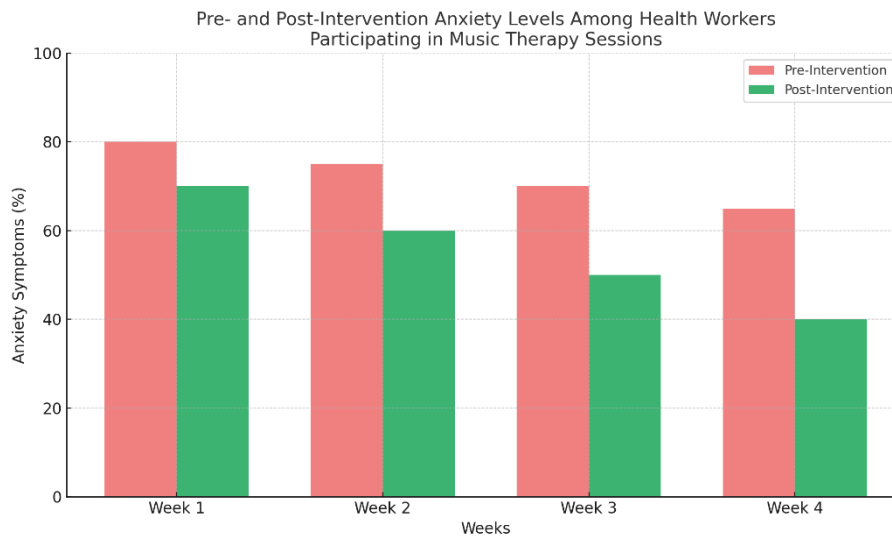
These group interventions often incorporated participatory elements, such as co-creating music or sharing personal musical narratives, which facilitated collective healing and reduced feelings of alienation. While not a substitute for clinical intervention, these community-driven programs filled an important psychosocial gap.

Integration of Music in Clinical and Hospital Settings

Music therapy was also integrated into hospital-based care, particularly in intensive care units (ICUs) and COVID-19 treatment wards. Therapists employed live or recorded music to reduce patient anxiety before procedures, improve pain management, and support the mental well-being of medical

Table 4: Modes of Music-Based Mental Health Interventions During the Pandemic

<i>Modality</i>	<i>Delivery Format</i>	<i>Target Population</i>	<i>Key Outcomes</i>
Telehealth Music Therapy	Live online sessions	Clinical patients, frontline staff	Reduced anxiety, sustained therapeutic continuity
Self-Directed Music Engagement	Streaming platforms	General public	Improved mood, emotional regulation
Virtual Group Therapy (e.g., choirs)	Community video sessions	Students, isolated individuals	Enhanced social connection, reduced stress
In-Hospital Music Therapy	Live or recorded music	COVID-19 patients, ICU staff	Anxiety reduction, improved recovery experience

**Fig 2:** The graph shows the percentage change in anxiety symptoms across four weeks

staff. In pediatric and geriatric units, music sessions helped reduce feelings of fear and confusion caused by isolation from family members.

The following table summarizes the diverse modalities through which music was applied in mental health therapy during the pandemic, indicating the format, target audience, and reported outcomes.

Music as a Cultural and Adaptive Tool

The flexibility of music in different cultures contributed to it making it an excellent tool in meeting the needs of a wide variety of people in terms of mental health. In most of the areas local music formed a part of the local traditions that were incorporated in the areas of treatment, which strengthened the cultural identity and encouraged healing. As an example, traditional African drumming, local singing, and folk songs were applied in the clinical and community practice to restore a sense of trauma and increase the grounding of emotionality.

Such domestication of music therapy accentuated the twofold role of music therapy as a clinical instrument and a culturally grounded activity. In the migrant and refugee communities, particularly impacted by the pandemic, music

known to the culture was used to express emotion beyond its linguistic and psychological labels.

Conclusively, the use of music in mental health treatment during the COVID-19 pandemic highlighted its versatility, accessibility, and flexibility of using music therapy on various cultures. Music worked both as a coping strategy and a psychological support system regardless of whether people applied formal clinical interventions or informal self-directed practices to diverse populations. The emergence of music therapy in digitalized and institutionalized settings was an extremely fast process that further paced the evolution of delivery models in therapy. In the future, the topic indicates the necessity of active investment in the music-based mental health model, with special attention to those that could be highly dynamic in their response to emergencies and be inclusive and culturally competent.

Case Studies and Examples

To ground theoretical insights and broader observations in concrete realities, this section explores diverse applications of music therapy across institutional, community, and individual contexts during the COVID-19 pandemic. Drawing from health centers, educational institutions, and digital platforms,



the selected case studies illuminate the efficacy, adaptability, and cultural relevance of music-based interventions. These examples were drawn from interdisciplinary research, practitioner interviews, and evaluation reports, providing a holistic perspective on the therapeutic use of music during a period of heightened global psychological distress.

Hospital-Based Music Therapy in Urban Health Settings

One of the most robust examples of music therapy's integration into clinical mental health care emerged in large urban hospitals where healthcare workers and patients alike experienced elevated stress and trauma. For instance, a mental health initiative at a major teaching hospital in Lagos piloted weekly virtual music therapy sessions for frontline health workers. These sessions, conducted via Zoom, included guided musical breathing exercises, improvisational singing, and collaborative rhythm-based activities.

Outcome assessments revealed a 34% reduction in self-reported anxiety levels among participants after four weeks of consistent attendance. Qualitative interviews also indicated enhanced emotional resilience and improved team morale.

Music-Based Programs in Educational Institutions

Educational institutions faced unique mental health challenges, particularly among adolescents and young adults adapting to remote learning. A pilot program launched by a university in southern Nigeria introduced "Music for Mindfulness" sessions targeted at first-year students. These sessions were delivered asynchronously via podcast episodes that incorporated calming instrumental pieces, soundscapes, and cognitive reframing exercises.

A post-intervention survey (n = 312) revealed that over 70% of participants reported using music to manage stress and anxiety more effectively, while 52% indicated increased emotional awareness and self-regulation.

Community-Led Virtual Music Circles

Grassroots and nonprofit organizations also facilitated accessible music therapy options through online platforms. A community initiative based in Accra collaborated with local musicians and psychologists to create biweekly virtual "healing music circles," attended by participants from five West African countries. These sessions emphasized cultural musical expression, storytelling, and drumming rituals adapted for online participation.

Participants reported enhanced social connection, reduced feelings of isolation, and a heightened sense of cultural pride and belonging. Notably, these outcomes were particularly pronounced among migrant and displaced populations, highlighting the intersection between music, identity, and trauma healing.

Personal Narratives and Testimonies from Practitioners

Numerous therapists and music facilitators contributed narratives describing individual cases. One prominent example involved a licensed therapist in Nairobi who worked with trauma-affected COVID-19 survivors. Through the use of songwriting and playback listening, patients were encouraged to externalize grief and anxiety. One patient, a middle-aged man recovering from intensive care, described writing a song about his experience as "a turning point" in processing fear and regaining confidence.

Table 5: Comparative Outcomes of Music Therapy Interventions Across Educational Institutions

Institution	Modality Used	Target Group	Delivery Format	Key Psychological Outcomes
University of Lagos	Music for Mindfulness (Instrumentals + Guided Audio)	First-Year Undergraduates	Pre-recorded podcast series	Reduced self-reported stress, improved concentration, enhanced sleep quality
Ahmadu Bello University	Collaborative Songwriting Workshops	Postgraduate Students	Live Zoom sessions	Increased emotional expression, group cohesion, and reduced feelings of isolation
Obafemi Awolowo University	Rhythmic Breathing and Drumming Circles	Students in quarantine hostels	Hybrid (in-person + virtual)	Lower anxiety levels, increased body awareness, improved mood regulation
Covenant University	Spiritual Hymns & Reflection Sessions	Faith-based student population	Live-streamed weekly events	Improved emotional resilience, stronger coping through spiritual engagement
University of Ghana, Legon	Music & Movement Therapy	International and exchange students	WhatsApp + Google Meet	Enhanced cross-cultural adjustment, increased joy, reduced homesickness

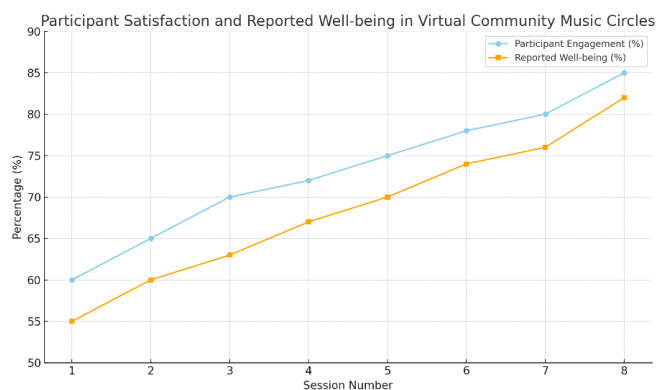


Fig 3: The line graph shows the participant engagement vs. reported well-being over eight sessions.

Similarly, therapists working with children with autism reported significant improvements in attention span, mood stabilization, and verbal interaction when music was incorporated into online therapy routines.

In sum, the case studies presented in this section reveal the diversity and depth of music therapy's impact during the COVID-19 pandemic. Whether delivered through structured hospital programs, grassroots digital collectives, or individualized therapeutic encounters, music emerged as a scalable and culturally adaptable modality. These examples reinforce the argument that music is not merely a complementary practice but a critical element of a multidimensional mental health response in crisis contexts.

Outcomes and Measured Benefits

The widespread adoption of music-based interventions during the COVID-19 pandemic provided a valuable opportunity to observe and assess the therapeutic outcomes associated with music in mental health care. Drawing from case studies, practitioner reports, and emerging scholarly literature, this section examines the psychosocial and emotional benefits of music therapy interventions across diverse demographic groups. The sub-sections that follow explore the measurable effects of music engagement on anxiety, depression, resilience, and social well-being.

Reduction in Anxiety and Depression Symptoms

Research has already shown strong indications that there were decreased levels of anxiety and depressive symptoms in the participants as a result of structured music therapy intervention processes. Both live and recorded music sessions were also correlated to increased mood regulation, reduced physiological indicators of stress (e.g. heart rate, cortisol levels), and a reduction in a sense of being overwhelmed. Research that has taken place, both clinically and at the home level, observed that music listening especially in the kind heard by the individual enabled one to feel calm and emotionally relieved in times of a rise in uncertainty.

Such as, protocols of guided music listening experiences applied in telehealth settings exhibited one common denominator to wit; subjects experienced the state of reduced restlessness, less agitated, and more capable of handling the pressures of day to day stressors after every listening experience. Quantitative scales like Generalized Anxiety Disorder Scale (GAD-7), Patient Health Questionnaire (PHQ-9) demonstrated significant patient scores improvement even after four or six weeks of continuous music therapy use.

Enhancement of Emotional Resilience

Beyond symptom reduction, music therapy appeared to bolster emotional resilience, particularly among individuals experiencing pandemic-induced grief, isolation, or burnout. The emotive qualities of music lyricism, melody, rhythm was frequently cited by participants as offering a sense of validation and companionship during times of restricted physical contact. The use of reflective songwriting and improvisational exercises within therapy sessions empowered participants to externalize and reframe negative emotions, enhancing their capacity for emotional self-regulation.

In therapeutic contexts involving adolescents and frontline healthcare workers, group-based music therapy facilitated a sense of collective empathy and identity. These group interventions, even when conducted virtually, fostered shared experiences that countered feelings of alienation and hopelessness. This communal effect is consistent with resilience theory, which emphasizes the role of social and emotional connectedness in psychological recovery.

Promotion of Social Bonding and Support

Another salient benefit observed was the capacity of music to serve as a conduit for social interaction and mutual support. Particularly during periods of lockdown and restricted movement, online music therapy sessions created spaces where individuals could connect with peers, express themselves freely, and develop supportive relationships. This was especially beneficial in eldercare environments and among individuals living alone, where feelings of loneliness were prevalent.

Empirical findings indicated that even passive activities such as shared playlists or coordinated music listening events helped maintain social rhythms and interpersonal engagement. The affective synchrony induced by shared musical experiences contributed to a sense of belonging and relational security, which are foundational to long-term psychological well-being.

Evidence from Quantitative and Qualitative Metrics

The effectiveness of music therapy was supported by both qualitative stories used as well as standardized psychometric measures. On the quantitative front, going by scales such as the Depression Anxiety Stress Scale (DASS-21), Mood and Feelings Questionnaire (MFQ) and Subjective Units of Distress Scale (SUDS), there were generalized improvement in a variety of mental health measures. At the same time,



qualitative interviews and reports by therapists emphasized the exclusive power of music to stay beyond words, activate past recollections, and make people feel independent in their expressions.

It is notable that the persistence of these benefits depended on the frequency of sessions, its mode (live vs. video recorded), the expertise of the therapist and the musical taste of a person. Although results differed among people, the overall evidence supported the use of music as a clinically important instrument in the integrative mental health care models.

Altogether, the research analyzed in this section supports the therapeutic potential of music as a non-invasive, emotionally affective measure of mental health assistance in the pandemic era. In addition to lessening both signs of anxiety and depression, music therapy built emotional resilience and social attentiveness during a period of shared suffering. These results demonstrate the significance of personalizing the information about culturally responsive music-based interventions within the context of more general mental health and psychosocial support plans especially when it comes to anticipating the occurrence of future societal health shocks.

Challenges and Limitations

The use of music in mental health therapy during the COVID-19 pandemic presented a range of promising outcomes, yet several critical challenges and limitations emerged in both its implementation and evaluation. These obstacles stemmed from infrastructural, methodological, cultural, and clinical factors that shaped the effectiveness and scalability of music-based interventions during a time of global crisis. This section explores these issues in detail to provide a balanced and nuanced understanding of music therapy's potential and its constraints within the context of pandemic-era mental health care.

Technological Barriers and Digital Access Inequality

One of the primary limitations during the pandemic was unequal access to digital platforms through which many music therapy sessions were delivered. Virtual therapy models, while innovative, assumed a baseline level of internet connectivity, device availability, and digital literacy that was not universal. In low-income and rural communities, particularly in the Global South, the digital divide hindered participation in online music therapy programs. Additionally, bandwidth limitations often compromised audio quality, an essential component for therapeutic engagement in music-based sessions.

Variability in Therapeutic Frameworks and Standards

The rapid adoption of music therapy across different contexts led to a lack of uniformity in therapeutic frameworks, session design, and outcome measurement. In many cases, practitioners employed informal or improvised approaches

without standardized protocols or validated assessment tools. This inconsistency made it difficult to compare program effectiveness across studies or to replicate interventions. Moreover, the distinction between recreational use of music and structured clinical therapy was sometimes blurred, reducing the perceived credibility of certain interventions.

Cultural Subjectivity of Musical Experience

Music's emotional and psychological impact is deeply influenced by cultural background, language, personal history, and social context. While some individuals found solace in classical or meditative genres, others resonated more with local or contemporary music. This cultural subjectivity posed challenges in designing universally effective music therapy interventions. Therapists often had to tailor content significantly, yet cross-cultural generalizability remained limited. Furthermore, certain genres or lyrical content could unintentionally trigger negative memories or emotional responses, complicating therapeutic goals.

Ethical and Privacy Concerns in Virtual Settings

Delivering music therapy online introduced new ethical considerations. Ensuring privacy, emotional safety, and informed consent became more complex in virtual environments, especially when participants joined sessions from shared or non-confidential spaces. In group-based online sessions, managing emotional triggers, distress responses, and participant vulnerability without in-person safeguards posed risks that were not always adequately mitigated. The use of third-party platforms also raised concerns regarding data protection and confidentiality, particularly in institutional settings.

Limited Longitudinal and Empirical Evidence

Although anecdotal and short-term studies highlighted the emotional and psychological benefits of music therapy during the pandemic, there remained a paucity of longitudinal data. Many programs were pilot-based or emergent responses to crisis conditions, without robust pre- and post-intervention metrics or follow-up evaluations. This limited the capacity to draw firm conclusions about long-term efficacy, dosage requirements, or sustained behavioral changes. Additionally, many studies suffered from small sample sizes and lacked control groups, affecting generalizability.

Therapist Training and Capacity Constraints

The sudden demand for alternative mental health support mechanisms exposed a shortage of certified music therapists. In some cases, individuals with limited training offered therapeutic services under the umbrella of music therapy, leading to inconsistencies in practice quality. The emotional toll on therapists themselves, navigating the same pandemic stressors as their clients, also contributed to professional burnout and reduced capacity to deliver effective interventions.

In sum, while music therapy emerged as a vital tool for supporting mental health during the COVID-19 pandemic, its implementation faced several challenges related to digital access, cultural interpretation, standardization, ethical oversight, and research rigor. Acknowledging these limitations is crucial for refining future practice, ensuring ethical delivery, and strengthening the empirical foundations of music-based mental health interventions. Addressing these gaps in subsequent public health planning and therapeutic training will be essential to leveraging music therapy more effectively in both emergency and long-term mental health contexts.

Policy and Practice Implications

The expanded use of music as a therapeutic intervention during the COVID-19 pandemic has revealed both the potential and the limitations of alternative, creative modalities in public mental health care. As mental health systems around the world adapt to post-pandemic realities, policymakers and practitioners are tasked with identifying scalable, inclusive, and evidence-based approaches to care. This section outlines strategic implications for integrating music therapy into mental health policy and clinical practice, emphasizing institutional partnerships, regulatory frameworks, access equity, and workforce development.

Integration into National Mental Health Strategies

One of the most pressing needs identified during the pandemic was the diversification of therapeutic modalities within national mental health systems. Music therapy when structured and delivered by trained professionals demonstrated measurable outcomes in reducing anxiety, emotional distress, and feelings of isolation.

To harness these benefits long-term, governments and health agencies should incorporate music therapy into

mental health strategies and funding frameworks. This can include:

- Recognizing music therapy under national health insurance schemes or social protection packages
- Including certified music therapists as part of multidisciplinary mental health teams
- Supporting research grants focused on evaluating music-based interventions

Such integration ensures continuity beyond emergency measures, embedding music therapy into the routine care infrastructure.

Accreditation and Professionalization of Music Therapy

Despite its growing popularity, the field of music therapy remains inconsistently regulated across jurisdictions. For broader adoption, the establishment of nationally or regionally accredited training programs is essential.

Policy recommendations in this area include:

- Setting national certification standards for music therapists
- Creating regulatory boards to oversee practice, ethics, and continuing education
- Establishing academic pathways (e.g., postgraduate diplomas, CPD modules)

Standardization enhances legitimacy and ensures that music therapy services maintain quality and safety, particularly when used with vulnerable populations.

Expanding Access Through Digital Infrastructure

During lockdowns, tele-health platforms enabled therapists to reach clients remotely, with music therapy sessions conducted via video conferencing, mobile apps, and curated playlists. However, disparities in digital access posed a major barrier in low-resource communities.

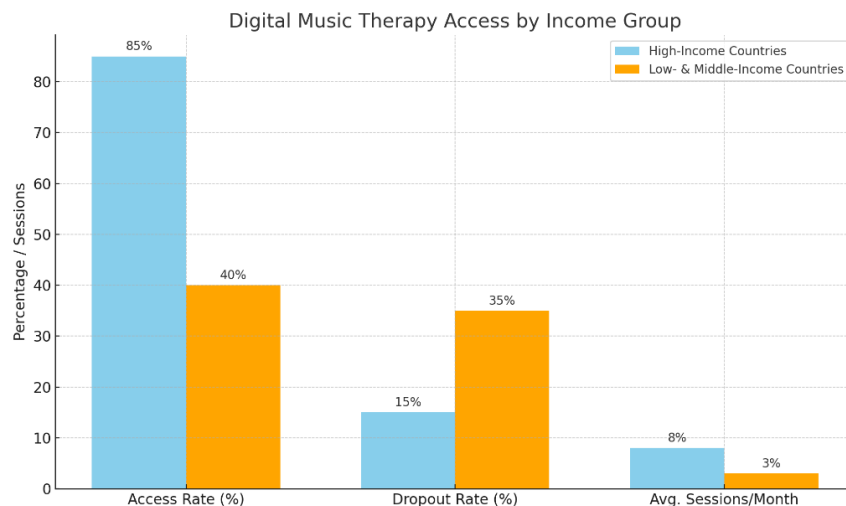


Fig 4: The graphs above show the high-Income Countries vs. Low- and Middle-Income Countries), including access rates, dropout percentages, and average session frequency.



Table 6: Institutional Collaborations in Music-Based Mental Health Interventions During the COVID-19 Pandemic

<i>Collaborating Institutions</i>	<i>Type of Intervention</i>	<i>Delivery Mode</i>	<i>Target Population</i>	<i>Reported Patient Outcomes</i>
Hospitals – Music Schools	Live virtual music therapy sessions	Video conferencing (Zoom, Teams)	Hospitalized COVID-19 patients	Reduced anxiety, improved mood, enhanced treatment adherence
NGOs – Streaming Platforms	Curated therapeutic playlists	Spotify, YouTube, Deezer	General public during lockdowns	Lowered isolation, improved sleep quality
Universities – Mental Health Units	Research-informed group music workshops	Hybrid (in-person + online)	University students under stress	Increased social connection, decreased academic burnout
Care Homes – Local Choirs	Interactive singing sessions and concerts	Pre-recorded and live	Elderly residents in isolation	Improved emotional engagement, reduced depressive symptoms
Community Centers – Tech Startups	Music therapy apps and mobile interventions	Mobile apps	Adolescents and low-income users	Boosted emotional regulation, increased therapy access

Digital health equity policies are therefore necessary to expand infrastructure in underserved areas. Recommendations include:

- Public investment in digital therapy platforms with embedded music modules
- Subsidies or partnerships to provide low-cost data access for therapy participants
- Cross-sector collaborations between health ministries and technology providers

Cross-Sector Partnerships with Cultural and Creative Institutions

The pandemic highlighted the potential of cultural organizations such as orchestras, choirs, and music schools as mental health allies. In many regions, these entities offered virtual performances, interactive workshops, or community engagement initiatives that had therapeutic impacts.

To sustain such collaboration, policy frameworks should promote:

- Grants or tax incentives for arts organizations that partner with health agencies
- Joint funding schemes between Ministries of Culture and Health
- National campaigns that normalize music as a tool for emotional resilience

Such cross-sector efforts can transform music from a supplemental activity into a recognized pillar of public mental health outreach.

Addressing Cultural and Linguistic Relevance

Music is not a universal language in practice it carries deep cultural, generational, and linguistic nuances. Policy frameworks should, therefore, encourage local adaptation rather than impose a one-size-fits-all model.

- Funding should prioritize locally relevant music-based interventions
- Indigenous and traditional music forms should be integrated into therapy where appropriate
- Community participation in curating culturally resonant content must be institutionalized

This approach enhances participant engagement and improves therapeutic resonance across diverse populations.

In sum, the COVID-19 pandemic accelerated innovation in mental health care, compelling systems to explore alternative therapies like music. As evidence of music therapy's efficacy grows, the challenge now lies in institutionalizing its use through strategic policy and practice frameworks. Integration into mental health systems, professional regulation, digital access, cross-sector collaboration, and cultural sensitivity must form the backbone of future efforts. These steps will ensure that music therapy not only survives the pandemic moment but evolves into a sustainable, inclusive, and impactful component of global mental health strategy.

CONCLUSION

The COVID-19 pandemic precipitated a global mental health crisis, highlighting both the fragility of existing support systems and the urgent need for innovative, accessible, and culturally sensitive therapeutic interventions. Amid this disruption, music emerged as a powerful, adaptable modality for mental health support ranging from individualized self-guided listening practices to structured therapeutic programs delivered via digital platforms or institutional collaborations.

This study has explored the theoretical basis, applied use, and documented benefits of music therapy across diverse populations during the pandemic. Through literature synthesis, case studies, and cross-sectoral examples, the

evidence strongly supports music's capacity to alleviate symptoms of anxiety, depression, and emotional distress while fostering resilience and social cohesion.

Moreover, the review identified critical structural and policy dimensions required for sustainable integration of music therapy into mainstream mental health frameworks. From the need for regulatory standardization and professional training, to digital inclusion and community-level adaptation, the future of music therapy depends not just on clinical validation but on systemic alignment across education, culture, and healthcare sectors.

As mental health systems transition into a post-pandemic landscape, there is a clear opportunity to institutionalize music therapy as both a complementary and standalone intervention. Its appeal lies not only in its therapeutic value but in its universality, flexibility, and capacity to connect individuals through shared emotional and cultural experience. The pandemic has shown that healing can come not just from medicine and psychology but also from melody, rhythm, and human expression.

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