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Crisis, Connection and Care:

Contemplation on Establishing an Early-Pandemic-Era Online Music Therapy Project in China

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Abstract

The COVID-19 outbreak in China brought multidimensional impacts on healthcare workers. This paper aims to report a rapid-response online music therapy project initiated by a volunteer team from a Chinese conservatory in early 2020, aiming to offer biopsychosocial support to the frontline healthcare workers and their children. The project was delivered via WeChat and Tencent Meeting, including Individualized Music Companionship and Individualized Music Caring sessions for healthcare workers, and Group Music Caring for their children. This report is based on organizational documents, coordination notes, media reports, and team debriefings, avoiding direct participant data to ensure ethical compliance. A total of 25 volunteers engaged in providing music support to 55 healthcare workers and 11 children. Daily supervisions identified the importance of music, the present moment, and positive resources, generalization and therapist's balance. Ethical sensitivity was maintained throughout. Public feedback highlighted the program's social value during the crisis. The project underscores the critical role of teamwork, ethical awareness, and adaptability of online technology. It offers a practical model for online music therapy and encourages further theoretical frameworks of music therapy to support biopsychosocial care in crisis preparedness and intervention.

Keywords: COVID-19; virtual music therapy; frontline healthcare workers; collective task force; crisis intervention; volunteer services

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Background

In late 2019, the novel coronavirus outbreak first occurred in Wuhan, China, precisely during the Spring Festival. To contain the source of the virus, Wuhan initiated a strict lockdown on January 23rd, halting public transportation and exit routes. This action strained medical resources, and medical teams from all over the country and the People's Liberation Army rushed to Wuhan in an emergency. On January 30th, the World Health Organization (WHO) declared the outbreak of the Public Health Emergency of International Concern (PHEIC), initiating global efforts to combat the pandemic.

Review of Literature

Overview of the COVID-19 Pandemic

On March 11, 2020, the World Health Organization (WHO) officially declared Coronavirus Disease 2019 (COVID-19) a global pandemic (World Health Organization, 2020). In response, governments worldwide implemented various public health measures. While effective in controlling the virus, these strategies resulted in challenges including increased social isolation, heightened psychological stress, and overwhelming burdens on healthcare systems (Fancourt et al., 2021).

The pandemic posed biological, psychological, and social crises. Patients and families faced increased loneliness and anxiety due to isolation and visitation restrictions. Frontline healthcare workers (FHCWs) experienced physical and emotional strain from high-stress environments and ongoing infection risks (Ip-Winfield & Grocke, 2021). Individuals with intellectual disabilities, older adults, and other vulnerable populations experienced disrupted support systems and reduced participation in daily activities, which further weakened their social connections and psychological well-being (Thompson & Khalil-Salib, 2021).

The Impact of COVID-19 on Different Populations and Therapeutic Responses

The COVID-19s pandemic since early 2020 has strained public health systems and profoundly affected psychological well-being of individuals and communities. Psychological distress has been most notable in the public, followed by hospitalized patients and healthcare workers. The virus's high transmissibility and mutation rate led governments to enforce lockdowns, quarantine measures, and social restrictions, resulting in heightened isolation, anxiety, accumulated stress, and experiences of grief and mourning (Pfefferbaum & North, 2020). Hospitalized patients with or suspected of having COVID-19 faced emotional challenges under isolation, with limited contact with loved ones, intensifying feelings of loneliness and helplessness (Wang et al., 2020). Under high-stress and high-risk working conditions, healthcare workers struggled with physical exhaustion, post-traumatic stress symptoms, and burnout, prompting a need for emotional recovery and meaning-making (Shanafelt et al., 2020).

The Multidimensional Impact of COVID-19 on FHCWs in China

During the COVID-19 pandemic, FHCWs in China faced immense psychological pressure. Anxiety, depression, and other emotional problems were commonly reported (Li et al., 2020). Work environment uncertainty and infection risks, and the severity of patients' conditions significantly increased the psychological burden on medical staff (Xia et al., 2021). Strict lockdown and closed-loop management policies limited healthcare workers' family contact and their families, and lack of social support further deteriorated their

mental health (Li et al., 2021). These psychological issues could lead to professional burnout, undermining work efficiency and the quality of care (Zhang et al., 2021).

The occupational impact of the pandemic on FHCWs included excessive workloads and hazards, reducing job satisfaction and increasing burnout (Wang & Wan, 2022; Xiang & Tang, 2022). Beyond routine duties, they faced the added pressure of preventing nosocomial infections. Many expressed feelings of extreme exhaustion and a desire to leave the profession (Chen & Zhao, 2022). The combined effects of physical overwork and psychological strain threatened healthcare workers' occupational stability.

Prolonged use of protective equipment led to skin damage and breathing difficulties among FHCWs during the pandemic (Yang et al., 2021). Sleep disturbances and fatigue worsened their physical well-being (Tian et al., 2021). The interplay between physical strain and psychological stress formed a vicious cycle, adversely affecting the overall health status of healthcare personnel.

The COVID-19 pandemic also impacted the families of FHCWs, who experienced emotional distancing and psychological distress due to quarantine requirements and infection control measures (Liu et al., 2020). Family members often worried about the safety of their loved ones while simultaneously bearing caregiving duties at home, resulting in heavy psychological burdens. Some developed symptoms of anxiety and depression, underscoring the urgent need for social support and mental health interventions (Wang et al., 2022). The psychological well-being of healthcare workers' families directly affects the emotional state and work performance of the medical staff themselves; thus, providing support to families is an essential component of comprehensive care for healthcare workers.

Chinese FHCWs encountered multiple stressors during the COVID-19 pandemic, including severe psychological, occupational and physical challenges, as well as their families. The studies suggested future strategies should prioritize mental health services, improve working conditions, and offer family-centered support to enable healthcare workers to effectively and sustainably address future public health crises (Li et al., 2020; Xia et al., 2021).

The Development and Specific Practices of Music Therapy in the Context of COVID-19

Music therapy practitioners swiftly adapted their intervention strategies during the pandemic by integrating remote technologies and creative approaches to overcome communication barriers. Music therapists transitioned from traditional in-person sessions to contactless therapy approaches like window performances, playing and singing at the doorway, and using pre-arranged gestures and whiteboards to maintain real-time musical interaction while adhering to infection control protocols (O'Brien et al., 2021). Patients established musical connections with therapists through simple bodily cues, enhancing the humanized care experience in clinical settings.

The pandemic accelerated the development of online platforms in music therapy, enabling the growth of remote group sessions despite some inherent limitations. Thompson and Khalil-Salib (2021) investigated an ongoing online music therapy group, and both participants and caregivers reported that the sessions provided emotional support and opportunities for social connection during the pandemic. Despite technical challenges such as latency and unstable sound quality, the study confirmed the feasibility and potential of remote music therapy in times of crisis.

Within high-pressure medical environments, therapists developed remote music-based support programs aimed at collectively supporting FHCWs. Ip-Winfield and Grocke (2021) designed a series of online group sessions integrating music and imagery. Through a structured process involving visualization, imagery-based guidance, and interactive music

selection, participants explored internal experiences, shared emotions, and established a collective space for support. This model highlighted the multifaceted effectiveness of music therapy in fostering interpersonal connection and psychological resilience.

During the pandemic, community-based musical creations, such as online choirs and collaborative music video projects, emerged as therapeutic interventions embodying collective resilience. The choir project for healthcare workers documented by O'Brien et al. (2021) not only offered an emotional outlet but also symbolically reinforced the message that "we remain connected." Despite restrictions and uncertainty, community music-making brought hope and a sense of cohesion, showcasing the social function of music.

The Purpose of this Article

A pioneering online music therapy project was promptly initiated to provide biopsychosocial support during the pandemic in China. It aimed at assisting FHCWs and their children through structured online sessions.

This article comprehensively discusses the project's inception, construction, design, implementation, and public reception. It also deeply explores the social responses to the project, the insights and practical experiences of the organizers. Furthermore, the article further analyzes the significant influences of this project on the application of crisis-oriented music therapy. Through meticulously documenting this early and organized therapeutic response framework, this article aims to provide valuable perspectives and inspirations for music therapists dealing with emergency and disaster situations in the future.

Project Overview

Project Initiation

The Music Therapy program faculty at a Chinese conservatory were significantly affected by the pandemic and subsequent lockdowns. Beyond repeatedly checking pandemic-related reports daily and scrambling to purchase daily necessities or pandemic prevention supplies, they remained deeply concerned for one member of their team—Author Lin, who was stuck in Wuhan, the epicenter of the outbreak. Despite these challenges and pressures, they decided to use their expertise to assist in the anti-epidemic work and cope with their own anxiety. On January 26, 2020, Music Therapy program faculty members, the authors, conducted a teleconference to initially establish the goals and structure for online intervention initiatives aimed at addressing the psychological and emotional impacts of COVID-19.

The Theoretical Foundation and Principles of the Project

On January 26, 2020, the National Health Commission of the People's Republic of China formulated the *"Notice on Issuing the Guiding Principles for Emergency Psychological Crisis Intervention for Pneumonia Caused by Novel Coronavirus Infection"* to provide a scientific framework for managing the epidemic, reducing psychological impacts, and promoting social stability. The document categorized the affected population into four levels based on exposure severity. The first-level population (hospitalized patients, frontliners, epidemic prevention workers, etc.) were the priority for psychological crisis intervention. Mental health education and counselling services were subsequently extended to second to fourth levels, including quarantined people, frontliners or patients' family members, and the public.

Prolonged use of protective gear and high-pressure work can cause excessive fatigue, sleep deprivation, emotional distress, and social isolation in FHCWs. These burdens may compromise both well-being and professional performance, ultimately affecting pandemic response and medical service quality. Given the large size of other affected groups and restrictions on inpatient access, the project specifically targeted FHCWs and their families, particularly children.

Informed by resource-oriented music therapy approach (Rolvsjord, 2010), the therapeutic process underpinning this project is characterized by a collaborative partnership that empowers clients and fosters their self-determination, maintains a consistent focus on the client's innate potentials and resources, consciously considers the clients within their social and cultural context, and intentionally leverages music as a health resource both within and beyond the therapeutic setting.

The design of this project was informed by the biopsychosocial model (Engel, 1977). The organizers recognized that the needs of healthcare workers at the onset of the pandemic stemmed not only from biological challenges of the disease but also from concurrent psychological distress. Furthermore, the robustness of their social support systems was considered a critical factor influencing their overall health during this critical period. The thematic analysis by Tekin et al. (2022) revealed that while family members of frontline healthcare workers felt pride and were supportive, they simultaneously shouldered increased responsibilities and significant emotional burdens. However, the existing literature focusing specifically on the needs of these family members remains limited. The development of our program constitutes a significant innovation, as it deliberately focuses on providing support for these family members, especially their children, a group whose critical role has been acknowledged yet insufficiently studied.

Project Introduction

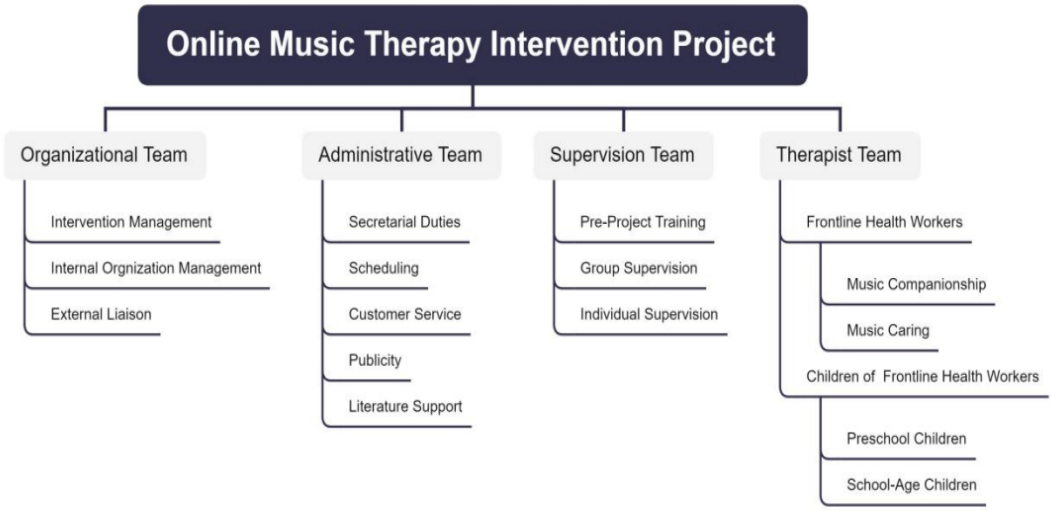
The online music therapy project was conducted from January 26 to February 28, 2020. The preparatory work, completed by three organizers from January 26 to 30, 2020, involved submitting the proposal, obtaining support from the Central Conservatory of Music (CCOM), finalizing intervention plans and target clientele, recruiting music therapists and student volunteers, organizing professional training, and coordinating with hospitals and schools in Wuhan. Due to the Lunar New Year and geographical dispersion, all tasks were conducted online.

Formal services were provided from January 31, 2020, to February 28, 2020. Daily workflow began with a 09:00 scrum meeting to review tasks and address therapists' needs and challenges. Therapists responded to referrals or engaged in paired exercises when unassigned. Group supervision (16:00–17:00) focused on therapists' therapeutic issues and emotions.

The daily treatment schedule included three sessions: 09:00–11:00, 11:30–13:30, and 14:00–16:00. Participants scanned a WeChat QR code to start the process. After an introduction by the assistant, participants selected the type of services, and the assistant connected them with the therapist. Participants were advised to prepare a device with music playback software and headphones.

As shown in Figure 1, the project comprises four teams: the organizational, administrative, supervision, and therapist teams.

Figure 1. Organizational Structure of the Online Music Therapy Intervention Project.



The **organizational team**, led by three project initiators who are music therapy educators from the CCOM, included Author Chen, who was responsible for managing therapeutic interventions to ensure the quality and effectiveness of music therapy practices; Author Li, who oversaw internal organizational operations and coordinated between therapists and administrative staff; and Author Lin, who handled external liaison duties by communicating with local hospitals and schools in Wuhan to recruit participants for the project.

The **administrative team** consisted of volunteers from the lower grades at the conservatory. It primarily focused on five key areas of responsibility: secretarial duties, scheduling, customer service, publicity, and literature support. Secretaries documented daily work activities, including the key agendas of group scrum meetings, therapy schedules, and supervisory topics. Schedulers matched the most suitable therapist to the specific needs of the participants, as communicated by customer service. Customer service was responsible for addressing customers' inquiries, distributing information collection forms, facilitating the signing of informed consent forms, and coordinating the connection between therapists assigned by the scheduler and their respective clients. Publicity designed recruitment posters and drafted press releases to effectively communicate the progress of the entire project to the public. Literature support gathered evidence for music therapy interventions by researching crisis intervention literature.

The **supervision team** offered three types of professional support: pre-project training during the project preparation phase, ongoing group supervision during the intervention phase, and individual supervision as required. Pre-project training involved workshops led by three music therapy educators and a guest presentation by experienced music therapist Xin Zhao. In the form of workshops, the participants explored and experienced the self-care of music therapists who were about to be deployed during the epidemic period, preparing them attitudinally for subsequent work. A comprehensive overview of the project, including work assignments, therapeutic technique training, workflow, setup procedures, and ethical considerations, was delivered through a formal lecture. Finally, pair exercises were conducted to ensure that the therapists fully absorbed the training content. Group supervision sessions occurred daily after work. Therapists who conducted interventions on that day were invited to share their experiences, and any questions raised by the therapists were discussed. Additionally, the supervision session emphasized the importance of self-care for all volunteers, encouraging them to engage in music-based self-care activities after work. Individualized supervision was tailored to therapists requiring support to enhance therapeutic skills and services.

The **therapist team** comprised senior undergraduate and graduate students from the CCOM, along with working graduate volunteers. All members served as therapists who had undergone clinical training and professional supervision before the outbreak. The therapeutic interventions offered to FHCWs were categorized into two types: short-term Individualized Music Companionship tailored to specific musical needs, and in-depth Individualized Music Caring emphasizing self-experience and emotion. Interventions for children of FHCWs were divided by age into preschool children aged 3 – 6 years and school aged children aged 7 – 12 years, in a group setting.

Sources Informing the Reflection

Although this paper is presented as a reflection on practice rather than a formal research study, the reflections are grounded in systematically documented materials generated throughout the project. The primary sources of data include:

- Records of scheduling and coordination maintained by the administrative secretary, which contained information on referrals, therapist assignments, and session arrangement.
- Notes recorded by the secretary during administrative meetings and clinical supervision sessions, which capture key decisions, discussions, and procedural reflections.
- Work logs, implementation summaries, and reflective discussions produced by the three project organizers at various stages of the project.
- Anonymous feedback from service users who signed written consent for publication, as well as insights from therapists drawn from previously published interviews and articles.

These sources were collectively reviewed to identify recurring patterns, challenges, and insights that informed the reflective analysis presented in this paper. All information was used in aggregated or anonymized form, and only data with written authorization or already available in the public domain were included to ensure ethical integrity and confidentiality.

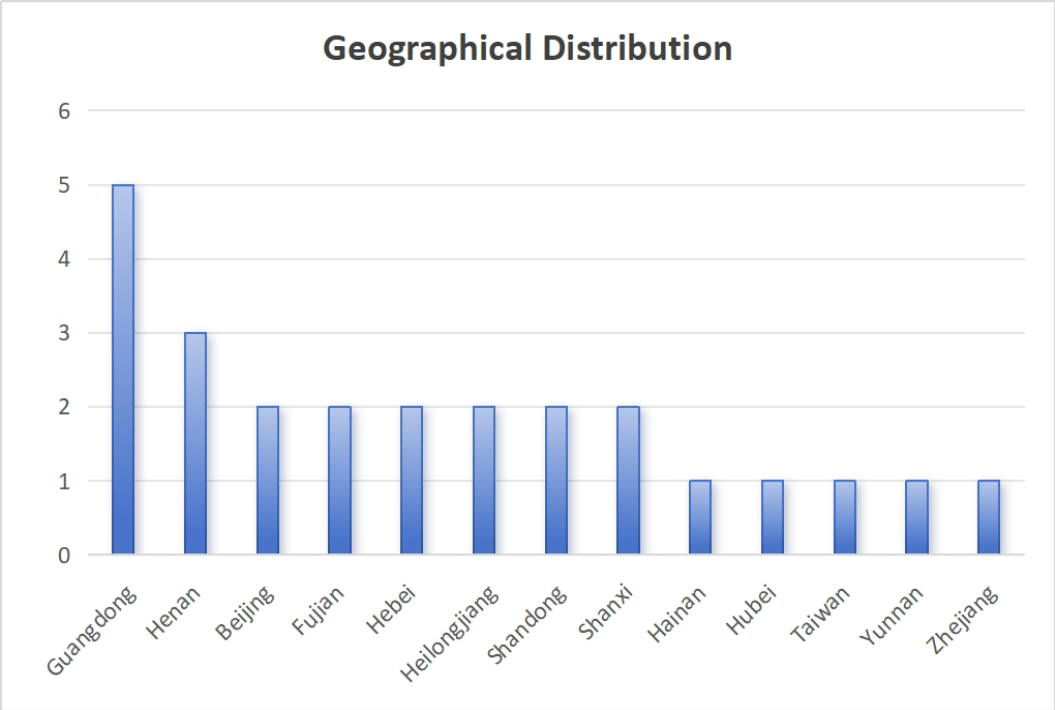
Based on these diverse materials, the following section outlines the implementation process and the unfolding of the project's main strategies.

Implementation Process

Volunteers

Twenty-five volunteers, comprising 2 males and 23 females, participated in the online music therapy project, representing three distinct categories: 64% were current music therapy students at the CCOM, 24% were music therapy educators at the same institution, and 12% were alumni of the music therapy program at the conservatory. Owing to the Chinese New Year holiday and pandemic-related restrictions, the volunteers were dispersed across various provinces. Figure 2 illustrates the geographical distribution of volunteers along with the corresponding number of participants in each province.

Figure 2. Geographical Distribution of Volunteers.



Music-Based Interventions: Design, Structure, and Therapeutic Considerations

FHCWs in Wuhan faced psychological stress during the COVID-19 outbreak due to prolonged exposure to critical cases, intense workloads and emotional exhaustion from patient care. Their children also experienced emotional distress from separation, uncertainty, and disruptions. In response to these challenges, three music-based interventions were developed: Individualized Music Caring for FHCWs, Individualized Music Companionship for FHCWs, and Group Music Caring for FHCWs' Children. These interventions aimed to meet specific psychological needs through varying levels of music engagement for optimal therapeutic outcomes. Figure 3 presents the recruitment posters for the project.

Figure 3. Recruitment Poster for FHCWs and Their Children (in Chinese).

Individualized Music Companionship for FHCWs

The Individualized Music Companionship intervention supported FHCWs in recognizing and managing their emotions states during high-stress situations. Participants engaged in guided music listening and experiential exercises to enhance emotional exploration and build psychological resilience. The therapist provided individualized musical guidance to help participants utilize music for emotional regulation. This approach enabled FHCWs to gain psychological support in high-pressure environments and incorporate effective self-regulation techniques into their daily routines. Unlike Individualized Music Caring, this intervention is shorter, aiming to offer immediate, focused emotional relief in a concise and accessible manner.

The Individualized Music Companionship model is grounded in emotion regulation theory (Gross, 1998, 2015) and the musical attunement framework (Malloch & Trevarthen, 2009; Reybrouck, 2023). The Individualized Music Companionship aligns with the stages of emotion identification, strategy selection, and response modulation, using music to enhance emotional awareness and support brief, adaptive regulation. Guided listening and experiential exercises facilitate recognition of affective states and rapid psychological stabilization during acute stress.

Musical attunement explains how rhythm, tempo, melody, and tone create intersubjective resonance between therapist and participant. This dynamic interaction fosters empathic alignment, with music serving as both an expressive mirror and a regulatory tool. Individualized Music Companionship thus offered concise, targeted emotional support for frontline healthcare workers under high psychological demands.

Individualized Music Caring for FHCWs

Individualized Music Caring is a goal-oriented intervention for FHCWs, addressing anxiety, grief, and emotional exhaustion. It utilized positive psychological resources and techniques such as guided improvisation, songwriting, and interactive music experiences to facilitate emotional expression and psychological recovery. The therapist provided structured musical support, ensuring that music serves as emotional release and psychological healing. The goal was to help healthcare workers gain positive emotional experiences during the regulation process, reinforcing their emotional resilience. Individualized Music Caring engaged participants at a deeper emotional level, offering a more immersive and transformative experience through active musical involvement.

The Individualized Music Caring framework draws on positive psychology (Csikszentmihalyi & Seligman, 2000) and music psychotherapy theory (Bruscia, 2014). The Individualized Music Caring emphasizes cultivating positive emotions, resilience, and meaning-making through creative and interactive music activities, including improvisation, songwriting, and collaborative group engagement.

From a music psychotherapy perspective, music acts as a symbolic and relational medium, enabling individuals to externalize and transform emotions. The Individualized Music Caring leverages this process-oriented function to promote emotional restoration and psychological growth, rather than merely offering short-term stress relief. Empirical studies show that music-based interventions reduce stress, alleviate emotional exhaustion, and enhance empathy among healthcare professionals (de Witte et al., 2020; Finnerty et al., 2022), supporting Individualized Music Caring as a holistic, restorative model of musical care.

Group Music Caring for FHCWs' children

Group Music Caring intervention focused on supporting the mental well-being of FHCWs' children affected by the pandemic. Many children experienced anxiety and insecurity due

to their parents' prolonged absence and the uncertainty surrounding the situation. This approach emphasized emotional expression, social interaction, and psychological security through group singing, movement-based musical activities, and music recreation. The therapist played an essential role in facilitating group interactions, ensuring that musical activities effectively provided emotional support and stability for the children. The intervention was stratified by age. For children aged 3 – 6, the focus was on enhancing social engagement and providing opportunities for interpersonal interaction, aiming to mitigate the negative effects of isolation at home. For those aged 7 – 12, the intervention prioritized emotional support and created a safe space for emotional expression.

Grounded in child development and social interaction theories, this program recognized that children acquire social and emotional competencies through varied forms of engagement across developmental stages (Berk, 2018). Therefore, the intervention integrated musical play, movement, imitation, improvisation, and collaborative music-making to support children aged 3 – 12 in developing emotional understanding, cooperation, and empathy through natural group interactions (Blanky-Voronov & Gilboa, 2022; Ginman et al., 2022).

Music serves as a medium for emotional expression and relational bonding, offering a safe and supportive interpersonal environment while fostering nonverbal affect exploration and emotional self-regulation (Bruscia, 2014). Evidence further suggests that music activities reduce stress, strengthen resilience (de Witte et al., 2020), and enhance prosocial behavior and social competence (Blanky-Voronov & Gilboa, 2022; Schellenberg et al., 2015).

Recognizing the time demands and family strain associated with healthcare work, attachment-based perspectives highlight the importance of stable emotional support. Although not a parent-child format, the program cultivated responsive and secure group relationships to provide emotional regulation, peer connection, and psychological safety for children of healthcare professionals, helping them maintain stability and resilience during periods of caregiver absence or stress (Newman et al., 2022).

Virtual technology

Since the entire project was conducted online and all team members worked remotely, there are specific considerations regarding software selection.

WeChat. WeChat was chosen for tailored individual music therapy sessions for FHCWs due to the COVID-19 pandemic increasing their workload and limiting self-care. Introducing a new software that necessitates extensive downloading and acclimatization could exacerbate their stress levels and impede their receptiveness to music therapy. WeChat's widespread use in China allows for quick therapy deployment. However, WeChat's "Moments" feature poses a challenge as it reveals personal posts. To avoid dual relationships, administrative staff reminded both clients and therapists during the referral process to use WeChat solely for therapy, and to disable the "Moments" function. Additionally, they were instructed to remove accounts post-session.

Tencent Meeting. Tencent Meeting was utilized for children's group therapies, therapists' scrum meetings, and group supervisions during the pandemic. Given that children and music therapists were likely to spend more time at home during the pandemic compared to FHCWs, they were likely to find it easier to download and adapt to the software. Additionally, the administrative staff designed a comprehensive manual guide specifically to assist children and their guardians in effectively using the software. Key features like scheduling, screen sharing, multi-party attendance, and session recording enhanced the efficiency of group therapies and supervisions. Simultaneously, participants in both therapy and supervision sessions had more opportunities to communicate, interact, and share with one another, thereby facilitating the realization of group dynamics.

Analysis of Intervention Sessions

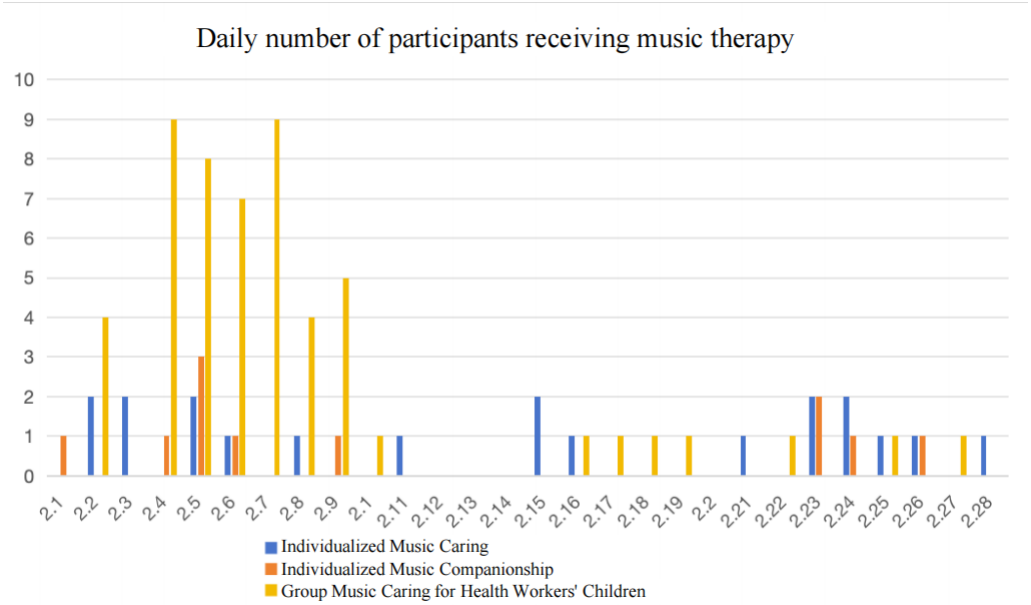
In February 2020, online music therapy services were provided to 55 children and 31 adults. Two individuals did not participate after connecting, while 11 made appointments but did not receive treatment.

Since there was group therapy for the children's group, 55 children were served during for a total of 814-minutes of treatment. The Individualized Music Companionship was the least chosen option, covering only 11 FHCWs.

Initially, the children's group was mostly conducted in groups, with parental accompaniment for younger participants. Later, the therapy shifted to individual sessions with children around 8-years-old, possibly influenced by equipment operation and the gradual return to online schooling.

The data indicates that the total cumulative service duration amounted to 2,328 minutes (approximately 39 hours), with an average daily service duration of 83 minutes. Participant attendance varied significantly daily, with a peak of 13 participants on certain days and a low of 0 participants on others. Figure 4 illustrates trends in attendance. Treatment duration also exhibited disparity, with the longest single-day service lasting 265 minutes on February 8th. In terms of service type, Music Caring predominated, comprising 1,191 minutes (50.8% of the total service).

Figure 4. Daily Number of Participants Receiving Music Therapy.



Supervision Themes

Group supervision, led by three music therapy educators, was conducted daily to provide music therapists with technical, emotional, and social support in a structured and collaborative environment. During supervision, several critical supervisory issues were identified.

The allure and significance of music

Many therapists face challenges in addressing emotions and pain of FHCWs. During the supervision, it was collectively discussed that revisiting music and leveraging its allure and significance could address numerous issues. Additionally, music remained a fundamental reason for many participants' choice of music therapy.

The diversity of musical experiences

Due to the challenges of online therapy, many therapists initially tended to rely predominantly on listening-based or receptive music therapy methods. However, supervisors consistently encouraged therapists to explore interactive methods like recreational singing and instrumental playing, vocal and instrumental improvisation, lyric analysis and composition, as well as verbal and written reflection after listening experiences. This significantly broadened the perspectives of music therapists.

The enhancement and generalization of music experience and gains

Since the majority of music therapy sessions were single sessions, to optimize the impact of music therapy, therapists were reminded to recognize and apply the benefits of musical experiences in participants' daily lives for sustained emotional regulation and resilience.

Focus on the present moment

Music therapists had been taught a broad range of philosophies and approaches in their academic programs, which influenced their focus and cognitive patterns in clinical practice. Nevertheless, during rapid crisis intervention, supervisors recommended prioritizing the present moment over extensive exploration of past experiences and traumas.

Enhance the utilization of positive resources

Considering the urgent time constraints and challenges faced by FHCWs during the pandemic, music therapists were encouraged to assist their clients in identifying and focusing on their positive resources. This served as both the anchoring point for therapy and the critical foundation for subsequent generalization.

Recognition and comprehension between aimless care and actual circumstances

Many music therapists participated in online volunteer services with the intention of offering their love during such life-threatening situations. However, such well-intentioned motives, and sometimes even aimless donations of love, may inadvertently obscure the genuine needs of the clients. Therefore, during the supervision, it was essential to help therapists recognize their own inclination to offer love and the true needs of the clients.

Enhance self-care practices and strengthen support systems

As individuals affected by the pandemic, music therapists also needed to focus on self-care. Those who assist others must first ensure their own well-being. Regular reminders during supervision prompted therapists to dedicate time and space for self-care after work. Likewise, many therapists were able to engage in online volunteer work during the pandemic, supported by their families. Therefore, it was continuously emphasized that in addition to caring for their clients and practicing self-care, they should also extend their attention to their family members and strengthen their support systems.

Ethical Considerations

When designing and implementing the entire online intervention project, many ethical considerations in online music therapy project were rigorously addressed and were continuously updated in response to the specific challenges encountered. The following aspects are several key ethical issues that received significant attention throughout the process.

Confidentiality in online intervention was maintained through unrecorded sessions, de-identification of personal information during supervision, secure storage of treatment documents with passwords, and strict adherence to confidentiality. Therapists consistently reiterated these confidentiality measures to reinforce participants' trust.

Competence was a critical factor that organizers prioritized in project design. The organizers assigned tasks to volunteers based on individual competencies for safe and reliable service. Graduates and experienced teachers conducted Musical Caring interventions while senior students with substantial clinical experience participated in Music Companionship interventions. Lower-grade undergraduates who had completed theoretical studies handled administrative tasks. In addition, ongoing supervision identified therapists' competencies for enhancement and provided specific suggestions for improvement, including specific methods and therapeutic directions.

The *boundaries* were mainly reflected in two key aspects. First, it was essential to avoid dual relationships that may impact treatment judgments. Using WeChat, a familiar virtual platform, could save participants' time and ensure the smooth progression of therapy. Disabling the "moments" function enabled both the therapist and the client to concentrate fully on the current session without allowing private lives to interfere with the therapeutic relationship. Second, clear boundaries were established between the therapist's personal life and professional services to safeguard the healthy and sustainable development of these services. Organizing daily supervision after work assisted therapists in separating personal and professional duties, allowing time for self-care during the pandemic and improving service quality.

Self-care practices were constantly reinforced. Organizers enforced job rotation for therapists to prevent prolonged exposure to traumatic situations, ensuring effective service delivery. During the initial phase of the project, volunteers received training, which included a workshop on self-care led by a professional and experienced music therapist. This workshop aimed to equip therapists with strategies for utilizing music as a self-care tool. Organizers also consistently reminded therapists of the importance of daily self-care practices during daily supervision.

Ethical decision-making represented a particular challenge in the organization of online volunteer services. During the project planning phase, the organizers identified significant demand across various populations and recognized that music therapy could indeed benefit many individuals, including COVID-19 patients and the public. However, with limited resources, determining how to allocate them fairly was a critical test for the organizers. After thoroughly evaluating factors such as the volunteers' competencies, the closed-management requirements of society at that time, potential institutional and organizational partnerships, and national hierarchical intervention guidelines, the organizers prioritized serving FHCWs and their families.

Musical Instruments

When the pandemic emerged, music therapist volunteers were on winter break. Conventional music therapy methods were hindered by the need for in-person sessions with instruments and equipment. Several adaptive strategies were subsequently developed to overcome these obstacles.

Live music

In addition to using instruments such as pianos and guitars that might already be present in their homes, supervisors reminded music therapists of the versatility and effectiveness of the human voice as a portable and adaptable instrument. Singing, humming, or speaking

rhythmically served as powerful tools for creating live music experiences through sound without requiring additional equipment during virtual sessions.

Recorded music

Music therapists utilized widely used digital platforms in China, such as QQ Music and NetEase Cloud Music, to provide recorded music during therapy sessions. Before each session, therapists instructed clients on operating these tools effectively to access music resources smoothly. Anticipating technical issues like internet speed discrepancies, therapists ensured seamless session experiences by proactively addressing such challenges.

Clients' instruments

To actively engage clients in the therapeutic process, music therapists encouraged them to explore creative ways of producing sounds using common household items as makeshift instruments, like pots, pans, or utensils. Clients were also encouraged to experiment with tapping, striking, or playing any items they had on hand. Furthermore, therapists introduced body percussion techniques, where clients could use their own bodies, such as snapping, clapping or stomping, to express themselves musically.

Media Coverage

The online music therapy project received coverage from domestic media such as Xinhuanet (Yin et al., 2020), The Beijing News (Wang, 2020), and Guangming Daily (Cai et al., 2020). The CCOM (Jing, 2020) and National Centre for the Performing Arts (Chu, 2020) highlighted the significance of this music therapy initiative for Hubei Province. Organizer Author Lin (2020) presented this project at the *International Forum on Music and Health in the Context of the Global COVID-19 Pandemic*, which was hosted by Wuhan Conservatory of Music, sharing it with domestic and international music therapy experts. Media reports and the forum underscored the advantages of music therapy in crisis situations, emphasizing its flexibility, timeliness, and public acceptance compared to other treatments. The project's prompt response, targeted population, and clear goals demonstrated the scientific nature of music therapy and the dedication of music therapists (Cai et al., 2020; Jing, 2020; Wang, 2020).

National Centre for the Performing Arts (Chu, 2020) highlighted the daily supervision and support for music therapists, demonstrating team cohesion, humanistic care, and professional ethics. Interviews with two music therapy volunteers revealed their sense of connection and unity during the work process, indicating mutual support among volunteers and supervisors. Just as Chenchen Wang, a music therapy volunteer, mentioned in the interview: "Our online team has a genuine connection that gradually exudes strength" (Chu, 2020). Similarly, another volunteer, Yiyun Cui, also emotionally shared: "This interaction gives us a lot of strength, making our hearts a little calmer" (Chu, 2020). Thanks to such team support, all the volunteers left their service experience with gradual gains and achievements, without any trauma or any stress reactions.

Feedback Analysis

After the music therapy session, the secretary distributed feedback forms to the participants or their guardians to confirm whether they had gained anything from the music therapy process or if they had any additional comments. A total of 15 responses from medical staff and six responses from guardians of the children was collected. All the feedback has been authorized for use, and the responses that were not agreed upon have been excluded.

The feedback from FHCWs further confirmed the stabilizing efficacy of music therapy. Among the 15 FHCWs responses, 100% of the participants reported achieving physical and mental relaxation through the activities. Typical descriptions included “reduction of chest tension” (Response 7) and “obtaining inner peace” (Response 1). It is notable that some medical staff attributed the therapeutic effect to the active participation guided by the therapist, such as “releasing stress by following along with humming” (Response 4), highlighting the role of the body-psychological connection mechanism in music therapy. All FHCWs expressed their intention to recommend the service to colleagues, and this high willingness to recommend may be closely related to the positive emotions they experienced.

The feedback from the children’s guardians indicated that this intervention model has the functions of entertainment, psychological support and promoting social willingness. The data showed that among the six cases collected, guardians observed that children gained significant psychological support through the activities, specifically manifested as improved emotional states, such as “relaxing the mind” (Response 17), “jumping and playing” (Response 18), and enhanced social willingness, such as “making new friends on the internet” (Response 19). Some children showed a preference for a specific piece of music called “Do Re Mi” (Response 21), suggesting that future efforts could include similar style music or more interactive music forms. All guardians held a positive attitude towards the activities and stated that their children gained something from them. Only a few suggested improvements in network stability. Some guardians suggested deepening the content design, such as adding a music appreciation module, reflecting the continuous pursuit of the depth of treatment.

Reflections and Lessons Learned

Organizational Challenges and Strategies

The online music therapy project, initiated with a preparatory meeting on January 26, 2020, and concluded after the last supervision meeting with 25 volunteers on February 28, 2020, was successfully completed. Despite interest from hospitals and medical staff for further services, logistical constraints and the well-being of volunteers led the organizers to unanimously decide against continuation.

Firstly, 88% of the volunteers were from the university. The conservatory planned to begin online teaching in March. Moreover, the volunteers faced personal changes due to the pandemic lockdown while aiding FHCWs and their children. To ensure volunteers’ return to normal life, the music therapy services were planned to end before the return to academic demands.

In addition, crisis intervention is a brief emergency method aimed at stabilizing and reducing crisis reactions, distinct from psychological therapy. Its goal is to promote the natural resilience of individuals through stabilization, reduction of symptoms, returning to adaptive functions, and enabling them to accept continuous care (Caplan, 1964). The online music therapy project was effectively completed within one month to adhere to timeline scheduling, ensure volunteer safety, and achieve project goals.

Strengths and Limitations of Virtual Music Therapy

Diverse musical experiences

Music listening and song-singing are commonly used therapeutic techniques in both children and adult groups. Online therapy, despite limitations in music interaction and

therapeutic relationship establishment, employed over 10 techniques yielding positive outcomes. These techniques included synchronous communication, fostering therapeutic relationships and enhancing self-awareness. Song discussions, song writing, and lyrics creation helped participants articulate emotions and regain a sense of control. Progressive muscle relaxation, guided music imagination, safe space visualization, and earworm technique aided in managing "high arousal state" among FHCWs, building a psychological safety base, reducing the risk of emotional breakdown, and strengthening psychological resilience. More than 80% of sessions combined multiple techniques, such as establishing relationships through shared song singing before delving into emotional discussion, promoting gradual relationship development and minimizing resistance.

The safety of the music experiences

Participants chose Individualized Music Companionship or Individualized Music Caring with the secretary matching competent therapists for treatment. Synchronization among secretaries, clients, and therapists ensured predictability, thus reducing anxiety. Anonymity options for participants during registration decreased identity exposure concerns. These procedures provided stability, encouraging FHCWs' participation in online music therapy. Most participants preferred Individualized Music Caring over Individualized Music Companionship, indicating a certain degree of awareness of their needs and conditions. They also had a relatively high acceptance of online music therapy and were willing to engaged in advanced techniques for more valuable outcomes.

Music and children

Children of medical staff experienced social disconnection due to pandemic measures. The group online music therapy activities helped these children connect with peers, reducing loneliness and increasing awareness of their shared situation. Despite limitations on physical instruments, online music therapy stimulated children's creativity through activities like body percussion and instrument recreation, instrumental improvisation, music and movement, and song lyrics composition. Music therapy encouraged children to express themselves creatively, fostering problem-solving skills and a positive mindset within constraints.

Limitations of virtual music therapy

Despite efforts to enhance online therapy, both health workers and children stated that the music therapy activities were effective, and the music experience were rich. However, the limitations of online therapy still exist. The most prominent ones are the limited depth of therapeutic relationships and the subjectivity evaluation of therapeutic outcomes. Online interaction lacks non-verbal cues crucial for interaction, hindering emotional perception and trust-building. Reliance on self-reports for therapeutic evaluation may skew results. Online music therapy is better suited for school-age children, as younger ones may struggle with technical aspects and require adult assistance, potentially disrupting their participation.

Theoretical Integration and Implications

A key finding of this project underscores that collaborative practice was essential for music therapists during the COVID-19 crisis. This paper further identifies training, consistent supervision, and peer support systems as the fundamental elements of this teamwork. These insights strongly align with the disaster response recommendations articulated by Else and González (2023). The authors emphasize that music therapists must not engage

in disaster work in isolation or without adequate preparation. They advocate for ongoing professional development and highlight that a network of supervision, personal counseling, and peer support is critical for fostering the self-awareness and resilience required of clinicians in crisis settings. Our findings from the pandemic context provide real-world confirmation of these important principles.

The use of everyday items and body percussion as adaptive instruments in this project's online sessions resonates with the international experiences synthesized by Kantorová et al. (2021), highlighting a shared global response among professionals to the practical constraints of the pandemic.

During the COVID-19 pandemic, several publicly reported music therapy initiatives emerged in China. For instance, Gao (2022) introduced the Earworm Technique telehealth music therapy program, and the Wuhan Conservatory of Music launched the Music Healing Radio (Chutian Metropolis Daily, 2020). These interventions primarily adopted receptive music therapy approaches, focusing on guided listening, relaxation training, and music imagery. Such methods utilize the soothing and affect-regulating properties of music to alleviate anxiety and emotional distress. Most of these programs were designed as remote or single-session interventions, providing psychological comfort and emotional support for the public, healthcare workers, and patients during lockdown periods.

In contrast, our team developed music-based interventions for frontline healthcare workers (FHCWs) and their children during the same period, employing a more active and multimodal therapeutic framework. The three interventions—Individualized Music Caring, Individualized Music Companionship, and Group Music Caring for FHCWs' Children—integrated receptive listening with interactive musical engagement, improvisation, songwriting, and movement-based activities. The goal extended beyond emotional soothing to foster emotional expression, psychological resilience, and interpersonal connection through active participation in music. This distinction reflects a broader shift in music therapy practice from purely receptive emotional support toward integrative and participatory models, emphasizing both immediate emotional relief and the long-term psychological recovery from potential crisis-related trauma.

Recommendations for Future Practice

Effective participation in crisis intervention by music therapists requires specific professional and personal qualities. Due to limited time for pre-treatment assessment, therapists rely on basic client information. Therefore, therapists must skillfully employ various therapeutic techniques and adapt their strategies to meet client needs. Additionally, therapists need to maintain stability in high-pressure environments, cope with client emotions, and exhibit psychological resilience to prevent secondary trauma. Inadequate skills in music and language processing or lack of confidence may hinder the establishment of client trust and security.

The project began amidst uncertainty about controlling the pandemic, posing challenges for music therapists. Organizers emphasized the importance of comprehensive planning and adaptability due to the unpredictable nature of the situation. Maintaining reflexive thinking throughout the process was essential given the evolving pandemic management capacity, governmental policies, and fluctuating participant numbers. This integration of structured planning with an adaptive mindset represents the key principles for organizing similar events and effective crisis intervention.

Therapists in a global pandemic often have high expectations to provide care for clients, who play a crucial role in saving lives and contributing to societal well-being. However, FHCWs may adjust or cancel music therapy sessions due to work demands or personal reasons. Therefore, therapists must maintain clear caregiving intentions, understand clients' genuine needs, and balance personal and professional boundaries. This ensures

focused dedication to meeting clients' authentic needs without being overly influenced from personal biases or demands.

Music therapists in this project demonstrated diverse roles, encompassing therapeutic and administrative tasks, such as organization, scheduling, customer service, and liaison duties. This aligns with the American Music Therapy Association's emphasis on therapists possessing clinical and administrative skills (American Music Therapy Association, 2013). Team collaboration has advantages over individual therapists, including insights into real-world challenges, the development of a positive support system, and the encouragement of therapists to leverage their strengths. This inclusive approach allows therapists at all levels to contribute meaningfully and gain valuable learning opportunities.

Conclusion

This project represented one of the earliest organized initiatives by Chinese music therapists during the early stages of the COVID-19 outbreak. It illustrates the effective intervention in addressing the biopsychosocial needs of FHCWs and their families through rapid, structured, and culturally sensitive online music therapy services during public health emergencies. From its conception to execution, this initiative underscores the significance of synergy and flexibility within team organization, the professionalism and applicability of music therapy, as well as the innovation and adaptability of online technology in delivering therapeutic services during public health crises.

By systematically presenting the design, implementation, and reflection of the project, this paper examines critical factors affecting online music therapy effectiveness, including team collaboration, ethics, supervision, and technical choices. It highlights the feasibility and scalability of using this model for disaster response. Practical evidence demonstrates that online platforms can facilitate meaningful therapeutic interactions in high-pressure, resource-limited environments through meticulous adaptation.

This project highlights that music therapists serve not only as providers of therapeutic services in crisis situations but also as professionals embodying proactivity, ethical awareness, and social responsibility. In future crisis interventions, it is essential to leverage their professional expertise, while establishing a robust team collaboration along with an institutional support system. We advocate for the field of music therapy to further extend its influence in crisis intervention, reinforce the accumulation of practical experience, and refine theoretical frameworks for such service models, thereby enriching the role and contribution of this discipline within the global emergency health system.

Ethical Safeguards

This article provides a detailed description of an online music therapy project initiated in early 2020 in response to the COVID-19 pandemic. The program was rapidly developed to offer biopsychosocial support to frontline healthcare workers and their children via online music therapy sessions. It was designed and delivered as a public health initiative, not as a formal research study. No systematic data collection, experimental design, or evaluation was conducted for research purposes. Therefore, the project does not meet the criteria for human subjects' research requiring ethical approval by an Institutional Review Board (IRB) or ethics committee. The initiators made every effort to consider all ethical implications that could arise during the process. No personal or identifying information is included in this article. Therapeutic sessions were not recorded. Finally, all participants voluntarily engaged with the services as part of a community-based emergency response effort. The purpose of this paper is to share practical insights derived from the organization and

delivery of the intervention, thereby informing future crisis-oriented music therapy initiatives.

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Generative AI Statement

The authors used multiple AI-assisted tools during the preparation of this manuscript. Youdao Translation AI and Bimuyu Academic Writing Assistant were used to support Chinese-English translation and to refine language expression. Open AI's Chat GPT was used to assist in checking the APA 7 formatting of references. All AI-assisted content was carefully reviewed, edited and verified by the authors to ensure accuracy, appropriateness, and originality.

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