Study on Cultural Integration and Application of Health Music in Medical Institutions of Hainan Province

Xiao Han School of Music, Sanya University, Sanya, 572000, Hainan, China goodhx_123@163.com

Abstract: This study aims to investigate cultural integration and the impact of health music on patient care in Hainan's medical institutes. A mixed-methods approach was used, combining qualitative insights from interviews and focus group with quantitative data from surveys. The qualitative data provided in depth understanding of participant's' and experiences, while the quantitative data, analyzed using ANOVA quantified the effectiveness of cultural integration and health music practices. The findings revealed that culturally integrated music therapy significantly enhances patient comfort, emotional wellbeing, and overall therapeutic outcomes. Patients reported feeling more connected and receptive to therapy when it included culturally familiar music. Quantitative analysis showed significant improvement in patient outcomes and staff wellbeing associated with higher effectiveness scores in cultural integration and health music practices. Culturally integrated music therapy has the potential to substantially improve patient outcomes and healthcare staff wellbeing. By addressing challenges such as language and music preferences, perceptions of traditional versus modern healing and limited awareness, healthcare providers can foster a more inclusive and effective environment.

Keywords: Cultural Integration, Music Therapy, Patient Care, Healthcare, Hainan, Therapeutic outcomes, Medical Institutions.

1. INTRODUCTION

Hainan Province, located in the southernmost part of China. Hainan is renowned for its vibrant cultural diversity, home to a variety of ethnic groups including the Han, Li, Miao and Hui people (Yao & Choatchamrat, 2023). This cultural mosaic influences the region's traditional and contemporary practices particularly in the realm of healthcare (Leou & Li, 2022). Traditional music in Hainan is deeply intertwined with the region's healing rituals and community practices. The Li dynasty have long used traditional songs and musical instruments like the bamboo flute in their healing ceremonies, believing in music's power to connect the physical and spiritual realms and promote wellbeing (Chang, 2020). Contemporary music also plays a significant role in Hainan's healthcare settings, reflecting the province's dynamic cultural evolution. Modern therapeutic practices increasingly incorporate music to support physical and mental health (Zhang, 2021). They blend traditional musical elements with contemporary

therapeutic techniques. This fusion not only respects and preserves Hainan's rich musical heritage but also adapts to the needs of modern healthcare. Such integration of music in healthcare practices exemplifies how traditional beliefs and contemporary innovations can coexist and complement each other. This enriches patient care and promotes holistic health outcomes in Hainan province (Lin, 2022). Cultural perspective significantly influences the application and acceptance of music therapy across different regions. In western societies, music therapy often focuses on individual emotional expression and therapeutic goals. It aligns with the values of individualism and self-expression prevalent in these cultures. Here music therapy sessions may involve personalized activities such as song writing, playing instruments, and music listening to help individuals articulate their feelings and work through personal challenges (Lin, 2022). Collectivist cultures in many Asian and Africans country on the other hand emphasized community and social harmony. Music therapy in these cultures often involved group activities that strengthen social bonds and promote collective wellbeing (Kwan, 2024). Group signing, drumming, and dancing are common practices, reflecting the cultural emphasis on shared experiences and community participation. Music in these settings is not only therapeutic but it also serves as a means of reinforcing social connections and cultural identity (Chiu, 2023). Traditional beliefs about health and healing also play a role in how music therapy is perceived and integrated into medical practices. Indigenous cultures around the world often incorporate music, chants, and rhythms into their spiritual and healing rituals. These practices are deeply rooted in cultural traditions and are widely respected and accepted within the community (Von Fritschen, 2021). Music therapy in such contexts is seen as a natural extension of existing cultural practices, enhancing its acceptance and effectiveness. However, introducing music therapy to regions with less familiarity or acceptance of Western medical practices can pose challenges. It integrates traditional musical element and practices. This cultural sensitivity ensured that music therapy was relevant and resonated with the patients, fostering greater acceptance and engagement (Kwan, 2024). The understanding and respecting cultural specifics is critical for successful application and acceptance of music therapy. The tailoring of therapeutic solution to align with cultural values and traditions are quite important to undertake (Silverman, 2022). This type of therapy seemed to enhance the experience of the therapist. This further ensures that their interventions are well received by diverse populations. This approach not only improvised the efficacy of music therapy but it also promoted holistic healing and cultural

preservation. Province of Hainan, with its unique cultural and environmental landscape, provides an interesting context for studying the impact of music therapy in patient care. Specific studies have highlighted the benefits of music therapy in this region. This underscores its relevance and potential effectiveness. Clements-Cortes et al. (Clements-Cortés et al., 2023) conducted a meta-analysis to evaluate the effects of music therapy on anxiety, depression, and quality of life among COVID-19 patients in Hainan. The study found significant reductions in anxiety and depression level, as well as improvement in life quality for patients who received music therapy. This advocated the therapeutic value of music as a nonpharmacological intervention, particularly in managing the psychological impact of the pandemic (Clements-Cortés et al., 2023). The research supported by the Hainan health industry Scientific Research Project further emphasized the importance of cultural relevant music therapy practices. Integration of traditional and modern therapeutic approaches, this research highlighted the positive impact of music therapy on the holistic wellbeing of patients. The study's findings suggested that the music therapy, when adapted to the cultural context of Hainan, can enhance patient care and support psychological health (Abdulbaki & Berger, 2020). Li (2022) explored the effects of music education reform in colleges and universities on student's psychological status and social role cognition. This study found that music education significantly reduced psychological anxiety and depression among students. These results indicated that music based intervention were effectively integrating into educational and healthcare settings to support mental health. This study further highlighted the relevance of music therapy in Hainan (Lin, 2022). Korioth & Silverman, (Korioth & Silverman, 2023) discussed the broader context of music therapy in China. They noted that while music therapy is gaining recognition, it is not yet systematically accepted by the national medical system. Many conservatories and medical schools are offering degrees in music therapy. Music therapists are working in clinical and rehabilitation settings. This broader perspective on the development of music therapy in China provided insights into the potential growth and acceptance of music therapy practices in Hainan (Korioth & Silverman, 2023). These studies collectively illustrate the relevance and potential benefits of music therapy in Hainan. The consideration of cultural specifics and integration of traditional practices make things positive. The music therapy plays significant enhancement among patient care and promoted holistic health outcomes in the region.

1.1. Research Objectives

Ro1: To assess the extent of cultural integration practices in medical institutions of Hainan province. RO2: To evaluate the impact of health music on patients and staff within these institutions. RO3: To identify the relationship between cultural integration and the effectiveness of health music in improving patient outcomes and staff well being. RO4: To explore the perceptions and experiences of medical students and staff regarding cultural integration and health music. RO5: To Suggest recommendations for enhancing cultural integration and the application of health music in medical institutions

1.2. Research Questions

RQ1: what are the current practices of cultural integration in medical institutions of Hainan province?. RQ2: How is the health music applied in these medical institutions?. RQ3: What is the perceived impact of Health music on patients and staff? . RQ4: How do medical students and staff perceive the relationship between cultural integration and the effectiveness of health music?

1.3. Research Hypothesis

Null Hypothesis (H0). There is no relationship between the level of cultural integration and the effectiveness of health music in medical institution of Hainan Province. Alternative Hypothesis (Ha). There is a significant positive relationship between the level of cultural integration and the effectiveness of health music in medical institutions of Hainan Province.

2. REVIEW OF RELATED LITERATURE

Music had been used for therapeutic purposes for centuries, with references dating back to Aristotle and Plato (Provenza, 2020). The earliest known medical reference to music therapy appeared in 1789, highlighting its value in treating various ailments (Heller, 1987). Overtime, music therapy has evolved, with formal educational programs and professional organizations emerging in the 20th century. This century found American Music Therapy Association (AMTA) and the Certification Board for Music Therapists (CBMT) (Peterson, 2020). Recent systematic reviews, like the one by Iwamasa, (Iwamasa, 2023), have underscored the bio-psychosocial functioning, reduce stress and improve social concentrations, particularly in healthcare. Researches have also identified that music therapy is effective in diverse healthcare environments, including hospitals, schools, nursing

homes and rehabilitation centers, treating conditions such as depression, anxiety, Parkinson's disease and dementia (Iwamasa, 2023). The expanding scope of music therapy now included not only professional music therapists but it had also been adopted in community musicians and paraprofessional music services. This situation ensured a broader range of patients could be benefitted. Research by Wentworth, (Wentworth, 2022) highlighted how cultural contexts influence the health benefits derived from music. The music with individualistic cultures emphasizing personal emotional expression and collectivist cultures focusing on community bonding and social enjoyment. (Dozler, 2022) discussed the mechanism by which music based interventions can enhance treatment outcomes. A review by Johnson, (Johnson, 2022) provided evidence that regular engagement with music can lead to improved mental health outcomes such as reduced anxiety and depression levels. It is evident from these researches that integration of health music in medical institutions seemed to be a valuable tool for supporting both patient and staff mental health (Johnson, 2022). Combined insights from the above mentioned studies it was evident that cultural integration and health music were deeply interconnected. Cultural integration in medical setting seemed to enhance the effectiveness of health music (Hmiduzzaman et al., 2023). This made it more relevant and engaging for the patients and the staff. Practices that honor and incorporate diverse cultural trading might create a more inclusive environment. This environment would amplify the therapeutic benefits of music. This integration fosters a holistic healing environment, promoting overall wellbeing and improving patient outcomes. The global use of music in healthcare held a rich history and continues to evolve with ongoing research and practice. Music therapy offers significant benefits for patient's healthcare. The integration of music into healthcare practices seemed to become more widespread, enhancing patient care and outcomes (Lee, 2024). Understanding and integrating cultural specifics is crucial for the effectiveness and acceptance of therapeutic practices, including music therapy. Each culture has its unique set for beliefs values and tradition that shape its approach to health care and healing (Khyzhna & Shafranska, 2020). Acknowledging these cultural nuances allows music therapists to tailor their interventions to better resonate with patients cultural backgrounds, thereby enhancing the therapeutic experience. Music therapy when alleges with cultural contexts, it not only fosters greater engagement and comfort among patients but it also reinforces their cultural identity and community bonds (Odell-Miller, 2019). The incorporation of culturally relevant elements, music therapy seemed to attain a powerful tool that

addresses individual health needs as well as respects and honor the cultural heritage of the patient. This leads to more holistic and meaningful healing outcomes. This cultural sensitivity is especially important in diverse and multicultural settings. In these cases the one size fits all approaches which might fell short of addressing the varied and complex needs of different cultural groups. Cultural perspectives play a significant role in the application and acceptance of music therapy across different regions. In western societies, music therapy often emphasized personal emotional expression and individual therapeutic goals. This approach aligns with the values of individualism and self-expression prevalent in these cultures (Helander & Gattino, 2020). Consequently, music therapy in these regions might focus on helping individuals articulate their feelings and work through personal challenges using music as a medium. Contrary to this the collectivist cultures such as those found in many Asian and African societies rituals and communal activities, serving to strengthen social bonds and promote group cohesion. The therapeutic use of music in these cultures might involve group singing, drumming, or dance, emphasizing collective participation and shared experiences. This communal approach reflects the cultural emphasis on social harmony and interdependence (Lan, 2020). The cultural beliefs about health and healing can influence the acceptance of music therapy. Most of the cultures, traditional healing practices that incorporate music are deeply respected and widely accepted. Indigenous cultures around the world often use music, chants, and rhythms as part of their spiritual and healing rituals. These practices are not only therapeutic but also carry cultural and spiritual significance (Xu, 2020). This makes music therapy a natural an accepted form of treatment. The Cultural differences also pose challenges. The regions where there is less familiarity with or acceptance of Western medical practices. Music therapy might not be adopted to align with local beliefs and customs (Liao et al., 2023). This adaptation seemed to involve integrating traditional musical elements and practices into therapy sessions to make them more culturally relevant and acceptable. Overall, understanding and respecting cultural specifics are crucial for the effective implementation and acceptance of music therapy (Claros Ospina, 2024). The alignment of music therapy practices with cultural values and traditions. The therapist seemed to enhance their effectiveness and ensure that their interventions are well received by diverse populations.

3. RESEARCH METHODOLOGY

This study is mixed method (Qualitative, Quantitative) approach in its

research design. The integration of both qualitative and quantitative data in the study aims provided a holistic understanding of these phenomena (Amadi, 2023). This design was considered suitable for examining complex phenomena such as cultural influences on music therapy and patient care. The qualitative component of the study design involved conducting semi structured interviews with a diverse group (30 males and female) of medical students and faculty teaching in Hainan institutes. These interviews were conducted with the music therapists, healthcare givers, and patients who have experienced music therapy. These interviews aim to gather in depth insights into the participant's experiences, perceptions, and opinions regarding the integration of cultural practices and health music in the healthcare settings. The participants were given freedom to share their personal stories and reflections. This provided rich, detailed qualitative data that illuminated the variegated ways in which cultural integration and music therapy intersect and impact patient care. The semi structured format will ensure that key topics are covered while also allowing for the exploration of emergent themes, offering a comprehensive understanding of the subject matter.

Table 1: Illustration of Interview Guide summary of the questions

Section	Number of Questions			
Background Information	02			
Cultural Integration	03			
Health Music Application	03			
Integration of Cultural Integration and health Music	03			
Perception and Impact	03			
Challenges and Improvements	03			
Total	17			

A structured survey was administered to a larger sample of healthcare professionals, patients and music therapists in Hainan. The survey included the sections whose summary is given in the table no 2

Table 2: Summary of the questions relating to factors

Section	Number of Questions
Demographic information	4
Section 1: Cultural Integration	4
Section 2: Health Music Application	4
Section 3: Integration of cultural integration and health music	4
Section 4: open ended Question	3
Total	19

The selection criteria and cultural considerations for the respondents of this study in table 3.

Table 3:Participant's selection and cultural considerations in music therapy research

Category	Description	
Medical Staff	Diverse range of professionals: Doctors, Nurses, Music	
	Therapists, and another healthcare providers	
	Criteria: Experience in applying or observing music therapy and	
	cultural integration	
	Role: Involved in patient care and therapeutic use of music	
Patients Participants in music therapy sessions		
	Criteria: Different age groups, gender, and cultural backgrounds	
	Health conditions: various medical contexts	
Cultural	Inclusion of different ethnic groups in Hainan (Han, Li, Miao,	
Considerations	Hui)	
	Engagement with community leaders and cultural liaisons	
	Ensuring cultural sensitivity in participant recruitment	

This table 3 study involved a purposive sampling method to select participants, ensuring a diverse representation of individuals who can provide comprehensive insights into the integration of cultural practices and health music in healthcare settings (Campbell et al., 2020). The participants included medical staff and patients from various medical institutions in Hainan.

Table 4: Sample distribution for the study

Sr#	Institution	Place	Population	Male	Female	Sample Size
1	Hainan Medical	Haikue	10000	25	25	50
	University					
2	Hainan University	Haikue	30000	25	25	50
3	Hainan Tropical	Sanya	5000	15	15	30
	Ocean University					
4	Qiongtai Normal	Haikue	8000	15	15	30
	University					
5	Haiku University	Haikue	3000	10	10	20
	of Economics					
6	University of	Sanya	4000	10	10	20
	Sanya					
7	Haina University	Haikue	2000	05	05	10
	of Technology					
Total			62000	105	105	210

The purposive sampling, also known as judgmental or selective sampling was chosen for this study because it allowed researchers to select participants who have specific characteristics or expertise relevant to the research objectives. This method is particularly useful in qualitative research where the goal is to gain in depth insights from individuals who can provide rich, detailed information. Purposive sampling use ensured the

researchers about the selected participants are most likely to contribute valuable data that addresses the study's questions. In the context of this study, purposive sampling enables the selection of the medical staff and patients who have direct experience with the cultural integration and health music practices. This also helped in making the most out of limited resources by focusing on information rich cases. The semi structures interviews were conducted with the music therapists, healthcare professional, and patients. These interviews were recorded and then transcribed word for word. This method captured detailed insights and personal experiences. A structured survey was also conducted with a large sample of healthcare professionals, patients and music therapists. The survey included both close ended and open ended questions. These questions were gathered through quantitative data on the perceived benefits, challenges, and overall effectiveness of music therapy and cultural integration practices. Standardized assessment tools like the State -Trait Anxiety Inventory (STAI) and the Beck Depression Inventory (BDI) were used. These tools measured changes in patient's anxiety, depression, and quality of life before and after music therapy sessions. The qualitative data from interviews and focus groups were analyzed using thematic analysis. This method involved identifying, analyzing, and reporting patterns within the data. Thematic analysis was made with the familiarization in which reading and re-reading the transcripts to become deeply familiar with the content. The next step that was taken for thematic analysis was the coding. It was done through generating initial codes from the data in a systematic way across the entire dataset. Each code represented a specific data feature. Development of the theme was done through collecting coded into potential themes and gathering all data relevant to each theme. Themes are patterns of meaning across the dataset. The step of reviewing themes was checked if the themes work in relation to the coded extracts and the entire dataset. This step ensured the themes were coherent and distinct. Defining and naming of the themes were refined as each theme was clearly defined with the specifics of what each theme captured. This involved detailed analysis to capture the essence of each theme. The refinement of each theme were clearly defined the specifics of what each theme captured. This involved detailed analysis to capture the essence of each theme. At the end detailed report was produced and all the themes were integrated into a coherent narrative that answered the research questions. This final step presented the finding in s structured format. Quantitative data were analyzed using descriptive and inferential statistics. This analysis was determined with the effectiveness of music therapy interventions.

Descriptive statistics were summarized into the basic features of the data, such as mean, median, and standardized deviation. The integration of qualitative and quantitative findings were attained by using triangulation. This method ensured a comprehensive and validated understanding of the research topic by cross verifying the data from multiple sources and methods. The study adhered to ethical guidelines, including obtaining informed consent from all participants, ensuring confidentiality, and minimizing any potential risks associated with participation. Ethical approval sought from relevant institutional review boards. Recognizing cultural diversity in Hainan, the selection of the participant was taken into account through respondents of various cultural backgrounds and traditions. This is crucial for understanding how cultural perspectives influence the application and acceptance of music therapy. The study aimed to include participants from different ethnic groups represented in Hainan, such as the Han, Li, Miao, and Hui communities. This helped in capturing the unique cultural influences that shaped the experiences and perceptions of both patients and medical staff regarding music therapy and cultural integration practices. The cultural sensitivity was ensured by the research team through engaging with the community leaders and cultural liaisons.

4. RESULTS

The qualitative data from the interviews with 30 respondents, including music therapists, healthcare professionals, and patients reveled key themes regarding cultural perceptions of health music. These themes reflected how health music was perceived and integrated into the cultural fabric of healthcare practices in Hainan. One prevalent theme was the familiarity and acceptance of health music within the cultural context of Hainan. Majority of the respondents highlighted those traditional music forms, such as folk songs and indigenous melodies and comfort levels of patient when engaging with health music therapies. One of the patient mentioned, "Hainanese folk songs reminded me of my childhood, and it feels like home when I hear then during therapy." The respondents of this study consistently emphasized the therapeutic value of health music that resonated with their cultural background. Music therapist and healthcare professionals noted that incorporating culturally relevant music into therapy sessions significantly improved patient's emotional psychological wellbeing. One of the therapist stated, "When we use music that patients culturally related to, it not only soothes them but it also makes them more receptive to the therapy." Health music played a crucial role in

strengthening emotional connections between patients and their caregivers. The use of culturally familiar music helped them to bridge emotional gaps, creating a sense of empathy and understanding. A healthcare professional explained, "Playing traditional music during therapy sessions often brings tears of joy or nostalgia to patients. It created an emotional bond that therapeutic in itself." The interviews revealed that a one-size-fits-all approach is less effective. Instead, personalization based on cultural preferences was critical. Respondents appreciated the flexibility in music therapy that allowed for the inclusion of diverse musical traditions. A patient shared, "I love how the music therapist asked about my favorite songs and incorporated them into my therapy. It made me feel seen and valued." Despite the positive perceptions, some barriers were noted, such as the lack of availability of culturally diverse music resources and the need for more trained music therapists who understand cultural nuances. A therapist pointed out, "we need more access to a diverse range of cultural music and training to effectively use it in therapy." Another theme was the integration of health music into daily life and healthcare practices. Respondents indicated that music therapy was more effective when it is seamlessly woven into the daily routines and cultural practices of patients. A healthcare professional observed, "When we integrate music therapy into everyday activities, such as during meal times or rest periods, it becomes a natural part of the healing process." The interviews underscored the importance of cultural perception in the effectiveness of health music. Culturally familiar and resonant music not only enhances the therapeutic experience but also fosters emotional connections and personalizes care. Addressing barriers and incorporating cultural diversity into music therapy practices seemed to further improve patient outcomes and acceptance of health music therapies in Hainan. Music therapy had been applied effectively in medical institutions in Hainan to enhance patient care and wellbeing. In these settings it is used for pain management, helping patients manage pain during procedures like chemotherapy or post-surgery recovery. The digestion of attention and provision of a calming effect, music helps reduce the perception of pain. Additionally, music therapy is employed to create a relaxing atmosphere, reducing anxiety and stress among patients. This is particularly beneficial in high-stress environment such as emergency rooms and intensive care units. Music therapy provided emotional support to patients, allowing them to express their feelings through music, which is especially helpful to those who find it difficult to verbalize their emotions. It is also used for cognitive and sensory stimulation for patients with neurological disorders, aiding in the improvement of cognitive functions, sensory processing, and the motor

skills during their rehabilitation and recovery process. Music therapy improves the quality of life in palliative care settings of life for terminally ill patients (Gao et al., 2019). They do it by providing emotional and physical comfort. Some hospitals in Hainan have implemented Environmental Music Therapy (EMT) to change hospitals atmosphere and improve the perception of the environment for both patients and staff. This approach uses live music to create a more welcoming and less stressful hospital environment. It is obvious now that the integration of music therapy into medical practices in Hainan demonstrated significant usefulness for both the patients and the health care providers (Qian et al., 2017). This held impact on pain management, reduction of anxiety, provisional to emotional support, and enhancing cognitive functions. This advocated that music therapy offered a comprehensive approach to patient care. The cultural resonance of music therapy further amplified its effectiveness, making it a valuable tool in the creation of a more empathetic and supportive healthcare environment. Continued efforts to incorporate diverse musical traditions and train specialized therapist seemed to enhance the reach and impact of music therapy in Hainan's healthcare institutions (Chen et al., 2021). The respondents were of the view that the integration of music therapy in Hainan hospitals shown significant positive effects on their mental, emotional, and physical health. The findings based on the responses state that for the patients, music therapy seemed to prove to be an effective tool for the reduction of anxiety and stress. Majority of the patients who had already taken music therapy reported that they felt calm and released after participating in music therapy sessions. This reduction in stress levels is crucial, particularly in high stress environments like emergency rooms and intensive care units. Music therapy also plays a vital role in pain management. Music according to the patients provided a distraction and promoted relaxation. Music therapy helped patients in managing their pain effectively during medical procedures and post-surgery recovery. Medical professionals identified that music therapy offers a unique outlet for the patients to express their feelings. Especially, for those who struggle to articulate their emotions orally. This emotional expression through music contributed to improved moods and overall emotional wellbeing. Patients also experienced a sense of comfort and familiarity when culturally relevant music is used. This enhanced their emotional connection to the therapy and makes them feel more at ease (Mandel et al., 2019). Physically, music therapy aids in the rehabilitation process for patients with neurological disorders. It improved cognitive functions, sensory processing

and motor skills. These sessions are essential for recovery (Rohilla et al., 2018). Music therapy is used in palliative care to provide physical comfort and to improve the quality of life for terminally ill patients. Healthcare providers also shared their opinion about attaining emotional relief and relaxation through this at the hour of their demanding roles (Sharkiya, 2024). The use of music at the workplace improved the overall atmosphere, making it a more pleasant environment for both patients and the staff. In short, the application of music therapy in Hainan hospital positively impacted the mental, emotional, and physical health of both the patients and the healthcare givers. It addresses anxiety, stress, pain, and emotional wellbeing. Music therapy enhanced the therapeutic experience and promoted a more supportive and empathetic healthcare environment. This holistic approach underscored the value of integrating music therapy into medical practices to improve health outcomes and quality of care (Prince, 2024).

Table 5(a): Description of the data analyzed by using ANNOVA

Institution	Place	Sample Size		Cultural	Health music	Patient	Staff	F -	P-
		Male	Female	Integration Effective ness (1-5)	Effectiveness (1-5)	Outcomes (1-5)	Wellbeing (1-5)	Value	Value
Hainan Medical University	Haikou	25	25	4.0	4.5	4.2	4.0	4.25	0.011
Hainan University	Haikou	25	25	3.8	4.2	3.9	3.8	5.87	0.003
Hainan Tropical Ocean University	Sanya	15	15	4.2	4.7	4.4	4.3	3.98	0.015
Qiongtai Normal University	Haikou	15	15	3.9	4.3	4.0	3.9	4.55	0.009
Haiku University of Economics	Haikou	15	15	4.1	4.6	4.3	4.2	-	-
University of Sanya	Sanya	10	10	4.0	4.4	4.1	4.1	-	-

Table 5(b): Description of the data analyzed by using ANNOVA

Institution	Place	Sample Size	Cultural Integration Effective	Health music Effectiveness (1-5)	Patient Outcomes (1-5)	Staff Wellbeing (1-5)	F -value	P- value	Institution
Hainan University of	Haikou	10	ness (1-5) 10	3.7	4.1	3.8	3.7	-	-
Technology Total	07	05	05						

The qualitative data, gathered through semi-structured interviews and focus groups, provided rich insights into the participants' experiences and perception of cultural integration and health music in healthcare settings. The thematic analysis identified that the data collected from surveys at seven medical institutions in Hainan is thoroughly analyzed to align with the research objectives. The analysis included ANOVA to determine the significance of differences across institutions regarding cultural integration, health music, patient outcomes, and staff wellbeing. The effectiveness of cultural integration on patient outcomes showed the institution with higher cultural integration scores has better patient outcomes. The F-statistics value of 4.25 and p-value indicated a significant difference in patient outcomes across different levels of cultural integration effectiveness. This suggests that higher cultural integration effectiveness is associated with improved patient outcomes. For instance, Hainan Tropical Ocean University, which had a cultural integration effectiveness of 4.2, reported a patient outcome score of 4.4. Similarly, the effectiveness of health music on patient outcomes revealed significant differences across institutions. With an F-statistic value of 5.87 and p-value of 0.003, the results indicated a significant difference in patient outcomes based on the effectiveness of health music. Institutions like Haiku University of Economics, with health music effectiveness scores of 4.6, saw better patient outcomes. Scoring 4.3, underscoring the positive impact of effective health music practices on patient recovery and well-being. The analysis also highlighted the impact of cultural integration on staff wellbeing. The F-statistics value of 3.98 and p-value of 0.015 demonstrated significant differences in staff well-being across various levels of cultural integration effectiveness. Institutions with higher cultural integration scores, such as Hainan Tropical Ocean

University, reported better staff well-being, indicating that cultural integration activities contribute to more supportive and cohesive work environment. The effectiveness of health music on staff well-being is evident, with an F-statistic value of 4.55 and p-value of 0.009, showing significant difference across institutions. Institutions with higher health music effectiveness scored, like Hainan Medial University, experienced better staff well-being, highlighted the importance of integrating health music into daily routines to reduce stress and improve morale among healthcare providers. It is evident from the data analysis aligned with the research objectives, demonstrating that both of the cultural integration and health music practices significantly impact the patient outcomes and staff wellbeing. The table values confirm that institutions with higher scores in these areas report better results, highlighting the importance of these practices in healthcare settings. Addressing the challenges identifies and implementing improvements can further enhance the effectiveness of cultural integration and health music therapies in Hainan's medial institutions.

5. DISCUSSION

Integration of music into healthcare within the Hainan cultural context presents several unique challenges (Roslan et al., 2024). One significant challenge is language and music preference. Hainan is home to a diverse population with varying linguistic backgrounds and musical tastes. Ensuring that music therapy sessions include culturally relevant and preferred music for different ethnic groups seemed to be complex. For instance, the Han, Li, Mial and Hui communities each held distinct musical traditions. Implication to such variegated culture for music therapy appeared to be an uphill task (Zhang et al., 2024). Addressing this variety required a deep understanding of the cultural nuances and access to a wider range of musical resources. Another challenge encountered is the differing perceptions of traditional versus modern healing practices. In Hainan, traditional healing methods are deeply rooted in the cultural heritage and are often preferred by older generations. Younger populations, however, might be more open to modern therapeutic approaches like music therapy. Bridging this generation gap and gaining acceptance for music therapy across all age groups seemed difficult to achieve. Some of the patients and their family might be skeptical of the benefits of music therapy, viewing it as less effective compared to traditional practices (Dozler, 2022). Limited

awareness and acceptance of music therapy also pose a significant challenge. Majority of the population in Hainan might not be familiar with the concept of music therapy and its potential benefits. There is a need for greater education and awareness campaigns to inform both healthcare providers and patients about how music therapy can complement traditional medical treatments. Implementation of music therapy programs cannot be accommodated without widespread acceptance. The programs can face resistance and lack of engagement if implemented without prior consent from patients and staff both. The availability of trained music therapists who can effectively integrate cultural elements into their practice is essential for the better results. Music therapists needed specialized training to understand not only the musical expertise but also the cultural competence too. This situation seemed to be challenging for the medical institutes to adopt such therapies. Integration of music into healthcare in Hainan involves navigating language and music preferences, reconciling traditional and modern healing perceptions, overcoming limited awareness and acceptance, and ensuring the availability of cultural competent music therapists. These challenges are essential to be addressed for the successful implementation and effectiveness of music therapy in Hainan's healthcare settings (Bain, 2023). Culturally adapted music therapy has significantly implications for healthcare, particularly in enhancing patient care. The findings of the study highlighted several ways in which this approach can be beneficial. At the first place, incorporating culturally relevant music into therapy sessions enhances patient comfort and acceptance. The patients when hear the music that resonates with their cultural background. They are more likely to engage with the therapy. This familiarity creates a sense of connection and safety, which is crucial for effective therapeutic outcomes. For example, patients who recognize and connect with traditional Hainanese folk songs feel more at home and open during sessions, which can lead to improved emotional and psychological wellbeing (Jackson & Meadows, 2024). Secondly, culturally adapted music therapy can bridge the gap between traditional and modern healing practices. The integration of elements of traditional music held significant cultural value with modern therapeutic techniques. The healthcare providers might create a more holistic and inclusive approach to patient care (Henderson et al., 2018). This integration represents and honors the cultural heritage of patients while introducing them to new, beneficial therapeutic methods. It also made the therapy more relatable and acceptable to older generations who might be more inclined towards traditional healing practices. The personalized nature of culturally adapted

music therapy means that it can be tailored to meet the specific needs and preferences of individual patients. This personalization enhances the effectiveness of the therapy, as patients are more likely to respond positively to treatments that consider their cultural and personal backgrounds. For instance, selecting music that patients enjoy and relate to; can help in reducing anxiety, managing pain, and improving overall mood and wellbeing (Agres et al., 2021). The study also indicated that culturally adapted music therapy can improve staff wellbeing. Healthcare providers who see the positive impact of culturally resonate music on patients are likely to experience greater job satisfaction and reduced stress. This positive work environment can enhance the overall quality of care provided, as staff members are more engaged and motivated. Culturally adapted music therapy holds the potential to significantly enhance patient care by fostering a deeper connection with patients, bridging traditional and modern healing practices, and providing personalized, effective treatment options (Macrae, 2024). These improvements can lead to better patient outcomes and a more supportive, positive healthcare environment. Addressing the identified challenges and increasing awareness and training in culturally adapted music therapy can further amplify these benefits, making it valuable addition to healthcare practices in culturally diverse settings like Hainan. There are several promising areas for further research that could expand cultural sensitivity in music therapy practices, enhancing their effectiveness and inclusivity. First among them is the impact of specific cultural music genres on different patient populations could provide a valuable insights. Research could focus on how various musical traditions, such as traditional Haineese, Han, Li, Miao, and Hui music, affect the emotional and physical wellbeing of the patients. This would help the in developing more tailored music therapy programs that resonate deeply with diverse cultural backgrounds. Secondly, investigating the long term effects of culturally adapted music therapy on patient outcomes would be beneficial. Longitudinal studies could examine how sustained exposure to culturally relevant music therapy influences recovery rates, emotional wellbeing, and overall quality of life over extended periods. This would provide a more comprehensive understanding of the enduring benefits of culturally sensitive music therapy practices. Thirdly, examining the role of cultural competence training for music therapist is crucial. Research could assess the effectiveness of cultural nuances and their ability to incorporate these elements into therapy. Identifying best practices for such training could lead to more effective and culturally sensitive therapeutic interventions. Fourthly, studying the integration of modern and traditional

healing practices in music therapy could offer valuable insights research could explore how blending modern therapeutic techniques with traditional music and healing practices impacts patient acceptance and therapeutic outcomes this would help bridge the gap ensuing between the conventional and the contemporary approaches, fostering a more holistic healthcare environment. Fifth, focusing on patient and community engagement in the development of music therapy programs is essential. Participatory research involving patients and community members in designing and implementing music therapy interventions could lead to more culturally relevant and accepted practices. This approach ensures that the therapy aligns with the cultural values and preferences of the community it serves. Lastly, investigating the potential barriers and facilitators to implementing culturally adapted music therapy in different healthcare settings could provide practical insights. Understanding the challenges faced by healthcare providers, such as resource limitations and institutional support. This may also identify strategies to overcome these obstacles would be valuable for expanding the reach and impact of music therapy. Addressing these areas, future researches can significantly enhance the cultural sensitivity and effectiveness of music therapy practices, ensuring they are inclusive and beneficial for diverse patient populations.

6. CONCLUSION AND RECOMMENDITIONS

The present study demonstrated the significant role and potential of music therapy within Hainan's healthcare settings. The integration of cultural relevant music therapy has been shown to enhance patient comfort, emotional wellbeing, and overall therapeutic outcomes. The finding highlighted that when patients heard music that resonated them with their cultural backgrounds. They were more likely to engage in therapy and experience reduced anxiety and pain. Cultural integration activities have also been found to promote cultural awareness and inclusivity, leading to better patient outcomes and staff wellbeing based on the effectiveness of cultural integration and health music practices. Institutions with higher scores in these areas reported better results, emphasizing the importance of these practices in healthcare. Challenges such as language and music preferences, perceptions of traditional versus modern healing, and limited awareness and acceptance need to be addressed to realize complete benefits of music therapy. Increasing awareness, providing cultural competence training for the therapists, and ensuring access to diverse musical resources

can further enhance the effectiveness of music therapy in Hainan's healthcare settings. The study overall, underscores the value of integrating culturally adapted music therapy into healthcare practices, offering a holistic approach to patient care that respects and incorporated cultural diversity. The continued exploration and development of these practices have the potential to improve patient care and create a more supportive and empathetic healthcare environment in Hainan. It is recommended to enhance the effectiveness and cultural sensitivity of music therapy programs in Hainan province a comprehensive library of cultural relevant music in collaboration with local cultural organizations might be established. This would help therapists to access diverse music tailored to patient's preferences through music schools, and community leaders meetings. Specialized cultural competence training for music therapists might be provided through workshops and certification programs that would enable them to deliver culturally sensitive sessions, improving patient engagement and outcomes. Involving patients and communities in program development and evaluation through focus groups and community meetings might align therapy with cultural values, increasing acceptance and effectiveness. Education campaigns might be launched to utilize social media, local media, workshops and informational brochures. This would arise awareness about the benefits of music therapy, leading to greater acceptance and utilization. Integration of music therapy with traditional healing practices by collaborating with traditional healers and cultural practitioners will create a holistic approach to patient care that respects and honors cultural heritage. Supporting of music therapist through professional development opportunities and establishing a professional association for continuous education, conferences, and peer support will keep therapists updated on best practices and innovations. Regular evaluations using qualitative and quantitative methods, including patient feedback and outcome measurements, will ensure music therapy programs remain responsive and consistent. This consistency would be based on evidence and feedback. Implementing these recommendations will enhance the effectiveness and cultural sensitivity of music therapy programs. This would lead to the better patient care and outcomes in Hainan's healthcare settings.

7. FUNDING

This work was supported by (1). Hainan Provincial Philosophy and

Social Science Foundation of China, "Research on the application path of health care music in medical institutions in Hainan Province", HNSK(QN)23-92. (2). Sanya University's scientific research project on the integration of industry and education, "Hainan Provincial Medical Institutions and Music Health Care Discipline Research on the path of integration of industry and education", USY-CJRH2327. (3).2023 (the first batch) school-level young teacher training scientific research project, "Research on the application path of music health care in medical institutions in Sanya", USYJSPY23-08.

7.1. Conflict of Interest

Authors declares no conflict of interest.

7.2. Data Availability Statement

Data of the present study can be made available upon reasonable request from the corresponding.

7.3 Ethics Declarations

This study was conducted ensuring ethical guidelines, voluntary participation and confidentiality. This study involves no sensitive data or information for that an ethical approval was needed.

7.4. Informed Consent

All the participants of this research were communicated about the study objectives and provided their informed consent.

References

- Abdulbaki, H., & Berger, J. (2020). Using culture-specific music therapy to manage the therapy deficit of post-traumatic stress disorder and associated mental health conditions in Syrian refugee host environments. *Approaches: An Interdisciplinary Journal of Music Therapy*, 12(2).
- Agres, K. R., Foubert, K., & Sridhar, S. (2021). Music therapy during COVID-19: Changes to the practice, use of technology, and what to carry forward in the future. *Frontiers in psychology*, 12, 647790.
- Amadi, A. (2023). Integration in a mixed-method case study of construction phenomena: From data to theory. *Engineering, Construction and Architectural Management*, 30(1), 210-237.
- Bain, C. (2023). Potential and barriers to culturally responsive music therapy education in the US: Perspectives of music therapy educators. *Qualitative inquiries in music therapy: A monograph series*, 17(6), 92-128.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters,

- D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, 25(8), 652-661.
- Chang, H. (2020). Between religious authenticity and intangible cultural heritage: The cult of Mazu in Taiwan, Fujian, and Hainan Island. In *Heritage and Religion in East Asia* (pp. 167-186). Routledge.
- Chen, X., Li, H., Zheng, X., & Huang, J. (2021). Effects of music therapy on COVID-19 patients' anxiety, depression, and life quality: A protocol for systematic review and meta-analysis. *Medicine*, 100(26), e26419.
- Chiu, M. (2023). Asian and Asian American music therapists' experiences with racism, discrimination, xenophobia, and microaggressions: A convergent parallel mixed methods study
- Claros Ospina, J. N. (2024). Exploring Musical Fusion in Music Therapy: Cultivating Therapeutic Relationships & Cultural Responsiveness Ohio University].
- Clements-Cortés, A., Pranjić, M., Knott, D., Mercadal-Brotons, M., Fuller, A., Kelly, L., Selvarajah, I., & Vaudreuil, R. (2023). International music therapists' perceptions and experiences in telehealth music therapy provision. *International Journal of Environmental Research and Public Health*, 20(8), 5580.
- Dozler, M. N. (2022). The Future of Music Therapy as an MLE to Licensure Curriculum: A Critical Literature Review Regent University].
- Gao, Y., Wei, Y., Yang, W., Jiang, L., Li, X., Ding, J., & Ding, G. (2019). The effectiveness of music therapy for terminally ill patients: a meta-analysis and systematic review. *Journal of pain and symptom management*, 57(2), 319-329.
- Helander, S., & Gattino, G. (2020). How are multicultural considerations playing a role in music therapy practice? A Nordic music therapist's experiences from working in a paediatric hospital setting in Peru.
- Heller, G. N. (1987). Ideas, initiatives, and implementations: Music therapy in America, 1789–1848. *Journal of Music Therapy*, 24(1), 35-46.
- Henderson, S., Horne, M., Hills, R., & Kendall, E. (2018). Cultural competence in healthcare in the community: A concept analysis. *Health & social care in the community*, 26(4), 590-603.
- Iwamasa, D. A. (2023). MUSIC THERAPY EDUCATION IN THE UNITED STATES: FROM COMPETENCIES TO BOARD CERTIFICATION. Developing Issues in World Music Therapy Education and Training: A Plurality of Views, 322.
- Jackson, V., & Meadows, A. (2024). A Description of Harmful Events Reported by Music Therapists in Their Everyday Clinical Practice. *Music Therapy Perspectives*, 42(1), 36-46.
- Johnson, R. (2022). Music Theory and the Music Therapy Curriculum: A Descriptive Study and Implications for the Curriculum. The Florida State University.
- Khyzhna, O., & Shafranska, K. (2020). Music therapy as an important element in shaping communication competences in children with autism spectrum disorder. *Journal of History Culture and Art Research*, 9(3), 106-114.
- Korioth, E. R., & Silverman, M. J. (2023). An Interpretive Investigation of Music Therapists' Experiences in Rural Communities of the United States. *Journal of Music Therapy*, 60(2), 175-201.
- Kwan, M. (2024). Current and future priorities of cultural music therapy knowledge in Southeast Asia: an E-Delphi survey Temple University].

- Lan, H.-Y. W. (2020). Academic and cultural adjustment among Asian students in graduate music therapy programs. *Music Therapy Perspectives*, 38(1), 89-98.
- Lee, Y. (2024). The Use of Music Therapy with Non-English Speaking Older Adults.
- Leou, E. C., & Li, J. X. (2022). Target Duo: the project of "international tourism island" in hainan special economic zone, China. In *Handbook of Research on Special Economic Zones as Regional Development Enablers* (pp. 206-233). IGI Global.
- Liao, J., Papathanassoglou, E., Zhang, X., Li, Q., Gupta, A., Lu, F., Wu, Y., & Frishkopf, M. (2023). A cross-cultural randomized pilot trial of western-based and five elements music therapy for psychological well-being. *Explore*, 19(4), 571-577.
- Lin, J. (2022). ADJUSTMENT OF NATIONAL TRADITIONAL MUSIC TO STUDENTS'SUB-HEALTH MENTAL STATE. *Psychiatria Danubina*, 34(suppl 5), 193-193.
- Macrae, A. (2024). Professional Supervision Among Music Therapists: A Survey. *Music Therapy Perspectives*, miae001.
- Mandel, S. E., Davis, B. A., & Secic, M. (2019). Patient satisfaction and benefits of music therapy services to manage stress and pain in the hospital emergency department. *Journal of Music Therapy*, 56(2), 149-173.
- Odell-Miller, H. (2019). A comprehensive guide to music therapy: Theory, clinical practice, research and training. Jessica Kingsley Publishers.
- Peterson, S. (2020). Factors influencing music therapists to join, or not join, the American Music Therapy Association (AMTA)
- Prince, A. E. (2024). *Music Therapy to Impact Post-Surgical Pain Grand Canyon University*]. Provenza, A. (2020). Music and medicine. *A companion to Ancient Greek and Roman music*, 351-363.
- Qian, Y., Yao, W., Yang, T., Yang, Y., Liu, Y., Shen, Q., Zhang, J., Qi, W., & Wang, J. (2017). aPKC 1 /P Sp1/Snail signaling induces epithelial mesenchymal transition and immunosuppression in cholangiocarcinoma. *Hepatology*, 66(4), 1165-1182.
- Rohilla, L., Agnihotri, M., Trehan, S. K., Sharma, R. K., & Ghai, S. (2018). Effect of music therapy on pain perception, anxiety, and opioid use during dressing change among patients with burns in India: a quasi-experimental, cross-over pilot study. *Ostomy Wound Manage*, 64(10), 40-46.
- Roslan, S., binti Ma'rof, A. M., Zaremohzzabieh, Z., & Yin, Y. (2024). A Study On The Intervention Of Emotional Behavior Disorders In Chinese Children With Autism Through Family Games And Music. *Educational Administration: Theory and Practice*, 30(5), 239-244.
- Sharkiya, S. H. (2024). The Effectiveness of Music Therapy in Reducing Perioperative Pain and Anxiety: A Systematic Review of Randomized Controlled Trials. *Perioperative Care and Operating Room Management*, 34, 100360.
- Silverman, M. J. (2022). Music therapy in mental health for illness management and recovery. Oxford University Press.
- Von Fritschen, C. (2021). Faith in music: Perspectives on music healing by traditional healers and music therapists University of Pretoria (South Africa)].
- Wentworth, T. A. (2022). What We Do and Who We Are: The Role of Music Therapy Scope of Practice and Scope of Competence in the Development of Professional Identity Ohio

- University].
- Xu, M. (2020). Role of Music and Emotional Expression in Chinese Culture: Cultural Considerations When Using Psychodynamic Music Therapy with Clients from Chinese Culture Drexel University].
- Yao, L., & Choatchamrat, S. (2023). The transmission process of Meizhou Hakka mountain song in Guangdong, China Mahasarakham University].
- Zhang, W. (2021). Viral Sounds: Music, Affect, Healing and Nostalgia in Wuhan The Chinese University of Hong Kong (Hong Kong)].
- Zhang, Y., Chaiyason, N., & Phimprajun, R. (2024). Musical Literacy and Education: A Historical Analysis of Huaibang Opera Development in Henan Province, China. *International Journal of Education and Literacy Studies*, 12(2), 101-110.