

# ***Research on the Communicative Role of Music in Mental Health***

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**Abstract:** Music therapy is an interdisciplinary that combines music, medicine, and psychology. It uses musical interventions to promote health, structure behavior, and thus address clinical goals. In recent years, there has been a growing academic interest in music therapy as the number of people suffering from mental illness has increased. On the question of why music can be used to promote people's well-being, previous research has primarily focused on the relationship between music and emotions and skimmed over the communicative role of music. This paper uses the literature research method to present a detailed analysis of the unique qualities of music compared with language, the possible reasons for communication barriers from the psychological and anthropological levels and discusses why music is of considerable importance in addressing communication disorders. The main conclusion to be drawn from this work is that the similarity and transcendence of music to language can be seen in many aspects, such as history, component elements, and functions, thus indicating the communicative role of music in initiating non-verbal communication, promoting social-communication skills, expressing inner thoughts, and building healthy therapeutic relationships.

**Keywords:** music therapy, communication, music and language, mental health

## **1. Introduction**

Music, an essential form of art derived from society and culture, serves as a powerful medium to express, entertain, and communicate, and has been used as a dynamic force to heal people's bodies and minds due to its unique features throughout the ages. Among the many healing functions, the communicative function of music is a decisive factor in building the therapeutic relationship in music therapy. Moreover, it's the foundation of treatment. Many experiments and studies in the field have indicated that music is extremely effective in promoting communication, bonding and the development of social skills in patients. Despite the fact that the communicative function of music has been extensively applied to the clinical treatment of clients with communication disorders, few researches have been done to dig deeper into the reasons behind it from all levels. The aim of this dissertation is to discuss the communicative role of music by exploring the relationship between music and language. To approach this question, this essay first sorts out the commonalities between music and language from the point of view of their origins and components. The second part highlights the transcendence of music over language in a therapeutic sense. In addition, the essay

points out the efficacy of music in forging bonds. The final section explains the specific application of music in therapy, utilizing its communicative role. This article is used in the writing process of literature research. This study explains why music facilitates communication within individuals from various perspectives, provides a theoretical basis for clinical treatment, and expands inspiration for further clinical purposes.

## **2. Music and Language**

### **2.1. The Origins of Music and Language**

In 1985–1987, a batch of bone flutes made from the wing bones of the Dandenong crane was unearthed in Jiahu Village, Mayang, Henan Province, China. It was determined to be as far back as 9,000–7,500 years. These bone flutes can play pentatonic, hexatonic and heptatonic scales and are strong proof of the fact that people from 9000 years ago have developed the ability to distinguish between different pitches to a certain extent [1]. What is astonishing and hard to imagine is that people in ancient times living in such a primitive environment were able to appreciate and create music, which demonstrate that music is a natural need and an indispensable part of people's lives. So what are the driving forces behind humans' desire to create music? It has always been a major issue hotly debated in historical and musical scholarship and still remained unsolved. Basically, there are six main hypotheses about the origins of music in the field: primitive human labor methods, social-emotional bonding, sexual selection, imitation of natural sounds, sorcery and evolution theory. As for the origins of language, there are hypotheses such as the theory of "labor cries" the theory of interjection, the bow-wow theory (the imitation of natural sounds), social contract theory, the theory of language deification, and the evolution theory. Interestingly, if compare scholars' hypotheses about the origins of music and language, will find a striking degree of overlap and similarity-they are both closely related to communication, emotional expression, emotional bonding, sounds in nature, and group cohesion.

### **2.2. The Similarities Between Musical and Linguistic Elements**

Music is composed of many tones of different pitches. These tones have been linked together in an organized way through the long practice and exploration of human beings, and are played and sung by various instruments with different timbres or human voices to convey people's thoughts and feelings. Language consists of phonemes, syllables, tones and intonation according to certain rules [2]. Different languages have different systems and rules. Taking the famous Chinese folk song 'Jasmine' as an example. It is spread in a lot of regions and has more than a dozen different versions of the score and singing form. It's an oral art form created with the characteristics of freedom and unrestriction. In the Jiangsu version of 'Jasmine', the melody is mainly stepwise, with a calm and smooth melodic line which matches the gentle and soft tone of Suzhou dialect. In contrast, the version of 'Jasmine' from Hebei is sung in dialect, and each short phrase is followed by "hey" and "yeah", which is in line with the speaking features of Hebei people [3]. Thus, the tones and melodies in Chinese art songs are adapted to the Chinese language, pronunciation, which further illustrates the correlation between music and language [4].

## **3. The Transcendence of Music Compared to Language**

All countries in the world have their own languages as well as a unique culture. In order for a person to communicate with people in another country through language, they have to learn the language of that country; otherwise, it is almost impossible to guess the meaning of another person's words. And the process of learning a language is usually long and difficult. However, for a person who has no

knowledge of the music and culture of another country, it is extremely easy to guess the composer's intentions and the theme of the piece only through the basic musical elements such as pitch, tempo and timbre. This is what people often call "music knows no boundaries between countries". To systematically demonstrate whether there are universal patterns to music across cultures, Sam Mehr and several colleagues ran a massive conceptual replication where 29,357 visitors to the citizen-science website <http://the music lab.org> listened to songs and were asked to guess what kind of song they were listening to from among four alternatives. Listeners guessed the behavioral contexts with a level of accuracy (42.4%) that is well above chance (25%), showing that the acoustic properties of a song performance reflect its behavioral context in ways that span human cultures [5]. If language is seen as the unique code of each country or nation, then music is more like the universal language of the world. The unique qualities and characteristics of music make it an indescribable art form beyond language, or sometimes even culture.

#### **4. Music and Bonding**

##### **4.1. The Importance of Bonding to Individuals with Mental Illness**

"Man is by nature a social animal", said the great ancient Greek philosopher, scientist and educator Aristotle in his famous work 'Politics' [6]. A man who is completely isolated from society can hardly survive in today's world where connections between people are everywhere, which means bonding with one another is crucial to people's life, especially for individuals with mental illness. Compared with healthy people, most of them tend to have a more pessimistic view of life, and are more sensitive to negative events in life, which makes them more in need of company, encouragement, and support from friends and family. The importance of bonding to individuals with mental illness not only appears in daily life but also in the treatment process. Music therapy has been defined as the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program [7]. Only on the basis of a strong and healthy therapeutic relationship can a music therapist help the client address clinical goals. Thus, during treatment, the first and the most important thing is for therapist and client to build trust, get along with each other and forge a special bond, which appears to be one of the major factors that affect outcomes. Without the establishment of a caring relationship or alliance, the most effective techniques may be utterly useless [8].

##### **4.2. The Efficacy of Music in Establishing Attachment**

Music therapy offers an alternative way for patients who have speech disorders or have difficulty communicating, interacting and entering into a relationship. As discussed earlier, music has a high degree of similarity to language in terms of constituent elements, structure and acoustics. It follows that the language-like nature of music allows it to be used extensively to establish attachment and connect with patients. For example, when an 8-year-old boy is reluctant to speak and prefers to play an instrument by himself, the most effective way to establish a connection might be to imitate or join in with the melody he's playing or the rhythm he's tapping. By doing this, the therapist can not only initiate a non-verbal form of communication but also capture the attention and stimulate interest of the patient. In addition, music can be a nonthreatening and harmless stimuli and help create a safe and comfortable environment for the patient if properly used. Usually, during the first session, the therapist would become acquainted with the client or group, showing curiosity and genuineness while creating a safe, trusting container for feelings and experiences, thus making them feel at ease and more willing to open their hearts to the therapist, which is of great benefit to the treatment process [8].

## 5. Music as an Indicator of Emotions

It is often the case that patients' inability to verbally express their true thoughts and feelings to the counselor delays the progress of counseling and makes it stuck at a certain stage. Some people may be so ashamed of negative emotions or events that they consciously or subconsciously try to cover them up because they are afraid of being judged and talked about by others. And there are other times when try to express ourselves in words, the words that come out are almost deprived of most of their meanings. Inner world is a miniature universe that is constantly changing, evolving and full of complexity. A thought or feeling takes shape in people's heads, and at the same time, it brings us excitement, sadness or distress. While language is not always "perfect" for people's inner world, music, on the other hand, may serve as a more objective indicator of people's intertwined emotions and feelings [9]. People are less judgemental when it comes to music because there is no right and wrong in art. Additionally, music can relax the guard in everyone's mind. Most people can't help but immersing themselves in their favorite music, and the facial expressions, body movements and all the observable emotional carriers they show are natural, direct and real. In a treatment session, music therapists often ask clients to do some performance or improvise in order to stimulate their desire to express and gain a more comprehensive view of clients because the unfolding of music is synchronized with the flowing, ever-changing, catharsis and expression of their emotions. For example, emotion may be located in the inflection. A performer's use of diminuendo at the end of a particular phrase may mirror the way a person might vocally inflect a verbal statement of deep disappointment, as if concluding a statement with a sigh [10]. By observing a large number of patients' cases, the therapist can match the patient's musical performance or improvisation to his or her emotions, thus better understanding the client's inner world and cracking the emotional code. That is why most of the time clients won't have to express themselves too much through words. By being engaged in music, clients are already communicating and expressing themselves in a nonverbal way.

## 6. Clinical Application of Music Therapy for Individuals with Communication Problems

### 6.1. Music Therapy for ASD

Autism spectrum disorder (ASD) is a behaviorally defined neurodevelopmental disorder associated with the presence of social-communication deficits and restricted and repetitive behaviors [11]. For individuals with ASD, music therapy provides them with clinically intended musical experiences, such as improvisation, receptive music, precomposed music, and songwriting that target core features of autism: relating, communicating, socializing, sensory integration, motor functioning, and cognitive functioning [10]. Take improvisation method as an example, which is frequently used in the treatment of patients with ASD. During improvisation experiences, therapists usually use music as a medium to stimulate the patient to use various instruments or sing to express their inner emotions and thoughts freely. Improvisation is the most direct and objective way to directly indicate the patient's mental activity, character traits, subconscious body movements, etc., thus helping the therapist observe and analyze the patient's condition. When working with improvisational experiences, the therapist generally follows the child's lead by spontaneously creating music to engage the child's musical and nonmusical responses, which helps the child to physically come closer to the therapist and increase all sorts of interaction, such as eye contact, body language communication [10]. What's more, the social-communication skills, body awareness, joint attention of client can be practiced through improvisation, along with activation of various brain areas, such as auditory cortex, prefrontal cortex, visual cortex, sensory cortex.

## 6.2. Music Therapy for Depression

Depression is a common mental disorder that involves a depressed mood or a loss of pleasure or interest in activities for long periods of time. It's different from regular mood changes and feelings about everyday life. It can affect relationships with family, friends, and the community, and result in or lead to problems at school and at work [12]. In clinical settings, it is often the case that clients who are suffering from depression have tons of mixed negative feelings in mind, such as restlessness, frustration, helplessness, and hopelessness. For people who are overwhelmed by these emotions and have difficulty expressing or coping with them, songwriting is a great way to spit things out. The therapist can help the client choose two songs he or she loves as background music, one in a major key and the other in a minor key. Then split and reorganize two pieces of music. The minor key part will be the verse, while the major key part will be the chorus. Next, the therapist would guide her to write down things that make him or her feel frustrated in the verse part and fill in the lyrics of the chorus with her hope for the future, things he or she loves about the world, or people who care for him or her. After the composition, the therapist would generally sing this song with the client. This activity helps her let out all the negative feelings using singing and reminds her that although she is having a really difficult time, there are still beautiful things in life, and she will eventually work it through as long as she carries hope. Moreover, engaging the mind, body, and spirit with music might just be the fountain of youth and elixir of eternal happiness. Perhaps every human being can benefit from seeking the creative capacity within and the rapture of beautiful music in the world [8].

## 6.3. Music Therapy for Speech Disorders

A speech disorder is any condition that affects a person's ability to produce sounds that create words. Examples include stuttering and ataxia [13]. As the author has discussed earlier, music is similar to language, from which can infer that there are many shared mechanisms between singing and speech. They both utilize rhythm, pitch variation, tempo, dynamics, articulation, and respiratory support, which is why it's feasible to use singing method to promote clients' ability to speak words correctly [14]. The major disorders of speech include various categories. Taking phonological disorder as an example. A child with phonological disorder may make a variety of speech errors, which significantly reduce intelligibility. For instance, a child may collapse the syllable structure of a word to make it easier to say or sometimes omit whole classes of sounds. In this case, speech therapist will have a detailed treatment plan targeting one or more of these phonological processes in specified sequences [10]. After knowing what speech sounds to focus on specifically, music therapist would create songs or short phrases based on these syllables. Normally, the process of learning and correcting the pronunciation of a word requires constant repetition and concentration, which can be exhausting and dull, especially for children who have difficulty focusing. However, music as an auditory stimulus can quickly attract clients' attention and holds their interests, thus enables clients to address their goals in a relaxed and enjoyable experience.

## 7. Conclusion

This paper has given an account of the communicative role of music and the reasons for this role. It takes the relationship between music and language as a starting point to illustrate the following points. First, there is a correlation between the origins of music and language. Furthermore, there are similarities between the components of music and language. Moreover, the universality of music makes it an indescribable art beyond language. In addition, music can serve as an indicator of emotions, express people's emotions and opinions in a more objective form, and can be used to initiate communication and forge a bond, which is more conducive to a healthy therapeutic relationship.

Finally, music therapy can be clinically applied to various types of communication problems, promote social or speech skills, and be beneficial to mental health.

The main weakness of this study was the lack of support by literature and experimental data in the field of neuroscience. Considerably more work will need to be done to explore the use of music's communication function in the clinical application and seek more effective methods to improve patients communication disorders based on the communicative role of music.

## References

- [1] Dai Jiafang. (2022). *History of Chinese music*. Beijing Higher Education Press, Beijing.
- [2] Friederici, A. D. (2005). Neurophysiological markers of early language acquisition: From syllables to sentences. *Trends in Cognitive Sciences*, 9(10), 481—488.
- [3] Zhao Jiao. (2022). Analysis of the artistic characteristics of multiple versions of the folk song 'Jasmine'. *The voice of the Yellow River*(12), 25-27.
- [4] Li Yiming. (2017). Music perception from the perspective of music-language congruence: Chinese as an example. *New Education Times eJournal(Teacher's Edition)*, 2017(6): 259-260.
- [5] Mehr, S. A., Singh, M., Knox, D., Ketter, D. M., Pickens-Jones, D., Atwood, S., ... & Glowacki, L. (2019). Universality and diversity in human song. *Science*, 366(6468), eaax0868.
- [6] Aristotle, U. (2006). *Politics*. Read How You Want.com.
- [7] American Music Therapy Association. (2013). *A descriptive statistical profile of the AMTA membership*. [www.musictherapy.org/assets/1/7/13WorkforceAnalysis.pdf](http://www.musictherapy.org/assets/1/7/13WorkforceAnalysis.pdf).
- [8] Hanser, S. B. (2000). *The new music therapist's handbook*. Berklee Press Publication, Boston.
- [9] Guo Yuli. (2011). An introduction to the limitations of linguistic expression. *Literature (Theoretical Edition)* (02), 108-109.
- [10] Wheeler, B. L. (Ed.). (2015). *Music therapy handbook*. Guilford Publications, New Jersey.
- [11] Ousley, O., & Cermak, T. (2014). Autism spectrum disorder: defining dimensions and subgroups. *Current developmental disorders reports*, 1, 20-28.
- [12] World Health Organization. (2023). Depressive disorder(depression). <https://www.who.int/news-room/fact-sheets/detail/depression>
- [13] Jamie Eske. (2019). What are speech disorders. <http://www.medicalnewstoday.com/articles/324764>
- [14] Tamplin, J., & Baker, F. A. (2017). Therapeutic singing protocols for addressing acquired and degenerative speech disorders in adults. *Music Therapy Perspectives*, 35(2), 113-123.