

Music Has Various Aspects as Culture, Communication, Medicine and Music Therapy

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Article Info

Article History:

Received: 29 October, 2021

Accepted: 01 November, 2021

Published: 03 November, 2021

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90-3187-2485; DOI:
<https://doi.org/10.36266/GJASS/155>

Abstract

In the evolution of mammals, human beings have often felt anxiety and fear, but sometimes felt safety, euphoria, love and well-being with communicative musicality and linguistic circumstance. For a baby, her mother will present proto-conversation by music and verbal communication for interactive relationship. There has been a question how music may have originated associated with some features. Several factors are involved including transmission of the culture, gathering of people, various music pattern, human vocal singing and entrainment with synchrony. Consequently, music includes its great meaningful power in the human body and soul for music therapy, leading to human happiness.

Keywords: Communicative Musicality; Proto-Conversation; Interactive Relationship; Music Therapy.

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Commentary

From historical point of view, human being has presented the evolution in the mammals [1]. As human started living together in a small village, rhythm, music, communication, language, and religion have been born. They gradually developed and merged mutually [2]. Recent international discipline has shown the combined scientific circumstances including medicine, neuroscience, psychology, linguistics, anthropology, culture, art, music, music therapy and education [3].

When a baby is born, we can expect beneficial social environment. Then, infant will encounter interactive relationship with people, where they are always taken care, responsive and loved. In the light of relationship between mother and infant, communicative musicality can explain the intrinsic human musical nature [4]. Its theme and theory were developed, and noticeable patterns of voice, gesture, pulse and timing were present. For the interactive environment, mother and other carers can present specific proto-conversation. It can precede verbal communication development, where musical characteristics are found such as pitch, music, rhythm, movement associated with gesture, dance and facial expressiveness. Consequently, these studies include educational and developmental psychology besides music therapy and art therapy.

Human brain can feel musical-emotional meanings earlier, and after that it can recognize the role of linguistic function [5]. If human can have genetically preordained evolutionary mechanism, it includes fundamental urge to have communication by emotional response and creative proto-musical dynamics. For animals, it is rather hard to find the precursors of musicality and language

function. In contrast, homo sapiens could establish these abilities about 50,000 years ago. The crucial role of names meant intimate parental love, safe life of child, their interaction and succession of generation for long. As one of the unique musical signs, calling names each other brought deepening of musical qualities [5].

During the evolution from ape to human being, simultaneously another development might occur. It would be “vocal learning” that was found in parallel to learning of song and/or voice by whales and birds [6]. This process includes the purpose for obtaining health, where a person capable of singing and dancing will demonstrate the excellent stamina and talent. Such situation brings motivation for mimetic behavior of vocal and body response. Consequently, the performance may cause our sympathy, mutual proto-conversation, cooperative conduct and some mimetic action that is called as mirror neurons. Regarding human evolution, strong motivation seemed to be anxiety and fear [7]. For some musically expressive behavior, they could feel mutual safety and love in the dangerous and scary world. Humans are rather unique among mammals for its characteristic ability. They can synchronize voice and behavior to other people, and keep safer circumstance associated with feeling of euphoria and well-being [8].

For vertebrate brains, their emotions showed evolution to resonate interacting individuals [9,10]. There is impressive clinical manifestation for human congenital disease. It is Williams syndrome, that is usually diagnosed in early stage. These children show intellectual quotient (IQ) of about 50 with walking disorder [11]. However, they always love music and dancing besides obtaining perfect pitch perception and socially joyous communication [12]. From these facts, it is suggested that social/private emotionality and musicality may exist together, and

can conduct separately from the understanding and processing of ADL/QOL.

An impressive experiment was found for the neonate just after the birth [13]. The protocol included providing the music to neonate with recording the responses. As a result, the imitation of vocal sound was found with rhythms. From these, music seems to give a virtual influence for neonates, and their rhythmical behavior may be interactive communication with dance-like movement. Various research was performed using hand-held percussion instruments and singing including tambourines and chime-bars [14]. The process of healing may take place when psychobiological loop can be established. The loop involves 4 functions which are hearing, respiration, heart beating and body movement [15]. These systems may influence one another and also affect fundamental metabolism such as cortisol, noradrenaline and serotonin [16].

There is a large power of music-therapeutic process. It exists in the music itself, and to express the richness satisfactory in words is not possible [17]. Music therapy (MT) session provides clients enjoyable emotional experience in the body and soul [18]. Furthermore, it may be brought successful results because therapist can be supportively accompanied aside with safety and relief [19]. When a person is young, one tends to be emotional and uncontrollable in communicating with others. MT has beneficial power for developing the ability to grow from immature status [20]. By receiving session continuously, one can manage the emotional feelings properly and express them calmly in words. Consequently, MT session may contribute the growth of our mind. The trial to describe the communicative musicality seems to have crucial step forward for psychology and special importance for psychoanalysis [21]. The latter has often discovered for expressing preverbal situation of experience and emotion. Our body are always swayed to some extent by the presence of music. Furthermore, music makes our heart relieving existential anxiety, confirming usual belief and bonding tight relationship with people in common cause. There has been a question how music may have originated associated with some features. Probably, some factors are supposed to be involved [23]. They are i) transmission of the culture: taking advantage of formal cultural power to next generation, ii) gathering of people: fundamentally universal tendency to grouping for occasional singing and dancing from motivational point of view, iii) various music pattern: creating infinite diversity model from certain finite means, iv) human vocal singing: a variety of performance associated with singing the melody in the heart, v) entrainment with synchrony: always continuing rhythmic ensemble with/without expressing apparent rhythm [24].

From mentioned above, human being has always kept music, dance, words, culture and related situation in our mind, heart and body. Music has been recognized to have a power to healing body and soul for long. In Greek gods, Apollo was the god of both of music and healing. This article is hopefully useful for future development and research.

Conflicts of Interest

None

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Funding

None

References

1. Merker B. Music, bonding and human evolution: A critique. *Behavioral and Brain Sciences*. 2021; 44: E83.
2. Leongomez JD, Havlicek J, Roberts SC. Musicality in human vocal communication: An evolutionary perspective. *Philosophical Transactions of the Royal Society B: Biological Sciences (PsyArXiv)*. 2021; 8.s
3. Bando H, Yoshioka A, Nishikiori Y. Future research direction from the perspective of music therapy. *Art Human Open Acc J*. 2020; 4: 54-56.
4. Monaci MG, Gratier M, Trevarthen C, Grandjean D, Kuhn P, Filipa M. Parental Perception of Vocal Contact with Preterm Infants: Communicative Musicality in the Neonatal Intensive Care Unit. *Children*. 2021; 8: 513.
5. Gardiner M. Human evolution of gestural messaging and its critical role in the human development of music. *Behavioral and Brain Sciences*. 2021; 44: E99.
6. Garland EC, McGregor PK. Cultural Transmission, Evolution, and Revolution in Vocal Displays: Insights From Bird and Whale Song. *Frontiers in Psychology*. 2020; 11: 2387.
7. Steven B, Ellen D. The Synthesis of the Arts: From Ceremonial Ritual to Total Work of Art. *Front Sociol*. 2018; 3: 9.
8. Bingham C. How Dance and Music Stimulate Therapeutic Change in a Personal Movement Ritual. *Expressive Therapies Capstone Theses*. 2020; 327.
9. Crump A. Effects of Anthropogenic Change on Animal Cognition and Emotion. *Biological Sciences University of Oxford*. 2021; 1-220.
10. Franco F, Aglioti SM, Massimo B, Andrea C, Jaak P. Evolutionary aspects of self- and world consciousness in vertebrates. *Front Human Neurosci*. 2015; 9:157.
11. Kitamura Y, Kita Y, Okumura Y, Kaga Y, Okuzumi H, Ishikawa Y, Nakamura M, Inagaki M. Discrepancy between musical ability and language skills in children with Williams syndrome. *Brain Dev*. 2020; 42: 248-255.
12. Weiss MW, Sharda M, Lense M, Hyde KL, Trehub SE. Enhanced Memory for Vocal Melodies in Autism Spectrum Disorder and Williams Syndrome. *Autism Res*. 2021; 14: 1127-1133.
13. Mazokopaki K, Kugiumutzakis G. Infant rhythms: Expressions of musical companionship. *Communicative musicality: Exploring the basis of human companionship*. 2009. 185-208.
14. Cruickshank S. Making magical music. *Educator* 2009; 50: 37732.
15. Zhu J. Function Centered Analysis of Music Therapy in Rehabilitation Practice. *Adv Edu Technol Psychol*. 2021; 5: 155-160.
16. Hasanah I, Haikal Z. The Effects of Music Therapy on Cortisol Levels as a Biomarker of Stress in Children. *Intech Open*. 2021; 23.
17. Kim SA. Historical and contemporary perspectives on the development of analytical music therapy Training. *Nordic J Music Ther*. 2021; 30: 219-237.
18. Jones CY. The Effects of Music Therapy Frequency on Children with Autism Spectrum Disorder ASD the Therapists Point of View. 2021. Northcentral University, ProQuest Dissertations Publishing, 2021. 28412703.
19. Kruh N. Resilience Fostering Music Therapy: Developing a Music Based Method for Children and Adolescents Experiencing Short-Term Psychiatric Hospitalization. "Expressive Therapies Capstone

- Theses. 2021; 299.
20. Dunaway M. Moved by Sad Music: Pleasure and Emotion in Sad Music Listening Experiences. Thesis Georgia State University. 2021.
21. Grassi L. The Sound of the Unconscious: Psychoanalysis as Music 1st ed 2021. Routledge.
22. Merker B, Morley I, Zuidema W. Five fundamental constraints on theories of the origins of music. Phil Trans R Soc B. 2015; 370: 20140095.
23. Dvir T, Lotan N, Viderman R, Elefant C. The body communicates: Movement synchrony during music therapy with children diagnosed with ASD. Arts in Psychother. 2020; 69: 101658.