

# A Comparative Study on the Impact of Different Types of Music Activities on Young Children's Emotional Behavior

Feifei Li\*

*School of preschool education, Tianjin Normal University,,no.38shuangfeng road, Nankai district, TianJin, 300073, China*

*\*Corresponding author: 13821236966@163.com*

**Abstract:** *Early childhood constitutes a critical period for the development of emotional behavior, and music activities, as a non-verbal intervention, hold unique value for young children's emotional development. This study focuses on the impact of different types of music activities on young children's emotional behavior, systematically exploring their theoretical foundations, mechanisms of action, and practical pathways. The research first analyzes the fundamental characteristics of young children's emotional behavior and the internal psychological mechanisms and external pathways through which music activities influence emotions. It then compares the differential effects of three types of activities - singing, movement and rhythm games, and music appreciation - on emotional expression, regulation, and perception. Building on this, practical strategies are proposed, including principles for selecting music activities based on emotional development goals, creating immersive environments, optimizing teacher-child interaction models, and extending home-kindergarten collaboration. These strategies aim to construct a scientific and effective emotional education system for young children, providing theoretical foundations and methodological support for educational practice.*

**Keywords:** *Young Children's Emotional Behavior; Types of Music Activities; Emotional Expression; Emotional Regulation; Emotional Perception; Emotional Education*

## Introduction

Early childhood serves as the foundational stage for the development of individual emotional competence, where the healthy development of emotional behavior holds significant importance for lifelong adaptation. Currently, identifying appropriate educational interventions to promote young children's abilities in emotional recognition, expression, and regulation has become a key focus in developmental psychology and early childhood education. Due to their inherent emotional attributes and multi-sensory engagement characteristics, music activities are regarded as effective vehicles for influencing young children's emotional behavior. However, existing research predominantly focuses on the overall effects of music activities, while systematic exploration of the specific pathways and differential mechanisms through which different types of music activities influence emotional behavior remains insufficient. Therefore, adopting a comparative research perspective, this study aims to conduct an in-depth analysis of the differentiated emotional functions of three types of activities - singing, movement and rhythm games, and music appreciation - clarifying the theoretical logic and practical pathways through which they affect young children's emotional behavior. This approach seeks to address the gaps in current research and provide theoretical support for developing differentiated and precise emotional education programs for young children.

## 1. Theoretical Foundations of the Impact of Music Activities on Young Children's Emotional Behavior

### 1.1 Basic Characteristics of Young Children's Emotional Behavior Development

Early childhood is a critical period for the development of individual emotional behavior, and its emotional expressions exhibit distinct developmental characteristics. At the level of emotional experience, young children's emotions are characterized by significant externality and impulsivity. Their inner experiences are often directly expressed through facial expressions, body movements, and

speech, with rapid emotional shifts and self-regulation abilities still in the embryonic stage. At the level of emotional understanding, young children are in a transitional period from basic emotions to complex emotions, capable of initially recognizing and naming basic emotions such as happiness, sadness, anger, and fear, but they have difficulties understanding mixed emotions and implicit emotions. At the level of emotional regulation, young children gradually shift from relying on external soothing to developing internal strategies, but their regulatory strategies are relatively singular and easily influenced by environmental factors and their own physiological states. These characteristics collectively form a dynamic emotional system that is susceptible to external influences, providing physiological and psychological possibilities for music activities as an external stimulus to intervene and affect their emotional behavior <sup>[1]</sup>. Understanding these basic characteristics is the logical starting point for exploring the intervention effects of music activities.

### ***1.2 The Intrinsic Psychological Mechanisms Linking Music Activities and Emotion***

There exists a profound, cross-cultural intrinsic connection between music activities and human emotion, with its psychological mechanisms primarily rooted in the neurophysiological and cognitive processing of music. From a neuroscientific perspective, musical stimuli can directly activate the limbic system and brain regions closely associated with emotional processing, such as the amygdala, hippocampus, and prefrontal cortex, triggering autonomic nervous system responses that directly induce emotional experiences. From a cognitive perspective, music resonates with listeners' pre-existing knowledge, experiences, and memory templates through its structural elements, generating psychological processes such as expectation, confirmation, and violation. The tension and release accompanying this process constitute the core of emotional generation. From an evolutionary perspective, music functions as a pre-linguistic communication tool whose rhythmic and melodic patterns inherently carry emotional communication functions, capable of bypassing higher cognitive processing to directly evoke empathy and emotional resonance. These mechanisms collectively operate to make music a powerful, non-verbal tool for emotional arousal and regulation, establishing a solid theoretical foundation for influencing young children's emotional behavior <sup>[2]</sup>.

### ***1.3 Regulatory Pathways of Musical Elements on Young Children's Emotional Experiences***

The regulatory effect of music on emotions is not a generalized whole, but rather operates through its specific, analyzable constituent elements that respectively influence young children's emotional experiences. Rhythm stands as the most primitive and powerful element, where steady, regular beats can synchronize with children's physiological rhythms, inducing calmness and security; whereas fast, variable rhythms tend to evoke excitement and heightened emotions. Melody, particularly its pitch contour and progression, directly influences emotional tone, with ascending melodic progressions often accompanying positive, bright emotions, while descending progressions tend to induce calm or sad feelings.

Harmony creates auditory experiences of tension or resolution through consonant and dissonant interval relationships, where consonant harmonies bring stability and pleasure, while dissonant harmonies may evoke unease and curiosity. Additionally, timbre and dynamics serve as important pathways, with soft timbres and weaker dynamics generally having a soothing effect, while bright timbres and strong dynamics are more likely to stimulate activity desire. These musical elements collectively form a multidimensional emotional regulation system, providing theoretical basis and practical pathways for precisely intervening in specific emotional states through the design of different types of music activities [2].

### ***1.4 External Mechanisms Through Which Music Activities Influence Emotional Behavior***

Beyond intrinsic psychological pathways, music activities also shape young children's emotional behavior through their distinctive external mechanisms. The primary mechanism is social synchronization. Collective musical activities, such as group singing and coordinated movement activities, require participants to maintain consistency in rhythm, tempo, and emotional expression. This synchronized behavior promotes non-verbal communication and emotional bonding among group members, enhancing the sense of belonging and thereby positively influencing social-emotional behavior.

The second mechanism involves play and symbolic expression. Music activities often utilize play as a medium, providing young children with a safe and structured space for emotional expression. Within

this space, children can symbolically express and process internal emotional conflicts and needs through imitation, role-playing, and improvisation. The third mechanism is structure and predictability. The repetitive phrases and regular patterns inherent in music create a predictable auditory environment for young children. This sense of structure effectively reduces anxiety caused by uncertainty and helps children establish an internal sense of order, thereby promoting emotional stability. These external mechanisms intertwine with the internal psychological mechanisms to collectively form a comprehensive theoretical framework explaining how music activities influence young children's emotional behavior [3].

## **2. A Comparative Analysis of the Differential Impacts of Various Types of Music Activities on Young Children's Emotional Behavior**

### ***2.1 Multidimensional Characterization and Classification of Music Activity Types***

A scientific classification of music activities serves as the foundational prerequisite for conducting differentiated comparative research. Based on the dominant form of the activity and the manner of children's participation, these activities can be categorized into three primary dimensions with distinct differentiating characteristics [3].

The first category comprises singing activities, which focus on vocal cord vibration and melodic lines. Their core characteristic lies in the organic integration of linguistic symbols and pitch variation, establishing a direct channel for emotional transmission. This form of activity involves not only the processing of musical elements but also integrates linguistic cognitive processes, forming a unique vehicle for emotional expression.

The second category consists of movement and rhythm games, which emphasize physical motion and beat response. Their essence is the real-time transformation of auditory signals into somatic kinesthetics, stressing precise rhythm perception and immediate motor execution. This category embodies the neuro-coupling mechanism between music and movement.

The third category involves music appreciation activities, which center on auditory input and internal experience. This type requires participants to maintain a highly focused receptive state, achieving holistic perception of and emotional association with musical works through introspective listening. This process involves more complex cognitive reconstruction and emotional mapping.

This systematic classification, based on multisensory channels and behavioral participation modes, not only clearly defines the core operational characteristics of each activity type but also establishes a scientific analytical framework for revealing their distinct pathways of influence on emotional behavior. The psychological resources and neural mechanisms engaged by different activity types differ fundamentally. These differences directly lead to significant specificity in the dimensions, intensity, and persistence of their effects on young children's emotional behavior.

### ***2.2 Analysis of the Impact of Singing Activities on Emotional Expression***

Singing activities demonstrate unique interventional value in promoting the development of young children's emotional expression capabilities. As a comprehensive art form integrating language, melody, and breath control, it creates a structured and safe space for emotional expression. From the perspective of neural mechanisms, the singing process simultaneously activates Broca's area responsible for language processing in the brain, the right hemisphere processing musical information, and the limbic system regulating emotions. This multi-regional brain collaboration provides a substantial neural foundation for emotional expression [4].

The emotional themes and narrative structures contained in lyrical content provide young children with specific cognitive frameworks for identifying and understanding complex emotional states, enabling them to acquire richer emotional vocabulary and expression methods through imitation and learning. At the physiological level of singing, children need to autonomously regulate breathing rhythms and vocal intensity. This conscious physiological regulation process itself serves as an effective mechanism for channeling and transforming emotional energy. Particularly in collective singing contexts, the synchronized vibration of sound waves and mutual emotional contagion create a strong field of emotional resonance. This social musical experience can significantly reduce individuals' social inhibition, encouraging more confident emotional externalization. Through systematically performing song pieces with different emotional tones, young children can explore and

practice various emotional expressions under the protection of artistic forms, thereby gradually enhancing the accuracy and appropriateness of their emotional expression.

### ***2.3 The Role of Movement and Rhythm Games in Emotional Regulation***

Movement and rhythm games exert profound influences on young children's physiological arousal levels and behavioral regulation capabilities through their unique bodily participation. These activities essentially establish a neural pathway connecting auditory perception with physical movement, enabling abstract emotional energy to be transformed into concrete, controllable physical actions. From a neuroscientific perspective, rhythm processing primarily involves subcortical structures such as the basal ganglia and cerebellum, which similarly participate in emotional regulation processes. This neural overlap provides a biological foundation for music-movement integrated interventions.

High-intensity, fast-paced movement activities effectively promote the release of catecholamine neurotransmitters, satisfying the expression needs of excited emotions and achieving reasonable catharsis of physiological energy. Conversely, gentle and rhythmic swaying motions activate the parasympathetic nervous system, gradually reducing physiological arousal levels and helping children transition calmly from excited or anxious states. The inherent requirement for beat stability and consistency in rhythm games essentially constitutes continuous attention training and impulse control practice. This cognitive effort directly strengthens the prefrontal cortex's regulatory function over emotional responses. When an individual's internal physiological rhythms achieve precise synchronization with external musical rhythms, it generates a profound sense of order and control. This positive self-experience plays a significant role in establishing stable emotional regulation patterns and lays the foundation for developing more advanced emotional management strategies.

### ***2.4 The Facilitation of Emotional Perception Through Music Appreciation Activities***

Music appreciation activities, serving as an introspective aesthetic experience, hold irreplaceable value in deepening young children's emotional perception capabilities. This type of activity redirects children's attention from external behaviors to internal feelings, cultivating their metacognitive awareness of their own emotional states. In a focused listening state, children's auditory systems become exceptionally sensitive to subtle changes in musical elements, enabling them to detect transitions between bright and dark timbres, variations in harmonic tension, the contour of melodic progression, and nuanced differences in dynamic levels. These elements constitute the material carriers of musical emotional expressiveness.

Through systematic exposure to musical works from different historical periods, cultural backgrounds, and emotional characteristics, children's emotional identification spectrum continuously expands, enabling them to gradually distinguish and understand those subtle and complex emotional hues, such as the tenderness within melancholy or the tranquility within joy - these mixed emotional states. Guided musical imagination further strengthens this process by stimulating children to connect current auditory experiences with personal emotional memories, forming new emotional-cognitive associations. This internalized perceptual training not only enhances children's insight into their own emotional states but also improves their empathic capacity toward others' emotional states through the emotional narratives embedded in music. From a long-term developmental perspective, the precision and depth of emotional perception cultivated through music appreciation establish a solid foundation for the development of children's emotional understanding capacity, making their emotional world more rich, nuanced, and better adapted.

## **3. Practical Pathways and Strategies for Optimizing Early Childhood Emotional Education**

### ***3.1 Principles for Selecting Music Activities Based on Emotional Development Objectives***

The selection of music activities should transcend simple entertainment functions and establish systematic connections with the stage-specific objectives of children's emotional development. The selection process must adhere to three core principles: targetedness, appropriateness, and progression.

The principle of targetedness requires educators to first clarify the core objectives of current emotional education - whether focusing on emotional identification, expression, regulation, or empathy - and then match these with music activity types possessing corresponding functional advantages. Establishing this principle requires precise understanding of the emotional functions of music activities,

such as utilizing singing activities to promote emotional expression, employing movement games to train emotional regulation, and leveraging music appreciation activities to enhance emotional perception acuity [5].

The principle of appropriateness emphasizes the alignment between activity content and the age characteristics, cognitive levels, and current emotional states of the child group. This demands that educators possess keen observation skills, enabling them to dynamically adjust the rhythm, melody, and harmonic characteristics of musical materials based on children's immediate emotional states.

The principle of progression manifests in the sequencing of activity design, which should advance from the fundamental level of emotional experience and identification to gradually transition to the complex level of emotional expression and management, thereby forming a spiral ascending path for cultivating emotional competence.

This objective-based design approach not only ensures the purposefulness and effectiveness of musical intervention but also embodies the child-development-centered educational philosophy, making music activities a powerful tool for supporting young children's emotional development.

### ***3.2 Creating an Immersive Music-Emotional Education Environment***

As a form of hidden curriculum, the environment exerts a lasting and profound influence on young children's emotional development. An immersive music-emotional education environment entails the organic integration of musical elements into children's daily lives and physical spaces. In the temporal dimension, educators can establish a "musical routine system," such as playing light and cheerful welcome music during arrival times to create a safe and warm atmosphere, using soothing lullabies during nap times to guide emotional calming, and utilizing specific rhythmic cues during transition periods to provide clear behavioral expectations.

In the spatial dimension, diverse music zones should be established, including private corners with sound-absorbing materials where children can calm their emotions through individual music listening, as well as spacious collective activity areas where they can release energy and engage in social interaction through movement. This comprehensive, multi-sensory environmental immersion makes music a natural tool for young children to explore, understand, and manage their emotions [6].

### ***3.3 Establishing a Teacher-Child Interaction Model Integrating Observation and Guidance***

The role of educators in music activities should transform from directors to keen observers, active empathizers, and flexible guides. Observation serves as the prerequisite for effective interaction, requiring educators to pay attention to children's non-verbal cues during music activities, including facial expressions, body postures, movement intensity, and social distance, to accurately interpret their internal emotional states. Building on this foundation, interactions should reflect individual differences. For emotionally reserved children, educators can establish connection and encourage expression by imitating their subtle movements and gradually adding musical elements. For emotionally expressive children, educators can guide them to channel and formalize their energy by transforming vigorous movements into specific rhythmic patterns. Educators' verbal guidance should emphasize descriptive feedback rather than evaluation, for instance using statements like "I noticed you just hit the drumhead with strong intensity" to help children develop self-awareness of the connection between their emotions and behaviors [6].

### ***3.4 Extending Music-Emotional Education Through Home-Kindergarten Collaboration***

The consolidation and development of young children's emotional competence require coordinated efforts between educational settings and family environments. Achieving effective home-kindergarten collaboration extension hinges on establishing shared understanding frameworks and transmitting operational methods. Educational institutions can utilize informal workshops or resource sharing to help family members understand the emotional functions of different music activity categories, enabling them to comprehend the respective roles of singing, movement, and appreciation in emotional support. Families should be encouraged to create simple musical rituals, such as designated family singing times or using music to manage daily routines, thereby integrating emotional regulation strategies into everyday life. Establishing communication channels between homes and kindergartens enables educators and family members to share observations of children's emotional expressions and preferences during specific music activities. This approach maintains educational consistency and

continuity across both settings, collectively building a stable and supportive ecosystem for children's emotional growth.

## Conclusion

This study systematically examines the theoretical foundations of how music activities influence young children's emotional behavior, provides a comparative analysis of the differential effects of various types of music activities on emotional expression, regulation, and perception, and proposes corresponding educational practice pathways. The research demonstrates that singing activities primarily facilitate emotional expression through the integration of language and melody; movement and rhythm games enhance emotional regulation capabilities through physical movement and rhythmic synchronization; while music appreciation activities improve emotional understanding through internalized perception. These three activity types exhibit functional complementarity and situational applicability in emotional intervention.

Based on these findings, educational practice should emphasize the scientific selection of activity types and environmental construction, strengthen educators' observational and guidance capabilities, and promote home-kindergarten collaborative education. Future research could further focus on the emotional development needs of children across different age stages, conduct longitudinal tracking and empirical intervention studies, and deepen the exploration of quantitative relationships between musical activity parameters and changes in emotional behavior. This will advance early childhood emotional education practices toward more refined and scientific development.

## References

- [1] Bao, Yujiao, Zhou, Yingjie, and Zhang, Limin. "The Impact of Family Music Environment on Young Children's Prosocial Behavior: The Chain Mediating Roles of Musicality and Emotional Regulation Ability." *Journal of South China Normal University (Social Science Edition)* 05 (2025): 99-112+208.
- [2] Zou, Zixian. "Practical Pathways for Enhancing Young Children's Emotional Understanding Through Thematic Music Games." *Pupils of Music* 11 (2025): 98-100.
- [3] Wei, Xiumei. "Implementation Pathways of Music Activities Based on Emotional Cultivation in Young Children." *Pupils of Music* 08 (2025): 62-64.
- [4] Yuan, Min. *The Influence of Family Music Environment on Young Children's Prosocial Behavior*. 2023. Guangzhou University, MA thesis.
- [5] Li, Nina, and Zhang, Kunying. "Strategies for the Impact of Family Music Education on Emotional Nurturing in Young Children." *Journal of Ningbo Institute of Education* 24.01 (2022): 36-38.
- [6] Zhang, Yurui. *An Empirical Study on Enhancing Young Children's Emotional Regulation Ability Through Music Appreciation Activities*. 2025. Jilin International Studies University, MA thesis.