THE DEVELOPMENT AND APPLICATION OF BODY PERCUSSION IN MUSIC EDUCATION, GUANGZHOU, CHINA

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Abstract

This academic article shows the development of body percussion in western and China. The contents include the definition of body percussion, the body in music experiences and application method, and the idea for using body percussion to develop music education. In classroom instruction, body percussion has been receiving little attention. The lack of attention shouldn't imply that it is useless; body percussion's benefits warrant closer and more in-depth research and study. Body percussion benefits students, teachers, schools, and society. For students, when they engage in body percussion in classes, they can hone their collaboration ability. The nature of instructing body percussion stipulates students observe, imitate, and follow the teacher's lead. When students repeatedly engage in such a process, they will develop their abilities to work with others effectively. Another benefit centers on the development of empathy.

Keywords: body percussion; music education; body percussion development; applying body percussion; China

Introduction

Since body percussion is an essential tool of the BAPNE method, a system was developed based on Howard Gardner's Multiple Intelligences Theory. It is reasonable to speculate that body percussion should aid the cultivation of social intelligence, of which empathy is an integral part. Preliminary support for body percussion supporting have numerous meaningful implications. First, it encourages and promotes more in-depth interdisciplinary research between psychology, neuroscience, education, and other disciplines.

Further interdisciplinary research could help inform better educational strategies from the psychological and neurological perspectives. Another meaningful implication centers on empathy cultivation. Preliminary support and evidence for body percussion-driven empathy cultivation could be a consistent and reliable way to help students develop empathy and social competence. Third, the research can have implications for treating psychological disorders. People who struggle with Narcissistic Personality Disorder, Psychopathy, and Antisocial Personality Disorder are often seen as individuals who can't empathize with others. In treating these conditions in a therapeutic setting, one strategy is to help them develop empathy and regard for others. Should body percussion is found to have a positive effect on assisting others in cultivating empathy, it could be adopted as a therapeutic tool that serves a larger population.

Body percussion could benefit music education instructors and teachers. It allows them to become more than someone who teaches students knowledge and empowers them to change students fundamentally. On the one hand, body percussion could help students build their music competency by making them more sensitive to pitch, timbre, tempo, and other essential musical elements. As students practice body percussion over time, they will gain a more in-depth understanding of music and develop the ability to appreciate music appropriately. In this sense, body percussion instructors are critical to helping students' musical ability. Besides, the inherent nature of classroom body percussion instruction involves social interaction, in which students need to observe, imitate, and follow the instructor. This process could help students become more socially competent since it approximates day-to-day social interactions. Body percussion instructors are important figures since their work could help students be more socially developed.

The significance of body percussion research goes beyond the scope of individuals, music classrooms, and even schools. Suppose the research findings lead to the conclusion of the ability of empathy being built and enhanced through body percussion in music education. In that case, this research fundamentally contributes to societal stability, especially when the entire world faces unprecedented uncertainty stemming from the coronavirus pandemic. The effect of empathy involves students' ability to effectively connect with others, truly feel with each other, care about each other sincerely, and compassionately respond to each other's needs with tangible and intangible actions. Such will be critical to the lives of everyone, community, and society, which sustains and strengthens ties and bonds beyond geological and even cultural boundaries. The

benefits of body percussion are numerous, which makes studying and promoting it instrumental and significant.

Definition of Body Percussion

"Body Percussion" refers to tapping one's various body parts to create rhythms through clapping, snapping, slapping, stomping, and more, which leads to experiencing a variety of musical elements within any musical piece rhythm, speed, emotions, etc. It is a type of imitation percussion behavior that uses one's own body as a percussion instrument. Our body can produce an infinite variety of possible sounds. According to the timbre characteristics and pitch produced by different body parts, the feet, chest, and buttocks are commonly used to make bass sound effects. The shoulders, abdomen, legs, and the like are used as middle tone effects, while finger-snapping, cheek patting, and mouth popping can produce a crisp and bright sound like the treble. The learning and training of body percussion must involve various elements of musical skills and musical qualities, all of which are accomplished through the carrier of body movements. The most common way to sit for body percussion is to sit in a chair without a backrest. The seat height is optimized for one's size so that the feet are entirely on the floor, forming a right angle between one's calves and thighs. Fixed position and spatial distance make it easier to execute physical movements, such as stomping, jumping, standing up, and turning in different directions. Warm-up exercises such as clapping, tapping on shoulders or thighs, stomping, and so forth are usually done at the beginning of body percussion. Afterward, one can begin tapping with feet to the rhythm, changing movements of hands, or turning the entire body to the music to complete the entire musical performance of body percussion. Such a complete warm-up exercise series improves blood circulation within one's body and increases physical agility and preparedness, which eventually contributes to one's physical and mental well-being. A series of single-movement skills and game skills conducive to sustainable development must be thoroughly designed, specifically developed, and strategically executed to develop more possibilities. Then, practitioners combine the expressions of music to form a variety of sound combinations and become creators with a sense of achievement in each exercise and activity. Body percussion helps students develop multi-tone auditory skills and enhance multiple intelligences in the music class. They are switching from the passive learning process of simple

imitation, memorization, comprehension, and execution to an interactive learning atmosphere with the active involvement of oneself (one's body parts). Collaboration with others enhances self-confidence and comprehensive teamwork skills while creating a mutually supportive and joyous learning community.

Background of Body Percussion

Over the past three decades, theories about the body have hugely impacted sociology and humanities. Today, discussions of embodiment, a significant ideological theme of body awareness, permeates both general theoretical studies and specialized sub-scientific studies. Sociological research is not limited to the disembodied mind, unaffected by bodily sensations and habits, but includes the thinking and sentient body (Shilling, 2005).

In human history, the body and strength are usually closely associated. A strong physique indicates health and power. Heroes in literature and artworks mostly appear with tall and mighty body images. Plato (Platonism) advocated that the spirit is above the body in educational thought, and the distinction between reason, emotion, and body has become the essence of its educational practice. However, under the influence of network intelligence technology, we are beginning to be weaker in body, voice, and language. We are witnessing a shift in human communication from a physical, biological model to a virtual, electronic one. "Culture is the body, applying our bodies to reconnect with the natural world by embracing the mysteries of life." (Tadashi, 2017).

The discussion of the body in modern social theory began with Hobbes. He first proposed understanding the human body's inclinations and abilities from the perspective of eternal motion and natural passion. Depicting the body as the source of society, Merleau-Ponty's phenomenology exerted the greatest influence. He believes that the embodied subject is based on the practical intervention of its environment and through the intentionality developed because of the situational nature of embodied existence (Merleau-Ponty, 1962). But there is also the inner contradiction.

On the one hand, it emphasizes the universal bodily basis of meaning and knowledge. It focuses on the body in experience while ignoring that the body may sometimes recede. This is well illustrated by Leder's research, which focuses on the latent invisible body as the normal body

The term "body" expresses a body full of life, emotion, and sensitivity to feelings, rather than a pure material body lacking life and feelings. And "aesthetic" in somaesthetics has dual functions: one is to emphasize the intuitive

function of the body, and the other is to emphasize the various uses of its aesthetics, both to stylize the individual self and to appreciate the aesthetic properties of other-selves. (Shusterman, 2011).

"Body" is not an unfamiliar word to French Philosopher Michael Foucault (1926-1984). The body he refers to as a "body" that breaks through the traditional meaning and places it in the context of power, politics, and knowledge. In the background, through the body's carrier, it reflects how the body between power and knowledge can be unfolded. In the late 1980s, the cognitive theory of the gods emerged as the antithesis of standard cognitive science. It emphasized the "Research on the Study Travel Strategies Based on Embodied Cognitive Theory," which states that learning is the role of the body in shaping the environment.

Chris Shilling, a British sociologist, proposed and expounded a new view of the body in his book "Culture, Technology and the Body in Society" (2005). It regards the body as a multi-dimensional intermediary in social formation, focusing on the body, the relationship between the body, and economic and technological structures, cultural structures, and social forms. Work, sports, music, social interaction, and technology in a modern society deeply influence the creativity of embodied subjects.

Published in 2012, "Thinking Through the Body" is the work of the famous American pragmatist philosopher and aesthetician Shusterman (2012). The book focused on the relationship between the existence of the body, the knowledge of the body, and the body's education.

In this century, the philosophy of embodied cognition touches and influences various fields. In CNKI's search, there are 429 articles on embodied cognition, 253 articles on body research, and 98 articles on embeddedness. It can be seen that the deep grey research on embodied manifestation is undoubtedly more and more diverse. What is important is that it provides a theoretical basis and a set of frameworks for the innovative teaching model of "body percussion," which can be used to control the relevant and substantive study of the subject to enrich the humanistic spirit of this model.

The “Body” in the Musical Experience

Since Platonism advocated the supremacy of the spirit over the body in educational thought, the distinction between reason, emotion and body has become the essence of its educational practice. Educational theory and practice

are a kind of "physical and mental separation." Descartes gave the body view of the mind-body dualism. He insisted that the essence of the matter is an extension of space and thought and pointed out that educational discussions about the body must start from its essence. Nietzsche believes that the body is great intelligence, with multiple meanings, and the body is a "spirit." He focused his attention on "the body embodies reason" for Naga. Only reason combined with passion can become the true reason. However, in Merleau-Ponty's phenomenology, the postmodernist movement began to focus on the body in the ontology. There was criticized the body as a subsidiary product of politics and point out that the purpose of education through the body is to build a person with a will, emotion, etc.

To explore the value and meaning of the body from the perspective of education or to hope for a concrete body curriculum related to aesthetics and art, we must start from the philosophical understanding of the body and explore the essence and social ontology of the body.

From the perspective of music performance and music education, the body's participation will help us pay more attention to cooperation and experience as a group. Body percussion is not only an auditory exercise but also an emotional experience that engages social relationships. In the listening practice, we gradually become aware of the role that our body plays, not only as a tool for "communication" but also as a way to project "self", the function of the body in participation and listening, making these experiences more vivid and significant.

In reading the literature, many clues can be found in the research on music, the body, and the brain. These clues point to the centrality of movements through musical expressions. H. Gardner mentioned that "the body is a vital vehicle for quantitative analysis, and physical movement requires precise brain control, not only for flexibility and balance but also for excellent attention training." Physical movement is manifested to varying degrees in all artistic and musical activities. In music, small changes in all major elements leave traces of the player's body movements and breathing patterns.

American psychologist B. H. Repp believes that the relationship between music and physical movement is parallel, that is, the relationship between time and force, music as the change of time, and the body as the change of force. He believes that both the brain and the body generate melody, rhythm, and harmony under normal circumstances. The brain creates and thinks about musical works, while the body undertakes the tasks of interpreting music. The time changes in music are reflected in multiple musical elements such as rhythm duration, time signature, phrase length, speed, etc. The changes in these elements have a great

impact on the same melody. The same is true for body movements. The change in the size of the action space affects the length of time to complete the action. The change in strength also has a non-negligible impact on the time consumed by the action. When we notice a person's body movement space becomes smaller and smaller, it can be concluded that the sound crescendos are changing accordingly.

It is not only the inner sense of movement composed of musical elements that connect body movements with musical emotions but also the dynamic changes in time, space, and force of the music itself. A.R. Damasio proposed in 1996 that the physical foundation of emotional expression stems from the "body circuit" or "hypothetical circuit." The former refers to expressing the perception of music information in the vestibular system through body movement. Conversely, body movement stimulates the vestibular system to process music information more actively. In contrast, the latter refers to a person's musical memory and musical experiences. It can be seen that it is necessary to understand the connections that arise in kinesthetic, visual, and auditory experience and to learn the ability to integrate information in different sensory modalities so that we can perceive force, space, and time in a multisensory way.

Movement is a natural and effective way of expressing musical emotions. As Maurice Merleau Ponty said: "Action is the most effective non-auditory way of expressing musical emotions. It is more powerful than languages." An important figure emphasizing the relationship between physical movement and musical expression is the Swiss music educator Emile Jacques Dalcroze, a scholar who has made outstanding contributions to the theory that physical participation contributes to the experience and expression of music. His great contribution was a systematic approach to teaching the relationship between body movement and music, called Eurhythmics. He proposed that both music and movement involve a "preparatory stage," which includes preparation for movement, breathing, and feeling. The process of everybody's movement is composed of preparation-movement-response, and the core of the movement is the duration, the force of the power, and the space used.

"The essence of body rhythm is 1. The rhythm of music itself is a kind of movement". 2. The nature of motion is physical. 3. All movements require changes in space and time and force. 4. Body rhythm is a form of physically experiencing music. 5. Gain clearer perception through paradigms that improve the bodily experience. 6. Focusing on the timing of the movement makes the movement aware of the rhythm of the music. 7. Paying attention to the space of action can better grasp the structure of music.

Papers on "Action and Music" in psychology focus on the relationship between movement and the brain in musical performance, such as On the Meaning of Movement in Music, Development and The Brain, etc., involving empirical research in neuroscience. Its perspectives include biological evolution, behavioral research, neural influence, neuropsychological methodology, etc. The core content includes the rhythm of music and dance and the multi-sensory experience of movement. These papers explore many upright theories about how music plays a critical role in developing body movement synchronization with musical rhythm in neural reflexes.

More than 400 years ago, the French philosopher Descartes said that the object of sociology is not just the Disembodied mind but the thinking and emotional body. With the rise of postmodern philosophy, the problem of body status highlighted by German philosopher Nietzsche and others began to break through the traditional philosophy of consciousness. It attaches importance to the inner mind and brings the perceptual or experiential body into the overall philosophy or system philosophy of the order of rational ideas. With the emphasis on the subject status of the body, philosophy has realized the return of sensibility. It emphasizing the physicalization of the mind, the spiritualization of the body, and the relationship between the body, life, and emotions. The problem with the body is an important topic in contemporary philosophy.

Embodied cognition theory holds that the human mind and cognition are closely related to the concrete body, and the mind always presents as the mind with the body. Cognition originates from the whole human body and is formed through body experience and the interaction between body and environment. Embodied Cognition theory emerged in the 20th century and is a new research field in cognitive psychology and cognitive science. French philosopher and thinker Mello Ponty (1908-1961) believed that "body subjects coexist with each other, and body subjects and the world coexist." He put forward the concept of embodied cognition from the perspective of body phenomenology and established the position of the body subject. He added: "Movement is one of the most effective non-auditory ways of expressing musical emotion, and it is more powerful than words."

In addition, the academic paper Hearing what the body feels: Auditory encoding of rhythmic movement discusses how the rhythmic sense of inner hearing is synchronized through body movements, illustrating the coordination of bodily functions and cerebral awareness. The article focuses on the development process of "music perception," the integration of auditory and kinesthetic information, and gives examples from the perspective of neuropsychology. The article raised some challenging questions, such as making people more "rhythmic." Combining these different perspectives reflect

psychologists' interest in the link between music, body movement, and brain awareness. They propose a theory of perceptual-motor matching, arguing that perceptual development depends on the accumulation of children's motor experience arguing that Consistent and efficient movement patterns allow children to learn to explore and connect harmoniously with their environment. Psychologists claim that children's time orientation to the environment also depends on motor learning, and visual-spatial perception is not enough. Students should open up all physical touches to make their bones and muscles filled with power.

Articles in this category aim to find the intersection of neuroscience and music and complement important research and observations in musicology, music pedagogy, music performance, and music therapy and provide evidence for researchers in these fields to support. Ultimately, musicians and scientists can work together to elucidate the importance of movement to music, consciousness, and thought.

Associate Professor Chen Rong of Shanghai Conservatory of Music's doctoral dissertation "On the Relationship and Function of Movement and Music in Music Education: From Pulling the Body to Dalcroze's Body Rhythm Teaching Method." This paper explains the relationship between movement and music, expounds on the expression of movement in music learning, and analyzes the value and significance of kinesthetic perception for auditory learning. Two theories are mentioned in the paper, namely Laban's Kinesiology and Dalcroze's Body Rhythm Teaching Method. It aims to observe, interpret, and record actions and regularly refine the emotional expression of actions. Therefore, it is proposed that the body has a non-negligible role in musical experience and expression and the accumulation of musical experience.

Dr. Chen Rong published the book "Momentum, Timbre, Rhythm and Body." The book focuses on exploring body timbre, the harmony between body and rhythm, the proper distribution of movements, etc. This introduces the various stages of voice and momentum teaching, the process and the focus and method, etc., to hear the dynamic rhythm while coordinating the body and realize the "visible sound." We have tried this method in teaching practice and separate the momentum or "body percussion" as a technical exercise, which is not conducive to cultivating students' output or problem-solving abilities. The problem with integrating the style of the work and enriching the performance of works through these methods influences the students' experience with connection and a sense of substitution (Chen, 2019).

"Sound and momentum" teaching is a teaching concept proposed by Orff's teaching system, which refers to human actions that can produce sounds, such as clapping hands, patting legs, stomping feet, and snapping fingers. Most of the domestic journal articles are still based on operation, emphasizing knowledge and skills, and the concept of foothold comes from Orff's teaching system. However, only four articles on CNKI use the expression "body percussion" as a key application in music practice, and two of them are written by the author.

The Development of Body Percussion education in China

Practical philosophy is also reflected in music education. Practical philosophy emphasizes the importance of physical movements and experiences in music learning and cognition. It encourages musicians to create music and changes the focus of music education from music appreciation and aesthetics to more emphasis on the attention and understanding of the elements of music ontology. The practical philosophy of music education should be a discussion centered on the physical basis of music and the "meaning" of music. Phenomenologists specifically urge us to recognize the body's central role in musical cognition and creativity, advocating movement as a specific form of musical expression (Elliott & Silverman, 2018).

Philosopher, psychologist, and educator John Dewey once claimed that mind and body are not two separate entities, much less separate. Whether from religion, science, philosophy, or art, the necessity of taking the mind and body as a whole can be found. In his article Nature, life and body-mind, he proposed the concept of exploring the body and spirit (mind) in the relationship with nature. From the perspective of education, he believes that it is necessary to think about how students learn, how teachers teach, and how to organize school activities. Under such requirements, more effective and favorable means must be proposed to promote the development of school education. Therefore, applying the concrete understanding of the "body" to school education is that students are more involved in the physical contact between people and people and the environment, which is very meaningful for school education and curriculum forms (Dewey, 1980).

The ultimate goal of teaching is to improve student's learning ability so that they can learn more conveniently and effectively in the future to acquire

knowledge and skills on the one hand and master the learning process on the other hand. In 2019, three American education experts, Bruce Joyce, Marsha Weil, and Emily Calhoun, wrote "Models of Teaching" (8ed.) that teaching activities must be based on students' original knowledge level and learning and self-awareness attitude. On the other hand, the variability of the teaching process determines that the teaching model has changed from single to diversified, and education is to enrich learners' thoughts and improve their emotions continuously. The book does a lot of data analysis on the teachers and environmental factors that affect the learning process. Teachers should be facilitators who can promote students' in-depth understanding of social activities and teach them how to effectively use the results of activities. If teachers can master effective teaching skills and apply them skillfully, they can help students achieve their learning goals smoothly.

The book "Learning to Teach" (2014) by Richard I. Arends, a professor of educational leadership at Connecticut State University, mainly expounds on the meaning of effective teaching and discusses in-depth aspects of organizing teaching, including managing students, teaching interaction, teaching organization and a variety of teaching modes, etc. It put forward many valuable, detailed, and actionable teaching suggestions.

Two series of books edited by Professor Yu Danhong from the Shanghai Conservatory of Music have also brought new thinking and vision to Chinese music educators. One is the book "Exploring the Significance and Value of Music Education" by the famous music educator Bennett Reimer. (2018) and The Musical Experience: Rethinking Music Teaching and Learning (2020), edited by Janet R. Barrett and Peter R. Webster. The former shows the development and change of Reimer's philosophy of music education to practice and the development and change of his thoughts, clarifies the unique contribution of music and its profound significance to human experience, and proposes more inclusive and universal music. Philosophy of Education. The latter discusses music teaching and learning thinking from six different aspects: philosophy, listening, the cultural dimension of music teaching and learning, creativity, role change, and music teacher education.

The Application of Body Percussion in Music Education in China

In China, Music Curriculum Standards for Compulsory Education (2011) mentions that the basic concept of the music curriculum is to provide students with aesthetic experience, cultivate their sentiment and inspire their wisdom, emphasize the practice process of music art, highlight the characteristics of music, pay attention to the integration of disciplines and encourage music creation. It is once again mentioned in the General High School Music Curriculum Standards (2017 edition, 2020 revision) that the teaching of each module of the music curriculum can be implemented through various practical activities such as listening, singing, playing, composing, and creating, and comprehensive art performance. "Standards" emphasize the importance of music practice and should run through all music teaching activities. By participating in various music practice activities, students can gain direct experience and emotional experience, learn, master the necessary knowledge and skills, and enhance their aesthetic perception and cultural understanding ability to enhance their artistic expression. "Body percussion" in this study is a novel humanistic music education concept and teaching mode with creative and generative significance. It pays attention to the active experience and participation of the human body in music and regards the development of the learner -- humans as the fundamental goal of the curriculum (Doll, 2000). Body percussion is an important musical practice in cultivating middle school students' musical quality. Good musical accomplishment requires an understanding of various elements in music composition, such as pitch sense, rhythm sense, tonality sense, etc.

They emphasize the importance of physical movement and experience in musical understanding (Elliott & Silverman, 2018). The unity of body and mind is the ultimate goal of music education. The teaching mode of "body percussion" is based on the criticism and reflection of the traditional "knowledge-based" and "subject-based" curriculum view, highlighting the "people-oriented" and emphasizing the experience and participation of the body in music. Its connotation has two meanings: on the one hand, learners are the core of the curriculum. Body percussion focuses on the learner's interests, attitudes, and needs; it also pays attention to the personality development of learners and their relationship with themselves, others, society, and nature. The relationship between learners and various curriculum factors and the regard for learners' development as the curriculum's fundamental goal is also significant.

On the other hand, physical activity accompanies the whole field of music. Both playing musical instruments and singing involve physical activities that produce sound. Music guides people's dance, and physical activities are the most basic part of the performance, which needs to be reasonably designed according to different teaching objects and teaching contents.

"Body percussion" teaching mode realizes the transformation of the teacher's role in curriculum reform. In traditional teaching, teachers become passive implementers of educational plans and curriculum planning and act as knowledge indoctrinators. For a long time, musical training in basic music education was mostly based on pure pitch and rhythm, excluding physical training. Listening to music is also a passive activity. Nowadays, teachers' teaching is the activity of creating meaning and generating meaning. It is a special practical activity. The teaching model is based on this theory to guide the practice of music teaching.

The three famous music education systems emphasize the participation of the body to experience music, such as the rhythm in Orff's music education system, the gesture and singing in Kodaly's music education system to experience the relationship between phonology and language, and the body rhythm in Dalcroze's music education system to feel the mood of the music. It can be seen that autonomous participation and physical behavior are important parts of music practice, which means highlighting the "physical status" of music and the overall feeling of the body and paying attention to the physical experience of music.

The Impact of Body Percussion through Music Education

"Body Percussion" embodies a teaching model of "learning by doing." It is beneficial to explore and cultivate learners' creativity by using "body percussion" as a means of improvisation and performance. In the freestyle and joyful musical practice, learners can enhance their musical sensibility, awareness of emotions, creativity, boldness, and self-expression, which contributes to their overall abilities of self-management, collaboration, and interpersonal communication.

According to Orff Schulwerk, a music education approach or process founded by the German musician and music educator Carl Orff (1895-1982), all

students have the right to enjoy music regardless of their natural talents for music (Li and Fan, 2010). Through group instruction in classrooms, active learning and teaching happen in singing, movement, body percussion, and instrument playing. In music, the tempo, phrase length, and styles can all be well demonstrated by body movements. Students learn about the elements of music through exploration, play, and improvisation. The Orff Schulwerk approach encourages students' free exploration, creation, and expression that transcend beyond music.

According to Romero-Naranjo and Bofill, multiple intelligences are developed through body percussion. This is also evident in the design research done by Romero-Naranjo and Fabra-Brell (2017). Their introduction claimed that the BAPNE method could help develop various intelligence outlined in the Multiple Intelligence Theory by Howard Gardner in 1999. Since body percussion is a component of the BAPNE method, it is reasonable to assume that body could aid the BAPNE method in facilitating the intelligence denoted in the Multiple Intelligence Theory. Through rhythm and using our own body as an instrument, practitioners of body percussion integrate music and movement in a new scenario that links emotions to social relationships. As it is widely acknowledged, emotions play a significant and powerful role in human relationships. Recognizing and understanding emotions and emotional dynamics contributes to the building and cultivating of social relationships. Empathy, defined as an emotional or cognitive response to another's emotional state, is essential for navigating meaningful social interactions and is closely linked to prosocial behavior. Therefore, empathy may be positively associated with prosocial behavior. With empathy, a person can execute positive responsiveness to others, strengthening their social bonds, particularly in times of stress, confusion, or despair. According to Morelli, Lieberman, and Zaki, positive empathy uniquely relates to prosocial behavior and a sense of social connection and subjective well-being (Morelli et al., 2015).

In the school environment, particularly in the music classroom setting, empathy is promoted through both music and musical training. Students naturally generate relevant emotions when listening to music, often linking what they are hearing to what they are thinking about or how they are feeling. This process is associated with the concept of "theory of mind," the ability to understand the intentions and emotional state. When engaging in musical

activities, we perceive the emotional and psychological content of music and interpret the thoughts and feelings of others.

Experiments show that the "body percussion," a music teaching model, adapts well to children and adolescents' physical and psychological development. In this process, empathy is well demonstrated, encouraged, and promoted. In the process of teaching body percussion in music classes, different rhythms and action types are designed according to different age stages, which expands the participation scope of learners to a considerable extent and makes them willing to take the initiative to participate in inquiry activities. Therefore, the teaching mode of "body percussion" has realized the transformation of teachers' role in the curriculum reform. In traditional teaching, teachers become the implementers of passive teaching and curriculum planning and act as knowledge inculcators. For a long time, music training in basic education is often based on relatively single pitch and rhythm exercises, not including physical training. Listening to music is also a passive activity. The teaching mode of "body percussion" makes teachers' teaching become the activity of creating meaning and generating meaning. It is a kind of musical practice that can eventually help students develop the ability of empathy, as well as other multiple intelligence.

Discussion

Body percussion and its connection with empathy

Body percussion involves movements of specific body parts. These movements are often charged with emotions, which are critical in understanding others and developing empathy. In their studies, Hatfield, Cacioppo, and Rapson (1993) demonstrated that automatic imitating other individuals' expressive behavior could lead to the comprehension and recognition of their emotions. The afferent feedback likely causes such a phenomenon. Aside from understanding others' emotions, Hatfield, Cacioppo, and Rapson also found that imitating behaviors also produce matching emotional experiences. In addition, emotional recognition, which results from automatic imitation of others' behaviors, is the necessary foundation for empathy. When the imitators resonate with others' emotions, they can empathize with others by activating the action representation and associated autonomic responses. Judging from such a mechanism, emotion recognition and resonance couldn't facilitate empathy without action representation and its related bodily responses, shedding light on its

significance. Another study presented a similar argument. Carr et al. (2003) claimed that empathizing with others hinges on activating action representation. They stated that empathy is based on body movements and their associated emotions. Specifically, when individuals mentally simulate the actions that stem from the observed emotions, they can empathize with others via the communication between the networks that control action representation and the limbic system. Both studies have provided reasonable ground and support for using body movements as a classroom instructional tool to help students cultivate empathy.

Conclusion

Body percussion training and empathy exercises. We learned that empathy is the ability to empathize with oneself and that having empathy is critical at the level of social interaction and understanding others. Our research found that stable rhythm, multi-part listening and coordination, timbre composition, and composition creation in body percussion training are effective ways to cultivate empathy. The course starts from the life experience of the students. For example, our heart has a rhythm, and our breathing and speech also have natural rhythms. We will beat the rhythm involuntarily when listening to music and guide students to observe. Even a two-month-old child can distinguish between music and music. rhythm changes. Therefore, in the course practice, we found that the body attaches great importance to the perception of rhythm.

Gaia Vince's *Transcendence: How Humans Evolved Through Fire, Language, Beauty, and Time* mentions that the beauty of music is one of the core elements of human evolution (2019). Body percussion promotes cooperation, coordination, and unity, has a cohesive effect and promotes dark gray identification, cooperation, and empathy. When middle school students form the habit of thinking of body percussion, when they learn music with others, they will enter a state of synchronization with space and rhythm—mirror neurons in the brain kick in when a human is observing or performing the same action. Whether we do the action ourselves or observe the actions of others and react in the same way, mirror neurons work to enhance empathy and make us feel more like others, which happens to be a prerequisite for good social relationships. The body percussion course embodies that education and courses are no longer instrumentalized but an intrinsic value—the value of promoting human spiritual growth. The "richness," "recurrence," "relation," and "rigor" proposed by the post-modern curriculum concept are the standard design ideas for the body percussion curriculum, which is also new thinking on the "Taylor principle," which is different from the instrumental rational character.

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