Bulletin of the *Transilvania* University of Braşov
Series VIII: Performing Arts • Vol. 16(65) No. 2 – 2023
https://doi.org/10.31926/but.pa.2023.16.65.2.9

Musical skills. Communication, diagnosis and developmental problems

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Abstract: *How can the development of imagination, the enrichment of the spiritual and cultural level influence the effective formation of thought processes. Fields of psychology that study the relationship between thought processes and active creative imagination in the light of the development of spirituality have always been relevant. Abilities are considered individual psychological characteristics that distinguish one person from another, mainly those that are related to the success of a certain activity, and giftedness is considered as a qualitatively unique combination of individual psychological abilities, on the basis of which it is possible, success also depends on activity.*

Key-words: *music, communication, diagnosis, development, children*

1. Introduction

The relevance of studying the problem of developing musical skills is primarily determined by the catastrophic decline in the level of musical culture of the young generation. The reasons for this phenomenon are different, but the main one, in our opinion, is the negative influence of the modern musical environment on the child.

Music has a beneficial effect on development and education only if a person is prepared to perceive it, that is, if he has developed the properties and qualities that allow him to experience and understand music and its artistic and aesthetic value. An important role in the perception of artistic material belongs to musical skills. Therefore, their formation and development is becoming one of the main conditions for familiarising with authentic artistic values. Consequently, today in the theory and practice of mass music education, the development of musical skills should become one of the priority areas of pedagogical activity (Nerubaska and Maksymchuk 2020).

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2. Abilities – as a psychological phenomenon

Skills are considered individual psychological characteristics that distinguish one person from another, mainly those that are related to the success of a certain activity (Roberts and Yoon 2022).

Sometimes abilities are considered innate. However, scientific analysis shows that only inclinations can be innate and skills are the result of the development of inclinations. Inclinations are the inborn anatomical and physiological characteristics of the body. These include, first of all, the structural characteristics of the brain, the sensory and motor organs, and the properties of the nervous system with which the body is endowed from birth. Inclinations are only opportunities and prerequisites for the development of skills, but do not guarantee or predetermine the emergence and development of certain skills. No person, regardless of his inclinations, can become a talented mathematician, musician or artist without working hard at his craft (Winterton and Delamare 2006).

2.1. Basic musical skills

In musical pedagogical practice, the following three are usually understood as basic musical skills: musical hearing, sense of rhythm, and musical memory.

2.2. Hearing

Musical hearing in the broadest sense is the ability to distinguish musical sounds, to perceive, experience and understand the content of musical works. Many researchers distinguish between pitch, timbre, dynamic, rhythmic, internal, relative, absolute, polyphonic and architectural hearing. What is their psychological difference and what is the role of each of them in the structure of musical talent? What explains such an abundance of varieties of musical hearing?

Music is a holistic and structural phenomenon. Consisting of melody and harmony, it includes several organized sounds. Therefore, melodic and harmonic hearing respectively are a manifestation of auditory abilities in relation to melody and harmony. All this suggests that the musical ear is a complex, functional, multicomponent system with a complex hierarchical structure.

Special attention of psychologists and musicians is almost constantly drawn to the ability called absolute hearing. We refer to absolute pitch as the ability to recognize and reproduce the pitch of a particular sound without relying on a sound that actually sounded or was perceived immediately before the task. The absolute tone is due to the presence of some innate features, still unknown in the structure

of the auditory centres of the brain. In contrast to absolute hearing, relative musical hearing is the ability to determine the pitch of sounds in relation to a known or actually sounding sound. Besides absolute hearing, all manifestations of pitch hearing are a function of relative hearing. The most important are melodic and harmonic hearing (Levitin and Rogers 2004).

2.3. Musical rhythm

Rhythm is understood as the regular repetition of various homogeneous or interconnected objects or phenomena that create the impression of proportionality, harmony and general harmony. In the process of perceiving, interpreting and composing music, there is a close interaction between tempo, rhythm and meter. Tempo is the basic speed of movement of all metric units, which is determined by the nature and genre of the musical work. It adjusts the psyche to perceive the entire musical work. The rhythm of a musical work is the temporal organization of the musical movement that forms the form of this composition. The rhythm helps with a more detailed perception, which is also stimulated by the meter - with the ratio of reference and equal durations of non-reference, creating an even pulsation of the whole movement (Cameron, and Grahn 2020).

Modal sense, that is, the ability to emotionally distinguish the modal functions of the sounds of a melody or to feel the emotional expressiveness of pitch movement.

This ability can be called otherwise, the emotional or perceptive component of musical hearing. The sense of modal forms an inextricable unity with the sense of musical pitch, that is, pitch separated from timbre. The modal sense is directly manifested in the perception of the melody, in its recognition, in the sensitivity to the accuracy of the intonation. It, together with the sense of rhythm, forms the basis of emotional receptivity to music (Kelmer, D. 2001).

Musical-rhythmic feeling, that is, the ability to actively experience music, feel the emotional expressiveness of a musical rhythm and accurately reproduce it. This feeling underlies those manifestations of musicality that are associated with the perception and reproduction of the temporary refrain of a musical movement. Along with modal feeling, it forms the basis of emotional receptivity to music (Fernández-Sotos et al. 2016).

Psychomotor - the most general form of psychological reflection, which provides sensory knowledge and a person's connection with the outside world through movement. The formation of psychomotor skills is carried out in musical activity in the process of working on skills and abilities (Kafol et al. 2014).

2.4. Musical memory

Memory is a form of psychic reflection that consists in the accumulation, consolidation, preservation and subsequent reproduction of an individual's experience.

Our memory is an entity that functions through the interaction of five basic processes: *memorization, preservation, reproduction*, *forgetting and retrieval*. A distinction is made between the involuntary and voluntary functioning of memory processes.

Musical memory is a complex process of transformation of the sensory and perceptive material received by the senses. It is actively involved in all cognitive processes and in all manifestations of the psyche: attention, sensation, perception, representation, thinking and is included in such complex personality structures as temperament, character and abilities (Arndt et al. 2023).

Based on the time and nature of mnemonic processes in musical memory, temporary memory systems are distinguished: *ultrashort (instant) memory* is about short, intermittent and unexpected sound impressions, mainly sound cues - pitch, timbre; *short-term memory* is characterized by a large volume of music that sounds in the mind, which ensures the memorization not of individual features of sounds, but of blocks that have semantic meaning - motifs, phrases, melodies; *working memory* – uses both material from immediate perception and short-term memory as well as previously learned material. Its main content is the service of the directly performed musical activity - imagined or real, performance or composition; *motor memory* is manifested in the fact that the performed movements and their complexes are well remembered. The importance of motor memory is enormous. The signs of a good motor memory are virtuosity, dexterity, ease in mastering technical difficulties, mastery. It is of great importance to the performer. Makes it easier to memorize and master a piece of music; *figurative memory* - vivid and stable musical and auditory perceptions are characteristic of the owner of figurative memory. Good figurative memory, auditory - facilitates the formation of internal hearing, visual - easily evokes visual images of the musical text along with the sound; *emotional memory* is the memory for experienced feelings and emotions. It is the basis of modal feeling and musicality; *verbal-logical memory* - is manifested by the facilitated memorization of generalizing and significant complexes - the form and structure of musical works, performance analysis and execution plan.

The complexity of the study of musicality has offered various approaches to its interpretation. The early manifestation of musicality received positive confirmation in later musical activities (Persson, Roland 2011).

The history of child prodigies is rich in opposite facts. They appeared very early, but stopped in their development and therefore did not justify the forecast made about them. As studies on the biographies of child prodigies have shown, the negative aspects of this phenomenon appear in cases where the following factors coincide with their growth: excessive exploitation of the child's early achievements and frequent public appearances, which are associated with disrupting the child's routine and exhausting the nervous system; addiction and emotional boredom from a monotonous repertoire and mechanical training; lack of systematic studies and adequate general and musical development, generated by adults' passion for early successes that were achieved without much difficulty; (William Forde Thompson and Kirk N. Olsen, 2020)

3. Diagnosing musical abilities

The problem of diagnosing musical abilities is one of the most pressing in music pedagogy and psychology, as it is related to the tasks of professional and individual selection. The second direction is related to it - the study of individual cases of brilliant musical talent. However, the diagnosis of musical abilities can serve wider scientific purposes, become the basis for studying the nature and ontogenesis of musicality.

One of the fundamental principles in psychology has become the position regarding the main role of learning in mental development. Skills are not only developed during the learning process, but also formed in it. Skills are a process, a training in life. In this sense, the diagnosis of abilities should be a process consisting of interconnected cognitive stages.

Music teachers, trying to overcome these difficulties, create their own original methods of diagnosing musical abilities (Ribeiro, et al. 2020).

Diagnostic studies with children, along with experimental development of musical skills, constituted the most important part of this study. The purpose of these classes was to determine the levels of development of general musical skills.

The study involved 60 children in two groups (two primary level classes). The diagnostic methods were purely musical and corresponded to the age and level of musical training of the children, making it possible to assess the level of development of the studied skill. The diagnostic classes were structured as either a game or a short lesson using game techniques. In the two classes, the emotional reaction to the music and the personal manifestations of the children were recorded. The diagnostic sessions were: identifying the level of children's emotional reaction to music. How they behave with musical instruments that are new to them, how they react to music played live on the piano and in recordings (Chopin -

Spring Waltz); identifying the level of development of dynamic hearing; identifying the development level of timbre hearing in terms of distinguishing the sound of children's musical instruments; determining the level of development of the sense of the melodic component of musical hearing; determining the level of development of the sense of musical rhythm; determining the level of musical thinking, children determined the genre characteristics of musical works: waltz, march, minuet; determining the level of development of the creative component of musical thinking – composing and accompanying a song; musical memory check

The obtained results were individual indicators of the levels of musical skill formation. During the first activity, most children reacted actively to the new situation. They curiously studied the instruments that were new to them and tried to play. Among the subjects were children who completely refused to study.

The analysis of the results of the second activity showed that the dynamic component of musical hearing in children reaches a fairly high level. The children found it possible to reproduce not only the polar gradations of dynamics respectively forte - pianissimo, but also gradual transitions forte- mezzoforte - mezzopiano -piano and vice versa. The analysis of timbre hearing activity showed that children successfully cope with distinguishing the timbres of musical instruments belonging to different groups. Regarding the timbres of the instruments belonging to the same group, the children practically did not distinguish between them. There were cases when children chose those instruments that they knew before or that they liked more.

An indicator of the level of development of the melodic component of the musical ear was the degree of clarity of the intonation of the melody with the voice. The study showed that half of the children in the preparatory class in the existing conditions of music education are at a low level of development of melodic hearing, because if a child with accompaniment sang the whole song correctly, without accompaniment he correctly reproduced only fragments or even totally lost the melodic line.

For the activity of determining the level of development of the sense of the melodic component of musical hearing, each child was assigned to one of the three levels of development of the sense of rhythm: forte, mezzoforte-mezzopiano , piano. Strengths - 11 children who managed to reproduce the rhythmic pattern of the passage. Mezzoforte-mezzopiano 20 of the subjects reproduced only the metric pulsation. 19 children clapped their hands at random, outside of the music.

The following activity, the intonation-auditory experience of many children is large enough to determine the mood of a musical work. The productive component of musical thinking, as it emerges from the analysis of the seventh activity, is in the initial stage in the development of the majority of children.

The interpretation of the results of the last activity gives us reason to believe that at this age, children can reproduce the melodic and rhythmic structure of a musical passage from memory. It is true that some of them performed their own melodic lines and ornaments that had nothing in common with the original. Some refused to complete the task altogether remembering the melody line saying they forgot.

So, from this experiment we saw that the simplest components of musical ability turned out to be relatively formed in children at this rather early stage of ontogenesis: emotional receptivity to music, dynamic hearing and timbre, those aspects of the sense of rhythm that are associated. with the reproduction of tempo and metrical pulsation, the reproductive part of thought and recognition, which is part of musical memory. As for the more complex components of musical skills, they represent later formations.

3.1. Children's musical talent

In general, a child's giftedness means a greater receptivity to learning and more pronounced creative manifestations than other children. When defining the concept of talent, its innate nature is emphasized. Very little attention has been paid to the psychological study of gifted children and the development of psychological and pedagogical problems in the training and education of gifted children.

The manifestation of musical talent, the relationship between ability and giftedness, is unique, individual and highly dependent on age, both in form and content. In a certain sense, we can say that every age has its talent.

Children's creativity lacks originality in form and composition, in order and integrity. With the exception of music, it is generally impossible to talk about giftedness in childhood or early adolescence. The concept of giftedness is inextricably linked to the personal, spiritual growth of a person, and therefore the period between thirteen and twenty years, when personal development is of the greatest importance for the manifestation of giftedness (Pfeiffer, Steven I., 2008).

We highlight three criteria for assessing musical skills and talent: *the cultural-historical criterion* - its essence lies in the fact that in each culture and in each historical era there are certain musical prescriptions for each specific age of development of a child, teenager and even adult. The cultural-historical criterion is very important when it comes to the psychological analysis of the talent structure of famous people who lived in previous eras. For example, we must be cautious in drawing conclusions about the linguistic talent of a child who, at the age of six, spoke, wrote and read several languages, if this child was raised in a wealthy noble family in the middle of the last century. The cultural-historical criterion is relative. It

allows comparison of general conditions of identification, but not of levels of musical ability and endowment; *age criterion*: if a child or teenager can easily and successfully do something that his peers cannot do, he is most often called gifted. Living conditions change, education systems develop, training programs improve, the average level of opportunity of the new generation becomes higher than that of the previous one. Complex works, which a century ago were accessible only to individual performers, today are performed with relative success by students. All musically gifted people have something in common, and those who lived before act as the ideal norm for those of today; *criterion - absolute* - for musicians, true talent is revealed in the originality, freedom and productivity of musical self-expression. Outstanding musical ability is usually revealed before the age of seven.

Gifted children are able to focus with extraordinary intensity on musical activities to the exclusion of all others, including communication with others. Musically gifted children are distinguished from the beginning by their very quick memorization of music.

Gifted children master motor techniques relatively easily, often on several instruments at the same time. From the age of four or five, they tend to improvise on an instrument. Soon after systematic study, they try to compose and grade their compositions. Researchers note that by the age of nine or ten, gifted children begin to feel acutely the difference between beautiful and pleasant; their aesthetic sense acquires early artistic maturity, which determines the further development of musical talent (Ohio Department of Education, 2004).

The ability to intonate accurately, which precedes the appearance of speech, is sometimes found in children from musical families who do not have outstanding musical ability. Young age demonstrates the greatest sensitivity and availability for musical development. Biographical data from over a thousand professional musicians show a statistically significant relationship between the age at which one began learning to play a musical instrument and possession of absolute pitch. Of those who began training before the age of four, 95 percent had absolute pitch, while among those who began training between the ages of twelve and fourteen, only 5 percent did.

As you can see, musical abilities in gifted children appear 2-4 years earlier than in children with good musical abilities and are of a fast, explosive nature. In this sense, the question arises about the significance of the musical environment and auditory experience in early childhood (Deutsch, Diana, 2013).

4. Conclusion

The problem of abilities has always been and remains acute and of vital importance: every individual is constantly faced with the need to satisfy vital needs and at the same time with the practical possibility of satisfying them; dependence on living conditions, availability of skills and abilities is reflected.

You shouldn't judge all musical ability by first impressions. In my opinion, a child may not show his full potential right away. All the entrance tests that are carried out when recruiting students to music schools only give an approximate picture of the children's abilities. Both lack of preparation and enthusiasm play a role here. Some 5-6 year olds are very shy. In general, many reasons can be found. Therefore, it is necessary that every child be given the opportunity to learn, during which the picture will become clear. And here the responsibility rests with the teacher and the child's parents. Developing skills requires hard work and patience from parents and teachers.

The identification of existing assumed abilities is possible only when their development can already be diagnosed, i.e. the level reached is already visible. Knowledge and skills of the child's already manifested strengths are important not only for analysis. They make it possible to determine prospects for further skill development. Taking into account the demonstrated abilities of the child is necessary not only for their development, but also to direct their talent in the right direction.

The study of advanced universal pedagogical experience is extremely important for the formation of a special type of creative thinking of people, on which the revival of spiritual values will largely depend in the 21st century.

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