LULLABIES FOR THE DEVELOPMENT OF MUSICAL ABILITIES OF CHILDREN FROM THE EARLIEST AGE

Krasimira Fileva-Ruseva

Academy of Music, Dance and Fine Arts "Prof. Asen Diamandiev" - Plovdiv, Bulgaria, krassyfilleva@mail.bg

Abstract: In this article I will introduce my new children's book "Lullabies for Children" - illustrated and including references to recordings of the music. The melodies are created in accordance with the available knowledge in music psychology and music therapy for music with a relaxing effect, they are also pursuant with modern methods of developing musical abilities. Such a book is necessary, on the one hand, for parents who, already in the first days of a little man's life, are faced with the problem of building a certain regime of wakefulness and sleep for him. On the other hand, listening to the melodies, the pitch hearing, metrorhythmic sense, dynamic and timbre hearing begin to be stimulated in the child from the earliest age. Due to the purposefully created chants and instrumental accompaniment, the child quickly becomes receptive to smaller and smaller differences in the pitch of the sounding tones, to a variety of metrical pulsations, to varying strength of sound, to characteristic rhythmic groups, timbres. Listening to melodies accompanied by various musical instruments, which is an active musical activity for the earliest childhood, accelerates the development of musical abilities, and according to numerous studies, musical activities develop not only musical intelligence, but also intelligence in general. The aim of the study is to prove the effectiveness of lullabies on the development of the child's musical and general intelligence. The main method of the study is the theoretical analysis of melodies - intervals, scale structures, metrorhythmic organization, timbre and dynamic characteristics. References to research on perceptual abilities, specifically the perception and differentiation of sounds in the earliest childhood, were also used as methods. Addressing parents at the beginning of the book, I describe various ways in which it can be used to diversify everyday life and build a creative attitude in the child. Each of the illustrations, which I also composed myself, based on photo collages, is related to the title and the character of the melody it depicts. If the parents wish, they can create stories based on the images, and the child, when he is able, can also participate in composing the story. The collective creative activity of parents and child not only brings joy, but also develops the inventive abilities and creative thinking of the little person. The book also contains the note text of the melodies. This is useful for parents who are musicians, and subsequently, if interested, the child can also try to play them. In this sense, my main recommendation to parents is to take full advantage of the diverse possibilities that the book provides. The first listener of the lullabies and at the same time the owner of the first copy of the book is my grandson. He is now 5 months old but has been listening to the chants since six days after birth. So far, the melodies are successfully lulling him to sleep, he also looks at the printed illustrations. How he will develop his musical abilities, whether he will use them in the future, as a professional musician, whether it will be necessary to write a second book of illustrated melodies that will diversify the child's free time, serve for entertainment and education, we have yet to find out.

Keywords: music, children's lullabies, musical abilities, earliest childhood education, development of musical abilities, creative thinking

1. INTRODUCTION

In this article I will introduce my new children's book "Lullabies for Children" - illustrated and including references to recordings of the music. The book includes recorded performances of all the chants accompanied by a variety of musical instruments, note scores of the melodies and accompaniment with marked the set of musical instruments performing the miniature, as well as beautiful color illustrations, emotionally resonant of the pieces. Such a book is necessary, on the one hand, for parents who, from the first days of the little man, are faced with the problem of building a certain mode of wakefulness and sleep for him. On the other hand, since it has been proven that the baby already in the embryonic age has sensations of timbre and pitch of sounds, and also perceives the mother's pulse, the plays are created in such a way as to stimulate the pitch and timbre hearing, and also dynamic hearing and metrorhythmic sense. These stimuli promote receptivity to finer pitch differences, various metrical pulsation, varied loudness, specific rhythmic groups, timbres. Regular listening to accompanied melodies, which for the earliest childhood is an intensive musical activity, accelerates the development of musical abilities, and according to numerous studies, intensive musical activities develop not only musical intelligence, but also intelligence in general.

2. MATERIALS AND METHODS

The aim of the study is to prove the effectiveness of lullabies on the development of the child's musical and general

intelligence. The main method of the study is a theoretical analysis of the melodies - interval construction, mode structures, metrorhythmic organization, timbre and dynamic characteristics. References to studies of perceptual abilities, specifically the perception and distinction of sounds in early childhood, and also references to studies of the influence of systematic music lessons on the development of intelligence are also applied as methods.

"Material", i.e. object of expected impact is children's musical abilities, object of study is also the effectiveness of created relaxing music.

3. RESULTS

In terms of developing musical abilities

Musical abilities are modal sense (the ability to identify, perform and emotionally react to a certain modal structure. Modal sense includes sound pitch hearing, dynamic hearing, timbral hearing), metrorhythmic sense (the ability to identify, perform and emotionally react to a series of tones of different durations organized in strong and weak metrical pulsations and sounded at a certain tempo) and musical auditory notions (the memory images of perceived tonal sequences organized by mode structures and metrorhythm).

Modern methods of developing musical abilities are based on the use of various modally and metrorhythmically organized melodies. At first they were composed of repetitions and combinations of melodic intervals with a tonal volume of less than an octave and repeating (or similar) rhythmic groups. Listeners memorize them as benchmarks to recognize them, distinguish them from each other, and identify them in other melodies. The use of these benchmarks subsequently helps identify both intervals wider than an octave and a more varied rhythm. Composing attractive accompanied chants through combinations of repeated melodic intervals prompts the perce iver to remember not only the melody, but also its constituent melodic movements and inherent rhythmic groups. A melodic graph of this type has, for example, chant No2. Since the perception of melodies rhythmically organized only by complementary rhythm would delay the development of children's metrorhythmic sense, against the background of complementary rhythm, in the construction of the solo voice, common rhythmic groups are also involved. Combinations between rhythmic groups of the melody and the evenly pulsing beat are also used, which usually make it difficult for an inexperienced performer, but hearing them often can make it easier for a child to perceive and reproduce them. Because the pieces have descriptive titles, some of them feature rhythmic groups and specific timbres that characterize the "characters" of the melody, which incites the creation of musical associations and provokes emotional reactivity.

Since particularly successful Bulgarian methods for developing musical abilities (Mincheva, P., 2006) are based on our folk music, and also because I believe that knowledge of native musical folklore is comparable to knowledge of the mother's language, several lullabies include intonations from Bulgarian folk songs. Medieval modes with their characteristic sound are also suitable to participate in melodic structures used to develop musical abilities. That is why often found in Bulgarian folk music medieval modes, with delicately emphasized characteristic intervals, are used in lullabies. In the Phrygian mode are melodies No. 8 and 25, in Doric - chants No. 16 and 18. Variants of the minor mode were also used - piece No. 3 is in natural minor, chant No. 24 - in harmonic minor (due to the tension that the characteristic interval - the augmented second between degrees VI and VII brings, this melodic interval is avoided), and in melody No. 23 major and minor arpeggios alternate. All this, in turn, expands the auditory experience, enriches the child's musical-auditory notions and emotional responses.

To stimulate the development of timbre hearing, the chants are accompanied by a variety of musical instruments. The timbres that have a toning effect are used in the book rarely and discreetly - with a quiet sonority, such as the timpani in piece No. 10.

Stimulating the dynamic hearing, and in consonance with discovered by John Sloboda (Sloboda, J. A. (1991a, 1991b) close connection between the varying in strengt speech intonations and musical means of expression, in the plays it is payed particular attention to details in the dynamic characteristics of phrases and the maximally permissible for lullabies variety of dynamic saturations.

In terms of the relaxing effect

The most widely used musical expressive means in the plays, favoring calming and falling asleep, is the uniform pulsation of the same tonal durations, which can be present in one particular voice, or can be obtained through combination of the voices - a complementary rhythm, i.e. rhythmic complement between individual voices. In music therapy, this approach is known as constructive rhythm. In Miniature No. 20 the even pulsation in fourths, broken only at the very end, is composed of chords performed on the guitar, in Piece No. 14 the constant pulsation in halves results from the rhythmic complement between the four trumpets and is emphasized by the discreet use of timpani. In Melody No. 10, timbrally designed for string quartet, the complementary rhythm of fourths is mainly due to the "dialogue" of violin and cello. Referring to research, L. Georgiev (Georgiev, L. S., 2005, p. 37) claims that a

recorded pulse of a mother in a calm state and sounds in the middle register (the usual register of the mother's voice) have a calming effect on newborns. This is another argument in favor of composing the pieces using complementary rhythm and a relatively small diapason of melodies in the middle register and performing them at a leisurely tempo. Because according to research by Hevner (1936) and also by Marco Costa, M. Fine and Ricci Bitti (Costa, M., Fine, P. & Ricci Bitti, P. E., 2004) the major mode is defined as "cheerful" (the very Latin name of the major - "dur" -"hard", directs the associations to some activity), and the cheerful mood is tonic, among the melodies created through the classical major-minor system, those in the minor mode prevail. An exception is chant No. 21, because it is inadmissible for musical abilities to develop incomplete, i.e. without knowing the major mode. According to Costa, Fine, & Ricci Bitti, cited above (Costa, M., Fine, P. & Ricci Bitti, P. E., 2004), minor seconds, augmented fourths, and intervals greater than an octave are perceived as "energetic," and perfect unisons (repetitions of the same tone) are associated with a notion of strength, these intervals, although occurring (so as not to remain unknown to the child), are not predominant in lullabies. In some of the pieces (No. 6 - figure 1, and No. 7), in order to prevent the frequent appearance of minor seconds and to encourage the use of perfect fourths (cited in the same study as "melodious", i.e. pleasant, creating a sense of comfort), pentatonic is used. Apart from the fact that the pentatonic with frequent use of the melodic interval perfect fourth is characteristic of the Rhodope folklore region (I mentioned above that one of my aims is the use of sound series and intonations inherent in Bulgarian folk music), the absence of semitones, which is why the tension-carrying degrees are excluded, makes this sound line particularly suitable for creating lullabies.

In terms of providing conditions for creativity

The various illustrations – to each miniature they are on the right (odd) page – are thematic, emotionally resonant to the titles of the pieces and the character of the music. Where possible, elements of the illustration on the right page have been carried over to the left page, below the note score of the respective piece (figure 1).



Figure 1: Note score and illustration for piece #6 "The Night's Tale of the Butterflies"

Based on the images, parents can compose intriguing stories using their imagination, and for older children - with their participation. The characters in the images are positioned and combined in such a way, as to allow for an unlimited number of interpretations (figure 2).

Figure 2 - Illustrations for the pieces #25 "Polar Night", #14 "Lords of the Savannah", #19 "A Dream in Pink"



The joint creativity of parents and children will strengthen their emotional connection, create positive memories. Collective creative activity contributes to the development of the child's fantasy, his ingenuity, his ability to express himself, to convey content in an understandable and fascinating way. There is also the exciting opportunity for parents to direct the course of action in the story being composed. Thus, having fun, parents and child create their own world - the world of their joint dreams. Creating a fairy tale with children's participation provides great opportunities for parents to get to know their child, to peek into his emotional world, which he is otherwise not always inclined to show. The fairy tale, if the course of the action is skillfully guided, also allows to structure the values of the little man, to cultivate in him qualities such as empathy, the ability to put himself in the other person's place, to understand the characters and to be reincarnated in them. The creation of the fairy tale can begin with the selection of the main characters - usually in the illustrations they are located in the foreground, they often occupy a central place in the picture, they are in focus, they are lit more brightly (naturally, you can choose as the main character a sympathetic small one "lurking" in the corner). Characters can be not only people, but also flowers, animals to be "endowed" with various characteristic features of destinies. Illustrations can show (or imply) the setting in which the action takes place, for example a palace, a forest, a savannah, a jungle, a meadow with fantastic flowers, a sea with a moonlit path. Some illustrations contain a reference to the history as well (pieces N 3 and 15). Acquainting the little man with a specific fragment of the rich history of the world helps to build the culture of the person growing up under parental care. Other pictures can be used to tell about the depicted flowers, insects, birds, mammals. Creating a fairy tale based on an illustration does not have to be completed in one day - by composing the individual parts, a whole, fascinating and beloved children's series can be created. Some of the more exciting events can be 'acted out', or even just individual character statements, mimicking their expected 'voice' and behavior. This provokes children's artistic and improvisational abilities. The child can be offered to think and tell what he would draw to a certain melody (and if he has the opportunity and desire - to draw it as well). This is an additional stimulus for the development of his creativity, his emotional intelligence, as well as for insight into the character of sounding music - a small but important step towards understanding the complex and beautiful world of art.

For musician parents on the notated version of the songs, visible on the even (left) pages is also indicated the musical instruments on which each miniature was recorded. Older children can also be introduced to the timbres – voices and instruments on which the melody and accompaniment are performed (marked to the left of the accolades of each note score). Unfortunately, in order to create an atmosphere of calm in the pieces, some instruments, especially percussion, cannot be used or, if they are included, they are prescribed to sound very quiet. Children who wish, are interested and are actively engaged in music, can "find" the familiar melodies on the instrument they play. Melodies have no lyrics attached. This is done on purpose to allow the parent/user to sing along to the melody, singing (or even just speaking rhythmically, which is even more convenient) the name of the child who will be

listening to the music, and also compose their own text. Adapting your own text to the melodies can be done according to the syllables of the child's name and the rhythm of the melody.

4. DISCUSSIONS

Using different methods, scientists come to the conclusion that active contact with music has a beneficial effect on the development of intelligence. For example:

- On the basis of a theoretical analysis of the complex mental operations carried out during the perception and performance of music, as well as on a huge number of observations on the development of the professional abilities of student musicians, the leading Bulgarian specialist in music theory, solfege and methodology of musical education Penka Mincheva (Mincheva, P., 1994b) substantiates her statement about the benefit of regular music activities on the development of intelligence.
- Schellenberg, E. G. (Schellenberg, E. G., 2006) experimentally proves a connection between the duration of music lessons in 6 11 year old children and their IQ test results.
- Criscuolo, A., L. Bonetti, T. Sarkämö, T. Klüchko and M. Brattico (Criscuolo, A., Bonetti, L., Särkämö, T., Kliuchko, M. and Brattico, E., 2019) prove, that older professional musicians perform better on cognitive and attentional tasks than non-musicians. The conclusions of these and other scientists show the benefit of exposure to music on the development of intelligence.

Examining the various "sensitive periods" (Maria Montessori's term), Lyubomir Georgiev expresses the opinion that after birth, children are particularly receptive to timbre and pitch (Georgiev, L. S., 2005, p.22). Therefore, the perception of melodies accompanied by different sound sources (timbres) and created in accordance with current methods for the full development of musical abilities are a suitable means of influencing the development of musical hearing in the earliest childhood.

Collections of children's songs have been created by many composers. Such is, for example, the collection "3, 5, 7" by Cyril Tsibulka, where experiences and important events of the child's life are described. The songs are vivid, cheerful, invigorating. A huge number of works have also been created for performance by children who are learning a musical instrument.

Despite the many songs and instrumental works composed for children, a book of lullabies:

- created according to the available knowledge about the means of musical expression with a relaxing effect;
 - adapted to modern trends in solfège education;
 - aimed at the development of all musical abilities;
- provided rich opportunities for composing fairy tales on music and illustrations, for dramatization, for joint creativity of parents and children;
- i.e. designed to ensure versatile creative and aesthetic development of the child, has not been created before.

5. CONCLUSION

The first listener of the lullabies and at the same time the owner of the first copy of the book is my grandson. So far, the melodies are successfully lulling him to sleep, he also looks with interest at the printed illustrations. How he will develop his musical abilities, whether he will use them in the future, as a professional musician, whether he will ask me to write a second book of illustrated melodies, remains to be seen.

REFERENCES

- Criscuolo, A., Bonetti, L., Särkämö, T., Kliuchko, M., & Brattico, E. (2019). On the Association Between Musical Training, Intelligence and Executive Functions in Adulthood. *Front. Psychol.* 10:1704.
- Mincheva, P. (2015a). Teaching Creative Abilities of Children in Music Education in the General School. *International Journal of Literature and Arts. Special Issue: Musical Theory, Psychology, Pedagogy and Performing*, Vol. 3, No. 5-1, October, pp. 31-36.
- Sloboda, J. A. (1991a). Music Strusture and Emotional Response: Some Empirical Findings. *Psychology of Music*, 19, p.110-120.
- Sloboda, J. A. (1991b). Empirical Studies of Emotional Response to Music. In: M.R. Jones (ed.), *Cognitive Bases of Musical Communication*. NY: American Psych. Association.
- Schellenberg, E. G. (2006). Long-term positive associations between music lessons and IQ. *Journal of Educational Psychology*, 98(2), 457–468.
- Гарднър, Х. (2004). Нова теория за множествените интелигентности на 21. век. София
- Георгиев, Л. С. (2005). Психология на развитието и възрастова психология. София

Генрихс И. (1978) Музыкальный слух и его развитие. Москва,

Манолова, В. (1989) Музикална психология – христоматия. С.

Минчева, П. (2006). етодика на обучението по солфеж. Пловдив, ИНМ

Минчева, Пенка. (1994 а) Музикалното възпитание в общообразователното училище. София,

Минчева, П. (1994 б) Музиката и интелектът. София,

Рачев, Н. (2005). Изследване на музикалната експресивност (нива на психологически анализ). В:

Годишник на Софийския университет "Св. Климент Охридски" Философски факултет, Книга – Психология, Том 98. София, изд. на Софийския университет "Св. Климент Охридски"

Савшинский, С. (1964). Работа пианиста над музыкальным произведением. Москва,

Семенов, В. Е. (1988). Социальная психология искусства. Ленинград, с. 30