

PREKONANIE PRÍZNAKOV MOTORICKEJ DYSPRAXIE POMOCOU MUZIKOTERAPIE

OVERCOMING THE SYMPTOMS OF MOTOR DYSPRAXIA BY MEANS OF MUSIC THERAPY

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Abstract

Cieľom článku je poukázať na výsledky pilotnej štúdie využitia prvkov muzikoterapie v procese korekcie všeobecnej a jemnej motoriky u detí s dyspraxiou. Súbor cvičení a hier viedol s dieťaťom učiteľ za sprievodu hudby. Predbežné výsledky ukazujú pozitívnu dynamiku. Došlo k zlepšeniu hrubej a jemnej motoriky, reči a emocionálneho stavu dieťaťa. Hudba pomáha meniť náladu dieťaťa, odpútava pozornosť od frustrácie a znižuje úzkosť. Z toho vyplýva, že muzikoterapiu možno úspešne využiť v procese socializácie detí so špeciálnymi výchovno-vzdelávacími potrebami.

Kľúčové slová

Deti so špeciálnymi vzdelávacími potrebami. Motorická dyspraxia. Jemná motorika. Reč. Korekcia. Muzikoterapia. Socializácia.

Abstract

The purpose of the article is to highlight the results of a pilot study of the use of music therapy elements in the process of correction of general and fine motor skills in children with dyspraxia. A set of exercises and games was conducted with the child by the teacher accompanied by music. Preliminary results show positive dynamics. There is an improvement in gross and fine motor skills, speech, and the child's emotional state. Music helps to change the child's mood, distracts from frustration, and reduces anxiety. This shows that music therapy can be successfully used in the process of socialization of children with special educational needs.

Key words

Children with special educational needs. Motor dyspraxia. Fine motor skills. Speech, correction. Music therapy. Socialization.

Introduction

Preschool children with dyspraxia attend preschools with inclusive education. Their socialization requires additional attention from the teaching staff. Dyspraxia is both a diagnosis and a condition of unknown origin. The diagnosis is made by pediatric neurologists. Causes of the disease are only speculative. Scientists and practitioners of medicine, psychology and pedagogy say that dyspraxia is characterized by problems with fine and gross motor skills, motor planning and coordination, speech and language. Preschoolers with dyspraxia feel insecure among their peers, are often nervous and depressed, because they are not able to act like others due to their abilities. This category can undoubtedly be classified as having special educational needs. Since such children are in an inclusive educational environment, educators, teachers, speech therapists, and psychologists make an individual developmental trajectory for them. These preschoolers require a special approach and additional forms and methods of pedagogical influence. According to our beliefs and our own experience, music therapy is one of the most effective forms of development of a child with dyspraxia. Music therapy contributes to treatment, development, and correction.

The essence of music therapy, its therapeutic and developmental functions

The therapeutic effect of music has been known for a long time. This information has been preserved in the writings of Egypt, China, and India. The melodiousness and charm of music has always appealed to the vast majority of people. But its influence on the human psyche was discussed much later (Draganchuk, 2003). In the nineteenth century, experimental studies began, and in the twentieth century, scientists revealed the preventive, therapeutic and health-improving properties of musical art, namely: the healing properties of sounds were revealed, the relationship between the frequency of sound vibrations of music and human physiological processes was established. Therefore, music is considered to be an art with a therapeutic effect. Music varies by genre and people are not alike. Therefore, the perception of the sounds of a melody is individual. The Modern Ukrainian Encyclopedic Dictionary of Art Therapy (2017) defines the main concepts. Music therapy (from the Greek muzike - literally, the art of muses and the

Greek therapeia - healing, treatment) is a type of therapy where music, singing, and sounds are the means of healing. Vocal therapy (from the Latin vox - voice; Greek therapeia - healing, treatment) is a type of sound therapy that involves increasing the reserve capacity of the human body and correcting its impaired functions through active vocal training. Sound therapy is a type of music therapy where sound is used as a means of healing to enhance the resonant frequency of a particular organ or system of the physical, emotional, mental, or spiritual body. As you can see, all generic therapies have healing properties.

There is a well-known phenomenon in the world called the Mozart effect. It is believed that his music has a strong influence on the human psyche. Researchers of the influence of music on the human mental world (Bekhterev, Cigarelli, Don, Koenig, etc.) argue that music can be used for therapeutic purposes. The world-famous rehabilitation physician S. Shushardzhan has developed, in our opinion, a successful scheme of music's therapeutic effect on the physical and emotional state of a person (see Fig. 1).

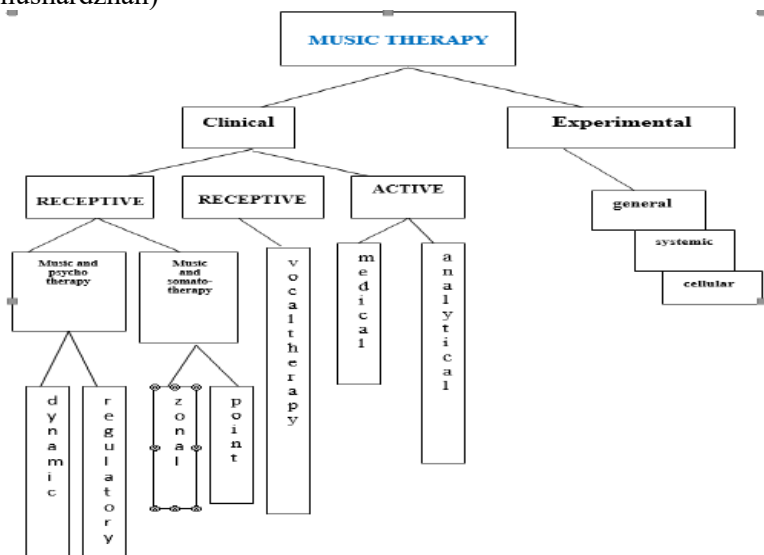
The author divides all music therapy into clinical and experimental. The purpose of clinical music therapy is to use the developed methods and technologies for therapeutic and preventive purposes. The following areas are distinguished:

- receptive (passive) when the patient receives a music therapy session using a certain technology without taking an active part in it (areas: music psychotherapy, music somatotherapy) (Voitko, 2016);
- active - involves the patient in the process of music-making and has two directions: therapeutic and pedagogical - the use of music to work with children who are behind in development, as well as children with hearing and speech impairments; analytical music therapy - for psychosis, neuroses and functional imbalances;
- integrative vocal therapy, which involves the correction of both individual psychophysiological disorders and increasing the reserve potential of the whole organism.

Experimental music therapy, which includes general, systemic, and cellular substructures, studies the holistic reactions of the body, namely: psychophysiological, biochemical, biophysical, etc., the reactions of individual physiological systems, as well as the reactions

of the human body at the cellular level. One of the main goals of music therapy sessions with children with special needs, in particular, with dyspraxia, is the socialization of the child, as musical co-creation works well on various communication skills, normalizes the emotional state, eliminates increased shyness, and develops endurance and self-control. Pedagogical practice (Zhavinina, 2003; Shanskikh, 2003; Shabutin, 2008; Kuzminska, 2010) shows that music therapy classes can be conducted individually or with a group. The form of classes depends on the category of a child with special educational needs and the level of support required.

Fig. 1 Classification of music therapy effects on human health (by Shushardzhan)



The main problems that parents of children with dyspraxia address to specialists are the following

- impaired coordination of movements (gross and fine motor skills)
- impaired speech processes;
- problems with dressing and buttoning;
- problems with putting on shoes and tying shoelaces;
- aggressive and chaotic behavior;
- attacks of anger, irritability and hysteria;

- withdrawnness in communication;
- difficulties in social adaptation;
- problems in joint activities;
- withdrawal, immersion “in oneself”;
- manifestation of anxiety, fear;
- emotional instability;
- learning disabilities.

Music therapy sessions involve the use of music material of various genres and styles: folk music, masterpieces of classical art, nature sounds, relaxation music, etc. The music was selected (A. Gelbak, 2019) in accordance with the focus of correctional and developmental work in the following areas: calming; relaxation; deep relaxation; stimulation of an optimistic positive mood; regulation of the emotional sphere; Stimulation of emotional and imaginative representations; activation of creative abilities; stimulation of the intellectual sphere; increased activity; stimulation of speech activity; laying the foundations of national consciousness.

The organization of music therapy classes imposes a double burden on the teacher. On the one hand, it is a correctional and developmental lesson, as positive changes in the child's development are expected, and on the other hand, it is a creative one, as the whole arsenal of forms, methods and means of pedagogical influence should be used to unlock the child's potential.

Musicologists (A. Gelbak, 2019; S. Shushardzhan, 1998; Y. Beketova, 2005, etc.) recommend using the following classical music pieces in preventive, health-preserving and correctional work: *For morning awakening*: Ravel - Suite “Daphnis and Chloe”, first part - “Dawn”; Debussy - Symphonic poem “The Sea”, first part; Grieg “Morning”; Williams “London Symphony”.

To reduce aggression, listen to dramatic music with a transition to soothing (slow) music: Bach's Chromatic Fantasy and Fugue; Stravinsky's The Rite of Spring; Richard Strauss's A Private Battle.

To overcome depression, feelings of loneliness and fatigue: Tchaikovsky's first symphony “Winter's Delirium”, first movement; Brahms “Tragic Overture”, “Requiem”; Gershwin “Clara's Lullaby” from the opera “Porgy and Bess”.

Musical pieces to create a cheerful mood, a sense of joy: Beethoven's “Eighth Symphony”; Rossini - overtures to the operas “The Silk

Staircase” and “The Thief Magpie”; Handel - “Allegro” music on water.

Musical works to relieve disappointment and frustration: Handel's oratorio Judas Maccabee; Schubert's Fourth Tragic Symphony.

To reduce the feeling of fear: Schoenberg - the opera “Waiting”.

To boost energy: Onneger's Pacific 231; Schumann's Toccata; B. Bartók's Allegro Barbaro; Mendelssohn's Violin Concerto Finale; Schumann's Manfred Overture.

Practical part of the study. Results.

The purpose is to present the use of music therapy forms with children with dyspraxia, their importance and effectiveness. The main efforts of correctional work should be directed to the development of general and fine motor skills, visual praxis, rhythmicity and speech.

General information about the child:

Characteristics of the child:

- Sofia, 7 years old. She studies in the 2nd grade under an inclusive program.
- The diagnosis is generalized underdevelopment of speech of the 3rd level;
- the inclusive resource center recommended level 4 support;
- is brought up in a full family;
- parents pay great attention to the child's development;
- from an early age, receives help from specialists: speech therapist, defectologist, psychologist;
- has been studying at a music school for two years and is showing good results.

Manifestations of dyspraxia observed by parents:

- clumsiness;
- self-service problems (unable to tie shoelaces, fasten buttons, etc.)
- problematic behavior.

Manifestations of dyspraxia observed by teachers:

- inability to open a textbook independently;
- problems with writing, math;
- problems with motor planning;
- problems with action planning.

Teaching materials: musical instruments, coordination track, ball, geometric shapes, circle, tactile cards.

Focusing classes on development	Exercises, games	Class procedure:
General motor skills	Song and game “A heron stood on the mud”	A circle and a path of squares are laid out on the floor, the teacher stands in front of the child, takes his/her hands, sings a song, takes turns doing the exercises, the child repeats.
	Song and game “The little monkey jumped”	The teacher and the child hold hands and jump alternately on the right and left feet while singing the song
	Working with the coordination track	While singing the sounds of the scale, the child gradually jumps from section to section of the coordination track
Fine motor skills	“Do-re-mi-fa-sol”	Forming geometric shapes in a column or row with singing the notes do-re-mi-fa-sol and singing the notes in the opposite direction
	“Rhythmic game of constants”	While singing a song (you can use any melodies and words that are accessible to the child), the child moves his or her fingers to the rhythm of the song
	“Finger Games”	Touch the thumb alternately with the index, middle, ring, and little fingers to the rhythm of the song.
	“The Spider Exercise”	Teacher and student take a plastic stick (right hand, left hand) and move their fingers from top to bottom in the rhythm of the song, then vice versa
Visual praxis	Exercise “Running ball”	The teacher demonstrates an exercise with a slide and a ball. The child repeats the actions and observes the rhythm of the ball's movement from top to bottom
	Didactic game “Where there is sound, there are eyes”	The teacher plays a musical instrument and moves it up and down, right and left, in a circle, semicircle (it can be an egg, passion fruit, rattle), and the child follows the instrument with his/her eyes)
Development of rhythm	Rhythm	The teacher demonstrates the exercises using a picture, a sensory image, and rhythm. The child repeats the exercises and develops tactile perception, vision and speech.

The time spent on the exercises varies from 3 to 5 minutes, depending on the child's need and potential, twice a week.

Reflection: the child was happy to do the exercises, trying to do it to the rhythm of music and singing. In the process of performing the exercises, the child said the words in order to correct the sound pronunciation. Such exercises were performed by the child accompanied by parents and relatives at home. During the exercises, some difficulties arose: maintaining the balance of the torso during jumps, performing exercises to the rhythm of music.

Results: during the 4 months of classes, the child showed increased interest in classes, improved emotional state, and confidence in his own actions. The child began to dress more lively, to make manual movements with his fingers correctly. According to the parents, the child began to feel more confident in the educational environment of peers, and to perform the recommended exercises at home.

Thus, a pilot study on the use of music therapy elements in the correctional work of children with movement coordination disorders has confirmed its effectiveness. The targeted use of music therapy elements will contribute to the development of such children.

Conclusions

Music therapy today is developing as an integrative discipline adjacent to neurophysiology, psychology, reflexology, music psychology, musicology and other sciences. When used in a controlled manner, it has a positive effect on brain development. It is known that gnosis and praxis are closely related. Gnosis is perception. Praxis is conscious movement. Music can be a unique bridge that can connect perception and conscious movement. It is highly likely that this is the unique compensatory capacity of music. There are children who have brain damage in which musical speech can serve as the only means of communication that the child understands. Music can also be a strong motivational tool for working with children with psycho-emotional developmental disorders. That is why the use of music therapy techniques is so important when working with children with different types of dyspraxia.

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Afiliácia

Príspevok je parciálnym výstupom projektu KEGA č. 007KU-4/2024 Tímový prístup k vzdelávaniu dieťaťa s dyspraxiou v predškolskom veku: od identifikácie ťažkostí k úspešnej inklúzii.

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