### МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ Державний заклад «ПІВДЕННОУКРАЇНСЬКИЙ НАЦІОНАЛЬНИЙ ПЕДАГОГІЧНИЙ УНІВЕРСИТЕТ імені К. Д. УШИНСЬКОГО»

ФАКУЛЬТЕТ ДОШКІЛЬНОЇ ПЕДАГОГІКИ ТА ПСИХОЛОГІЇ КАФЕДРА СІМЕЙНОЇ ТА СПЕЦІАЛЬНОЇ ПЕДАГОГІКИ І ПСИХОЛОГІЇ

## МАТЕРІАЛИ

II Всеукраїнської конференції здобувачів вищої освіти і молодих учених

# АКТУАЛЬНІ ПРОБЛЕМИ ДОШКІЛЬНОЇ ОСВІТИ: ТЕОРІЯ ТА ПРАКТИКА

**Випуск 2** 4 листопада 2022 року

Одеса Видавництво ТОВ «Лерадрук» 2022 рік Друкується згідно листа Міністерства освіти і науки України «Про проведення міжнародних, всеукраїнських конгресів, форумів, науково-практичних конференцій та семінарів студентів і молодих учених на 2020 рік» (Лист МОН №22.1/10-83 від 19.01.2021) та рішенням Вченої ради факультету дошкільної педагогіки і психології (Протокол №2 від 30.09.2022).

Педагогічний альманах. Актуальні проблеми дошкільної освіти: теорія та практика: матеріали II Всеукраїнської конференції здобувачів вищої освіти і молодих учених (04 листопада 2022 року). Вип. 2. Одеса: Видавництво ТОВ «Лерадрук», 2022. 206 с.

#### Організаційний комітет:

| Богуш А. М.    | _ | дійсний член АПН України, доктор            |
|----------------|---|---|
|                |   | педагогічних наук, професор (голова);       |
| Бабчук О. Г.   | — | кандидат психологічних наук, доцент,        |
|                |   | завідувач кафедри сімейної та спеціальної   |
|                |   | педагогіки і психології (заступник голови); |
| Кавиліна Г. К. | _ | кандидат педагогічних наук, доцент,         |
|                |   | викладач кафедри сімейної та спеціальної    |
|                |   | педагогіки і психології (відповідальний     |
|                |   | секретар);                                  |
| Булгакова О.Ю. | _ | доктор психологічних наук, доцент, декан    |
|                |   | факультету дошкільної педагогіки та         |
|                |   | психології;                                 |
| Левицька М.I.  | _ | методист кафедри сімейної та спеціальної    |
|                |   | педагогіки і психології                     |

Матеріали збірника відображають наукові дослідження і їх результати, що здобуті в процесі науково-дослідної роботи студентів та молодих науковців, які навчаються у закладах вищої освіти України.

Відповідальність за зміст, точність цитат, прізвищ і даних несе автор.

| Булгакова О. Ю., Саєнко О. Є. Освітнє середовище ЗДО як умова розвитку регуляторних функцій дітей | 77   |
|---|------|
| старшого дошкільного віку<br>Велічко Г. В. Види насильства над дітьми                             |      |
| Сторож В. В. STEM – технологія як інноваційний  | 65   |
| підхід в розвитку дітей дошкільного віку  | 87   |
|   |      |
| Розділ III Особливості інклюзивних підходів   |      |
| Ковиліна В. Г., Клецко А. Сучані методологічні  |      |
| підходи до корекції аутичних порушень у дітей   | 94   |
| Ковиліна В. Г., Федорова О. Використання зоро-  |      |
| вих реакцій для оцінки психофізичного стану дітей   | 99   |
| Коргун Л. М., Слюсаренко А. Ю. Формування го-   |      |
| товності педагогів до роботи у закладах дошкільної осві-  |      |
| ти в умовах інклюзії  | 104  |
| Коргун Л. М. Махновська К. А. Корекційна робо-  |      |
| та з усунення дислалії у дітей дошкільного віку   | 112  |
| Літовченко О. В., Собакіна І. В. Логопедична ро-  |      |
| бота з розвитку просодичних компонентів мовлення при  |      |
| дизартрії у дітей 5-6 років   | 123  |
| Літовченко О.В., Філіппович І. І. Формування  |      |
| мовленнєво-рухових процесів у дітей 5-6 років з дизарт-   |      |
| рією засобами ігрових комп'ютерних технологій   | 133  |
| Tubychko Y. Peculiarities of voice and intonation   |      |
| speech of children with rhinolalia  | 141  |
| Розділ IV. Професійні якості майбутніх фахівців   |      |
| дошкільних закладів   |      |
| Бабчук О. Г., Видиневичус О.В. Психологічна   |      |
| проникливість: сутність та структура  | 148  |
| Водолазська О. О. Психологічне благополуччя   | 1-10 |
|   |      |

| осіб з різним рівнем схильності до самозмінювання |     |  |  |
|---|-----|--|--|
| Кавиліна Г. К. Проблеми вибірковості сприйняття   |     |  |  |
| брехні у психології                               |     |  |  |
| Коренблат О. О. Комунікативна толерантність       |     |  |  |
| викладача   | 166 |  |  |

## PECULIARITIES OF VOICE AND INTONATION SPEECH OF CHILDREN WITH RHINOLALIA

## Teacher Y. Tubychko

The study of disorders of the voice function is an extremely important and complex problem that attracts the attention of specialists of various profiles. Researchers working in the field of voice disorders have different goals, use different devices and systems of initial ideas about the speech process, depending on the tasks set before them. Thus, a complete, multifaceted view of the state of voice function has not yet been formed, as a number of issues have not been resolved, in particular, peripheral voice disorders in adults have been quite fully studied, while the problem of voice disorders in children is associated with voice overload, somatic weakness, anatomical features, developmental defects, as well as negative psycho-emotional factors, is becoming increasingly relevant.

According to L. Belyakova, O. Orlova, V. Filimonova, approximately 10-12% of children aged 5 to 7 years have voice disorders caused by pathology of the vocal apparatus. Foreign researchers also note the presence of voice disorders in 7-10% of children. A pathological change in the acoustic characteristics of the voice impoverishes the intonation design of speech, which affects the content and emotional coloring of the utterance, reducing the intelligibility of speech, causing difficulties in its perception by others, and disorders of voice function complicate the structure of the existing speech defect and affect the development of its communicative functions.

As noted by scientists O. Lavrov, V. Filimonov, O. Sharov, there is a very high prevalence of voice disorders in children with various types of speech pathology, which vary from minor changes in individual acoustic characteristics to complex voice disorders. However, insufficient attention is paid to the study of children's voice features in the structure of speech defects. Information on the state, nature, and prevalence of voice disorders in such complex speech disorders as dysarthria, alalia, and rhinolalia are scattered and scarce. Thus, according to O. Orlova [7, p. 36], V. Filimonova [8, p. 4], phonation breathing suffers in any voice pathology, regardless of the nature of the defect, since breathing disorders, in particular shallow, clavicle breathing, sudden sporadic bursts of air during speech are observed in spastic dysphonia of various genesis. There is a reduction in inhalation and exhalation, which is the basis of the phonation breathing disorder. With functional disorders of the voice, breathing is weak, superficial, inhalation and exhalation are often uncoordinated, breathing is poorly combined with movement. Among the features of phonation breathing, the authors note speech on inspiration, a significant reduction in phonation time.

The analysis of studies of voice, breathing and intonation coloring in rhinolalia showed that I. Yermakova points to the predominance of the clavicle type of breathing in children with rhinolalia, in which the vital capacity of the lungs decreases, the development of the chest lags behind, and its excursion decreases. Disturbances in speech breathing are manifested in frequent shortened exhalations due to air leakage into the nose, in a decrease in air pressure in the suprapleural space [3, p. 39-41]. M. Zeeman believes that it is necessary to pay more attention to the study of the voice in rhinolalia, because, first of all, the sound, the tone of the voice, and not the articulation, is disturbed, therefore, the state of speech is most accurately characterized by the term «rhinophonia». He calls voice disorders in this type of speech pathology «palatophonia», indicating two reasons for its occurrence: 1) strong expiratory pressure on the glottis, which leads to tension of the vocal folds, while the larynx rises and the epiglottis shortens, giving the voice a compressed laryngeal sound shade; 2) improper resonance caused by a number of anatomical disorders, as well as improper movement of the tongue and larynx. According to the author, palatophony increases with age [4, p. 128-130]. More than 80% of preschool children with rhinolalia have a leak of air through the nose when uttering oral sounds, and in most children (more than 50%) the hypernasal tone is expressed quite strongly. One of the serious speech defects with open rhinolalia is the loss of loudness of the voice. According to X-ray data, they proved the connection of these disorders with a decrease in muscle tone of the vocal apparatus and changes in the mode of operation of the vocal folds.

The insufficient amount of data on the peculiarities of voice function in rhinolalia, which is a severe speech pathology, and the lack of special methods of corrective work do not provide enough information for speech therapists about the need for voice examination and the inclusion of special phonopedic methods of influence in the system of classes. The importance and necessity of improving traditional and finding new methods and forms of corrective and pedagogical work necessitates the study of the problem of impaired voice function and the intonation side of speech in preschool children with rhinolalia.

When planning the methodology of the experiment aimed at studying voice disorders in the structure of the main speech defect (rhinolalia), separate methodical methods of voice research, developed by L. Belyakova, were used [1, p. 5-44], K. Dykman [2, p. 46-52], V. Filimonova [8, p. 7-12]. 10 children of older preschool age, with a diagnosis of rhinolalia, who have various anomalies of the structure of the articulatory apparatus, took part in the study. The study was conducted in 2020-2021 in speech therapy groups for children with speech disorders, on the basis of NVK No. 310 and No. 241, Odesa. According to experts, all children had preserved hearing and intellectual development within the age norm.

The experimental study of children with rhinolalia was carried out by various methods, since the most complete picture of the nature of changes in voice function in children can be obtained only in the process of long-term observation and a special experimental study of the state of the voice. Therefore, the following was organized and carried out: 1) study of anamnestic information (history of the child's development, conversations with parents) about heredity, course of pregnancy, childbirth, physical and mental development. The peculiarities of the development of speech and voice of the test subjects, from birth to the moment of examination, as well as the duration and effectiveness of speech therapy classes conducted with them were clarified; 2) study of the conclusions of doctorsspecialists of various profiles; 3) an objective study of the child's speech, which can be conditionally divided into two stages: a) observation of the child in various activities (in general group and speech therapy classes, during activities, routine moments, walks and games); b) conducting a special experimental study.

Children were examined: 1. Condition and mobility of the organs of articulation: a) structure: hard palate - normal, high, Gothic, flat; the presence of a cleft or postoperative scars; soft palate - normal, shortened, scars; tongue – normal, small, massive, shortening of the hyoid ligament; maxillofacial system - absence/presence of teeth; malocclusion: progeny, prognathia, open front or side bite; b) function: mobility of lips, tongue, lower jaw; mobility of the soft palate; state of facial muscles, presence of accompanying movements. 2. State of sound speech (substitutions, mixing, distortion, absence of sounds). 3. General level of speech development.

The evaluation of the formation of speech breathing consisted of the following indicators: the ratio between inhalation and exhalation during the speech process; determination of the breathing phase in which words were spoken (inhalation, exhalation, moment of full exhalation); character, depth, speech breathing; the possibility of differentiating nasal and oral breathing, the presence of air leakage through the nasal passages at the time of speech; the effectiveness of using speech breathing when pronouncing a logically completed segment of an utterance. The study of these indicators was carried out while performing the following exercises: 1. Take a shallow breath, and on exhalation draw the sound C. 2. Take a shallow breath, and during exhalation slowly pronounce A-O-U-E-I. 3. Pronounce syllables on a long exhalation: pa-po-pu-pe-pi, ma-mo-mu-me-mi. 4. Take a shallow breath, quickly taking in air through the nose. On the exhalation, count from 1 to 10, trying to have enough air until the end of the count, slowing down the exhalation. 5. Say each line of the text in one breath: «It's warm outside.» It's warm outside today. It's very warm outside today.»

The quality of the voice was studied when speaking words containing the maximum number of vowel sounds, sonorous sounds, where its features were most fully revealed.

Voice strength was assessed by observing the child's voice in various activities and in various emotional states. The volume at which the voice can be heard well in specific conditions, taking into account the background noise, but not so loud as to cause unpleasant sensations in the surrounding people, was considered normal.4 loudness levels were defined: 1) very loud speech, approaching shouting; 2) loud speech; 3) normal volume; 4) too quiet speech.

The peculiarities of the dynamic range were manifested when the child performed tasks on the use of a quiet, normal, conversational and loud voice, the ability to change the strength of the voice from quiet to loud and vice versa.

Timbre is the most complex and essential characteristic of the voice. Its study began with the first words of the subjects, continuing during the experiment and further observation. Hoarseness, hoarseness, and nasality are classified as specific voice timbre disorders.

A characteristic feature of the voice of rhinolalics is a violation of the resonating balance due to a violation of the functioning of the palatine-pharyngeal valve. Nasalization of speech was noted in 9 children, but the degree of nasalization expression was different. Sharp nasal speech was observed in 4 children. As a result of the involvement of the nasal resonator, all oral sounds changed, which made the speech not sufficiently intelligible, and sometimes completely incomprehensible. In addition, an involuntary short-term increase or decrease in the voice was observed. Such changes in pitch may be the result of uncoordinated muscle contractions that cause tension or relaxation of the vocal folds. Weakness of arbitrary control of voice pitch causes dips in pitch and leads to monotony, indistinctness of speech, which makes it difficult to perceive.

In the process of timbre examination, the following characteristics of the voice were taken into account: sonority, flight, melodiousness. Violations of voice timbre were manifested in the form of hoarseness, which was noted in all examined children. Hoarseness of varying degrees was expressed by the presence of a whistling tone and unregulated voice raising. Such disorders occur as a result of a change in the position and quality of the closure of the vocal folds, as well as as a result of forced, shallow breathing.

Examination of articulatory motility showed impaired mobility of the lips, lower jaw, and tongue. We also noted the insufficient range of movements, the difficulty of switching from one articulation position to another. Cicatricial changes of the lips, deformations of the maxillofacial region in 1 child prevented the correct articulation of sonorous labial-labial and labial-dental sounds (б, бь, в, в), which were pronounced deafly, and sometimes almost silently.

When the sound pronunciation was examined, it was determined that the pronunciation of the sound «r» suffered most often, since the vibration of the tip of the tongue requires a strong air jet, which is quite difficult to develop in children with palatal pathology. The correct articulation of a solid sound requires a cacuminal position of the tongue (the tip of the tongue rises and approaches the upper alveoli). The entrance to the nasal cavity is tightly closed by the palatopharyngeal valve. In 5 children of this group, the exhaled stream of air was weak, so the sound was pronounced in one stroke. The peculiar position of the tongue contributed to the formation of the guttural sound «r» (1 child), or its replacement by the sounds «y», «k» (3 children). Violation of the pronunciation of the sound «l» was recorded in 5 children. When the air jet hits the nasal cavity, this sound sounds like a nasal «ng» (2 children). When moving the tip of the tongue deep into the oral cavity, the lips participated in the articulation of the sound «l». The presence of defective articulation of the sounds «sh», «zh» was recorded in 7 cases, it is due to both an incorrect articulation position (the tongue did not take the shape of a «cup») and a loose closure of the palatine curtain with the back wall of the pharynx. A sharp, unpleasant shade of hissing sound in 1 child arose due to the friction of air against the edge of the tense vocal folds. A similar sound occurs with the participation of the larynx, which in children with rhinolalia rises and acquires, along with the phonatory, articulatory function.

The results of the study of the acoustic characteristics of the voice and the intonation side of speech were reflected in speech maps and taken into account when drawing up individual programs for further corrective and pedagogical work.

The study of the voice of older preschool children with rhinolalia revealed a violation of its acoustic characteristics: strength, pitch, dynamic and tonal ranges, timbre. In the vast majority of children (7 people), the lack of formation of phonation breathing is noted, which is expressed in a frequent respiratory rhythm during speech, shallow breaths, short exhalations, reversible phonation. In all children, the components of the intonation side of speech were also unformed: melody, logical accents, pauses, tempo-rhythmic organization of speech. It is noted that lack of expressiveness, lack of emotional coloring of speech not only affects the quality of information transmitted, but also limits the communicative capabilities of children with rhinolalia. The data obtained as a result of the study showed the expediency of voice study and the inclusion of phonopedic techniques in the system of corrective and pedagogical work with children with rhinolalia. Experimental work on determining effective ways to restore voice function in the process of speech therapy has confirmed the need to use both general correction techniques and specific ones that take into account the nature of the voice disorder in rhinolalia and confirms the need for further research and the creation of appropriate methodological recommendations for conducting speech therapy classes.

## REFERENCES

1. Belyakova L.Y., Goncharova N.N., Shishkova T.G.Methodology for the development of speech breathing in preschool children with speech disorders / Ed. L.I. Belyakova. Knygolyub, 2004. 56 p.

2. Dykman K. D. Speech therapy work on voice development in children with rhinolalia. Speech therapy today. 2008. No. 2. P. 46–52.

3. Ermakova I.I. Speech correction for rhinolalia in children and adolescents. Prosveschenie, 1984. 143 p.

4. Zeeman M. Speech disorders in childhood. Astrel Publishing House, 2002. 302 p.

5. Ippolitova A.G. Open rhinolalia. Prosveschenie, 2000. 80 p.

6. Lavrova E.V. Speech therapy. Fundamentals of phonopedia: textbook. study aid higher education studies routine. Izd. «Academy» center, 2007. 144 p.

7. Orlova O.S. Voice disorders in children: учеб. study aid higher education studies routine. Astrel Publishing House, 2005. 125 р.

8. Filimonova V.I. State of the voice of preschoolers with speech pathology: author's review. thesis ... candidate ped. Sciences: 13.00.03. 1990. 16 p.