

QUALITATIVE AND QUANTITATIVE CHARACTERISTICS OF THE PHONETIC-PHONEMIC ASPECT OF SPEECH IN CHILDREN OF PRIMARY SCHOOL AGE WITH SPEECH DISORDERS

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Abstract. *The relevance of the problem of overcoming phonetic-phonemic underdevelopment of speech in children with speech pathology has long attracted the attention of specialists in various fields of scientific knowledge.*

Keywords: *development, phonemic processes, speech therapy, examination.*

Introduction

The relevance of the problem of overcoming phonetic-phonemic underdevelopment of speech in children with speech pathology has long attracted the attention of specialists in various fields of scientific knowledge. The significance of the study of the phonetic-phonemic factor is due to the fact that today the majority of the child population has sound pronunciation disorders, which negatively affect not only oral (impressive and expressive) but also written speech. The role of phonemic processes for the development of all speech functions necessary for mastering reading and writing is indisputable. In addition, if phonemic processes are formed on time, then the risk of secondary speech defects is reduced. Therefore, the development of phonemic processes or their timely correction is one of the main tasks in speech therapy work with children with speech disorders.

Methods

1. Select a method for speech therapy examination of the phonetic-phonemic aspect of speech for students in grades 2-3 with phonetic-phonemic speech disorders (hereinafter with FFSD).

2. To identify the state of the phonetic-phonemic aspect of speech in 2nd grade students with FFND.

75 8-year-old 2nd-grade students who were diagnosed with "underdeveloped phonetic-phonemic speech" and attended the speech therapy center participated in the testing experiment conducted at the base of the 284th general education school in the Sergeli district of Tashkent city. According to the analysis of medical, psychological and pedagogical documentation, all students have a state of physical hearing. Vision was assessed as normal. No pathologies in the structure of the articulatory apparatus were recorded.

The anamnesis of the students was not burdened with serious diseases, but the presence of various unfavorable factors was noted both in the prenatal, natal, and postnatal periods of development of the subjects.

Creating conditions for conducting the experiment. All tasks corresponded to the age of the students - primary school age (2nd grade). The examination was carried out individually with

each student. Conditions of silence were created in the office so that nothing would distract the subject from completing the task.

Selection of diagnostic and visual material

For the ascertaining experiment, methods were selected in accordance with modern psycholinguistic concepts and requirements for conducting an examination of the phonetic-phonemic aspect of speech. The sound analysis examination was based on the methodology of L.R. Muminova [4], Note that the concept of “sound at the beginning of a word” means that the sound comes first in the word; the concept of “sound at the end of a word” - that the sound comes last in the word. All other sound locations are considered the middle. The state of students’ sound pronunciation was also necessarily taken into account: in all subjects it was impaired to one degree or another. Therefore, to examine phonemic processes, mainly tasks on auditory discrimination of sounds were used, and not on pronunciation through repetition. If the task required the student to name words, then words with those sounds that were preserved in his pronunciation were selected. The stimulus material was represented by certain lexical material, pictures from L.R. Muminova’s speech therapy album. et al [4] Determination of parameters and criteria for assessing the phonetic-phonemic aspect of speech.

We divided all selected tasks into two groups:

Examination of phonemic processes:

2. The parameters for examining phonemic processes were the following: phonemic hearing (the ability to recognize sound); phonemic perception (the ability to distinguish one speech sound from another); phonemic analysis (the ability to determine the place of a sound in a word, the ability to identify the sequence of sounds in a word; the ability to evaluate the position of sounds in a word in relation to each other). Phonemic synthesis (the ability to combine sounds into a word); phonemic awareness (the ability to independently select a word for a given sound);

Sound pronunciation examination.

The parameters for examining sound pronunciation were:

Isolated pronunciation; pronunciation in syllables; pronunciation in words; use in independent speech.

The main criteria for assessing phonemic processes were the following: correctness, independence, self-control

The main criterion for assessing sound pronunciation was the correct pronunciation of sounds.

According to the selected parameters and the age of the children, tasks were selected to examine the phonetic-phonemic aspect of speech.

I. Main stage.

The study of phonemic processes included several blocks in accordance with the assessment parameters.

The sound pronunciation survey consisted of studying the pronunciation of the following groups of sounds:

- 1) whistling: [s], [z],
- 2) hissing: [w], [zh], [h] 3) sonoras [l] [r],
- 5) back-lingual [k], [g], [x], [th].

The final stage: assessment and analysis of the research results. As mentioned above, all sounds were conditionally divided into five groups, each of which was assessed separately, and the scores received were summed up. Each group of sounds was assessed as follows:

5 - standard pronunciation of all sounds of the group;

4 - All sounds are pronounced correctly, but in spontaneous speech one sound or several sounds of the group are subject to distortion or substitution (that is, they are not sufficiently automated);

2 - Only one sound of the group is distorted or replaced in all speech situations;

0—either several sounds of the group or all sounds are distorted or replaced.

The final assessment of sound pronunciation was carried out based on the results of the entire examination and amounted to 30 points.

Therefore, the final maximum score was 99 points. Based on these indicators, the level assessment of the development of the phonetic-phonemic aspect of speech in primary schoolchildren with FFND was presented in this way: the obtained absolute value was converted into percentage expression. Here, the four-level percentage scale proposed by T.V. was taken as a basis. Akhutina and T.A. Fotekova, modified by us by qualitatively designating the levels and adding a fifth - high - level, at which no errors are detected:

High level (100%, 99 points) - all tasks on phonemic processes were completed correctly, independently, without any errors. There are no problems with sound pronunciation.

Level above average (80-99%, 80-98 points) - performs almost all tasks on phonemic processes correctly and independently, mostly controls his own actions, but can make some mistakes, which in most cases he notices and corrects. There are isolated violations of sound pronunciation or the sounds are not sufficiently automated.

Average level (65-79.9%; 64-79 points) - most of the tasks on phonemic processes were completed correctly or with some, including persistent ones; in other tasks only erroneous answers are observed; the student can act independently, but also turns to an adult for help; self-control is rarely present, mistakes are not always noticed and even less often corrected. There are partial violations of sound pronunciation, when sounds are present, but are not sufficiently automated, or only one sound of the group is distorted or replaced in all speech situations.

The level is below average (50-64.9%; 50-63 points) - in tasks on phonemic processes, he makes many mistakes, tries to get help from the teacher or guess the answer, there is no self-control. There are disturbances in the sound pronunciation of different groups of sounds at all levels.

Low level (0-49.9%; 0-49 points) - in tasks on phonemic processes, he makes frequent and gross mistakes, practically does not complete tasks, does not understand them, or refuses to complete them; there is no self-control. There are multiple violations of sound pronunciation at all levels.

Thus, the experimental study of phonetic-phonemic processes was carried out in stages, taking into account the age and speech therapy conclusion of the students, compliance with organizational conditions and selected parameters and evaluation criteria. On this basis, a comprehensive methodology was selected, consisting of tasks proposed by various authors. In accordance with this, the qualitative and quantitative assessment of results was adapted based on point and percentage scales and transferred to the appropriate levels of development of the phonetic-phonemic aspect of speech.

Analysis of survey results

Let us consider the results of a survey of phonemic processes in primary schoolchildren with: PPSU (Phonetic-phonemic speech underdevelopment) from the standpoint of qualitative and quantitative analysis.

In answering tasks in the “Phonological Hearing” parameter, students made virtually no mistakes: they could distinguish words that were correctly named by a speech therapist from incorrect ones and distinguished words that were similar in sound composition. Mistakes made were mostly noticed and corrected. Selecting pictures for the paronym words did not cause any particular difficulties, but some children were still confused in distinguishing those pictures whose names contained sounds that were mixed or replaced in pronunciation. In addition, it is likely that sometimes the children made a semantic guess. Therefore, the survey used variable tasks for a more objective assessment of phonemic processes. In tasks to study phonemic awareness, the following answers were obtained. Most children were able to determine the presence or absence of a given sound in words, but made isolated errors. Most students found it difficult to give the correct answer to many of the words presented: they were confused in their answers and did not notice the mistakes. Approximately the same picture was observed when showing a picture with a given sound. It was not for nothing that the sound [r] was chosen for the definition: it was impaired to one degree or another in most children. The students were not able to show all the pictures with this sound, which indicates not only problems in pronunciation, but also in the perception of sound. Also, with some errors, the students found a word with the desired sound as part of sentences: the children named words, but not all, containing the given sound, but only the simplest ones in terms of sound-syllable structure. Particular attention was paid to the state of phonemic analysis and synthesis: firstly, as the highest level of phonemic processes, and secondly, as a particularly relevant area for primary schoolchildren. The most successful tasks were to isolate the vowel sound at the beginning of the word and the consonant sound at the end of the word. Most likely, this is due to the strongest position of these sounds in words. The selection of vowels and consonants in other positions was accompanied by a large number of errors. We can also explain this by the fact that some students have not fully formed the concepts of “vowel sound” and “consonant sound.” The children used the help of a speech therapist in the form of specification: “Where do you hear the sound: at the beginning, middle or end of the word?” We also note that errors were made when identifying sounds in words with three syllables or with clusters of consonants, while simple one-syllable or two-syllable words did not cause any particular difficulties. Tasks to determine the number of vowels or consonants in a word, as well as the total number of sounds in a word generally caused the greatest difficulties. This can be explained by the fact that the child needs to mentally imagine the entire word, break it down into its components, select the necessary sounds and count them. Such multi-stage mental actions often turned out to be inaccessible to the majority of subjects.

Not a single student completed the task of identifying all the same sounds in two named words without errors. Children named either single matching sounds, or non-matching sounds (due to their inability to distinguish them by ear), or did not give an answer at all (they said “I don’t know”, “there are no such sounds”). Determining the serial number of sounds in a word also turned out to be difficult: students acted by trial and error. Accordingly, the task of determining the sequence of sounds in a word was also very difficult: students made mistakes when trying to name

the place of a sound in a word in relation to other sounds. This was especially true for polysyllabic words and words with consonant clusters.

In the area of phonemic synthesis proficiency, both correct and incorrect answers were also obtained. Thus, children coped better with the task of composing words from a given number of sounds, named by a speech therapist in order, than from sounds given randomly. Most students did not cope with the second task at all.

Responses to tasks examining phonemic representations were mixed. On the one hand, students gave correct answers when naming words to given sounds, but this mainly concerned tasks where they needed to name any word or a word from a specific lexical area. Finding words for a given sound indicating its place in the word or starting with the same sound as those named by the speech therapist was a difficult task for the students. Summarizing the qualitative analysis of the results obtained, it should be noted that in the answers to many tasks there was a tendency of correlation between sound pronunciation disorders and phoneme recognition disorders: students made more mistakes where it was necessary to give an answer based on the distinction of sounds mixed or replaced in pronunciation. Children experienced the greatest difficulties in differentiating whistling and hissing sounds (s-sh, z-zh,) and in differentiating consonants; sonars (r-l), affricate (h-sch). For example, one child replaced the sound “z” with the sound “zh” in his speech, and did not differentiate them when examining phonemic hearing. Another boy replaced the sound “r” with the sound “l” in his speech.

The students' phonemic awareness as the basic ability to distinguish speech sounds turned out to be the most developed. The simplest forms of phonemic perception were easier for students (the ability to hear a given sound, determine the presence of a given sound in a word) and it was much more difficult to complete tasks for proficiency in sound analysis, synthesis, and phonemic representations. Students found it difficult to perform the mental actions of analysis and synthesis also due to the multi-stage implementation, the need to retain several tasks in auditory memory to obtain the final result.

When examining sound pronunciation, it was revealed that it was also impaired to one degree or another.

The main disturbed groups of sounds were sonorants ([l], [r]); paralambdacisms and pararotacisms were observed, as well as the absence and distortion of these sounds. Thus, 60% of children demonstrated that they pronounce sonorants correctly, but in spontaneous speech one sound or several sounds of the group are subject to distortion or replacement (that is, not sufficiently automated): most often there was a replacement of [r] with [l], [l] with [v], [l] with [th]. For 40% of students, all sounds of the group were distorted or replaced, and in 30% only one sound of the group was replaced in all speech situations ([p] and [l] to [th]).

Various parasigmatism were also a common disorder: mainly whistling (40% of students) and hissing (60% of students). In 15% of children, disturbances in back-lingual sounds were observed, where substitutions and confusions were forms of impaired pronunciation. It should be noted that in the majority of children (80%) the sounds were produced, but not automated and undifferentiated at the level of sentences and in independent speech. For the remaining 40%, one, several or all sounds of the group were distorted or replaced at all levels.

Quantitative analysis showed that 50% of students demonstrated an average level of development of the phonetic-phonemic side of speech, 30% of students demonstrated a below-average level, and 20% of children demonstrated a low level. Thus, almost all the children

examined were found to have some degree of underdevelopment of the phonetic-phonemic aspect of speech. In phonemic processes, this was expressed in the range from mild errors at the level of phonemic hearing and phonemic perception to more serious and even gross errors at the level of phonemic analysis, synthesis and phonemic representations. The state of sound pronunciation in all subjects was stated to be impaired, which also manifested itself to varying degrees.

Conclusion:

An empirical study of the level of development of the phonetic-phonemic aspect in children of primary school age was carried out on the basis of secondary school 284 in the Sergeli district of Tashkent. The study involved 75 primary school age students with a speech therapy report: "Phonetic-phonemic speech underdevelopment" (PPSU).

In order to identify the state of phonemic processes in children of primary school age with PPSU, a survey was carried out using a complex technique based on the material of the tests proposed by (L.R. Muminova). The tasks were offered in an adapted and modified form, taking into account the age of the children studied and modern psycholinguistic views.

The following results were obtained: 30% of students demonstrated an average level of development of the phonetic-phonemic side of speech, 50% of students showed a below-average level and 20% of children showed a low level. A comparison of the available data on the state of sound pronunciation and the obtained data on the state of phonemic processes made it possible to identify the following patterns: in cases where there were phonological defects in the form of mixing sounds, deficiencies in phonemic processes in differentiating these sounds were identified.

Most of the examined children showed immaturity of all phonemic processes to one degree or another; in some children, phonemic hearing as the basic ability to distinguish sounds is relatively intact, but at the same time its higher links are significantly affected: in particular, phonemic analysis and synthesis.

It was established that the examined students suffered more from the phonemic side than the phonetic side, which confirms the fact that the phonemic defect is primary in PPSU.

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