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Phonological Abilities of Preschool Children[2]

Extended summary

The distinctive features of phonological processes have been much discussed in the relevant literature. Unlike articulatory disorders, which include an incorrect pronunciation of the phonemes in children whose hearing, intelligence and language develop normally, phonological disorders include the entire process of speech production, from basic representation to phonological rules, meaning that a child may pronounce the phonemes incorrectly, but not decode them incorrectly at the phonological level. Research findings in this area show that children who incorrectly pronounce phonemes (without language deficits) do not belong to the group of those with language and learning disabilities. Phonological processing deficits, on the other hand, form the basis of reading disability.

The aim of the research is to identify the phonological abilities – the analysis and synthesis of the phonemes in words - and the elements of phonological awareness in preschool children. In addition, our intention was to determine if there were differences between boys and girls at the level of development of phonological abilities. The sample consisted of 85 children (42 boys and 43 girls), ages 6-7. Their ability to analyze and synthesize the phonemes and their phonological awareness were evaluated in preschool institutions in Belgrade. The Test of Analysis and Synthesis of Phonemes in Words (Radičević & Marinković, 1993) was used to assess the ability of phonemic analysis and synthesis, while the Test for the Assessment of Phonologi-

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cal Awareness - FONT (Subotić, 2011) was used to assess the phonological awareness ability. All tests were administered individually, in separate rooms with only a speech therapist as an examiner and a child. Test time was not limited. The results obtained were quantitatively and qualitatively analyzed using appropriate techniques.

The results of the research showed that, in the six out of eight tasks assessing the elements of phonological awareness, the children demonstrated an average and above average level of development of phonological abilities: syllable blending, syllable segmentation, identifying the initial phoneme, rhyme recognition, phonemic segmentation, and identifying the final phoneme, while the lowest achievement was observed in the tasks of elimination and phonemic substitution of the initial phoneme. Abilities that include the manipulation of phonemes develop after the others, so a lower achievement of children in these tasks is not uncommon in relation to other tasks in the Test of Phonological Awareness in our research. Considering that the children's achievement in the elimination and substitution of the initial phoneme tasks is from 47.83% to 55.52% in terms of correct answers, we conclude that the development of these aspects of phonological abilities continues during school. No statistically significant differences were found between boys and girls in their achievement on the FONT test tasks ($p > 0.05$).

By further analysis of the results, based on the results of an average achievement, we found that children were more successful in the synthesis of the phonemes in monosyllable and two-syllable words task, than in analysis of phonemes in monosyllable and two-syllable words. It was found that on the phonemic analysis and synthesis tasks, a higher percentage of children's correct responses was related to the complexity of the tasks themselves, as well as to the frequency and length of words. The results showed that children's performance on phonemic analysis and synthesis tasks was statistically significantly associated with their success on the following tasks: rhyme recognition, elimination of the initial phoneme, and phonemic substitution (initial phoneme) ($p < 0.05$). Differences in the achievement between boys and girls regarding the phonemic analysis and synthesis tasks were identified in the tasks including the synthesis of the phonemes ($p < 0.05$).

The authors believe that the research results open up a possibility for further study of certain levels of language development at preschool and early primary age. Detecting speech and language disorders in children at an early age is very important because a proper assessment allows experts to promptly initiate and successfully complete treatment.

Keywords: analysis of phonemes, synthesis of phonemes, phonological awareness, phonological abilities.

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