

Vesna Mildner and Marijana Šimić

University of Zagreb

## **FREQUENCY AND TYPES OF SPEECH DISORDERS IN PRE-SCHOOL CHILDREN**

The aim of this study was to determine the frequency and types of speech disorders in pre-school children and possible gender differences. Participants were 101 children (age range: 5;6 – 7;6 years), 50 boys and 51 girls. Children were presented with three tasks: (1) Description of 4 drawings of different situations – a child playing in his bedroom, children in a playground, a street scene and a kitchen scene; (2) Picture naming task – naming 56 common objects from pictures; (3) Repeating nonsense syllables – the most common sources of speech disorders in Croatian ( $/s/$ ,  $/ʃ/$ ,  $/z/$ ,  $/ʒ/$ ,  $/ts/$ ,  $/tʃ/$ ,  $/tj/$ ,  $/dʒ/$ ,  $/dʒ/$ ,  $/r/$ ,  $/l/$ ,  $/ʎ/$ ) were auditorily presented in different positions and vowel contexts (3 each). In tasks (1) and (2) 76 words overlapped, i. e. were elicited on both tasks. The entire procedure was recorded and 3 trained phoneticians evaluated the recordings.

The results show that the overall incidence of speech disorders in pre-school children is 26.73%. The most common disorder is rhotacism, followed by lambdacism and sigmatism. These single disorders amount to 16.83%. Combined disorders (any pairwise combination of the three) total 9.90%. Examination of the children with disorders reveals that single disorders occur in 62.96% of participants, and combined disorders in the remaining 37.04%. The disorders are most frequently manifested as distortions and substitutions (59.26% and 22.22% of the disordered sample, respectively). No omissions were recorded as sole manifestations of disorder in any of the children. They were usually found along with distortions and substitutions. That combination and distortion + substitution were found in 18.52% of children who presented with speech disorders. Although the difference between boys and girls was considerable (40% of boys vs. 13.73% of girls), on the test of proportions for 2 samples in R it did not reach statistical significance ( $p > 0.05$ ).

These results are generally in line with those reported in literature. Gender differences warrant further study, because the data presented here are based on only 27 children who presented with speech disorders.