



## Oral Motricity in preschool children with speech sound disorders: preliminary study

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**Introduction:** Speech Sound Disorders (SSD) is a developmental disorder for which sensorimotor and cognitive-linguistic aspects contribute. Those include perceptive capacity, phonological and articulatory representation of the language impairing the speech segments and the phonotactic and prosodic elements, resulting in different degrees of intelligibility.

**Aim:** Verify the existence of differences in oral motricity according to age and the diagnosis of SSD.

**Methods:** Case-control study with 107 children with typical development and SSD matched for age (in months), between 4 and 5;11. The evaluation was carried out with the PAOF-2 (Protocolo de Avaliação OroFacial, versão 2) (Guimarães et al., 2021). The statistical analysis of the two domains of PAOF-2 (Structure and Mobility) was performed using the *Mann-Whitney test*.

**Results:** There are no statistically significant differences between the groups in the structure domain at 4 ( $U=236.5$ ,  $p=0.182$ ) and 5 ( $U=344.5$ ,  $p=0.578$ ) years of age. In the mobility domain, children aged five years old with SSD have significantly lower performance than children without SSD in diadochokinetic oral movement (pá-tá-ká) ( $U=227.00$ ,  $p=0.005$ ). Preliminary data point to an evolution in the orofacial motricity of children with and without SSD, but children with SSD present a different evolution with a lower magnitude than children without SSD. All male children with SSD perform worse than female children.

**Conclusions:** The performance of oral diadochokinesia in 5-year-old children with PSF is significantly lower than in 5-year-old children without PSF. The oromotor development pattern of children with PSF is different from that of children without PSF.

**Keywords:** Oral motricity, Children, Speech Sound Disorder, PAOF-2