

Speech Sound Disorders Assessment in Children

Haydée Fiszbein Wertzner

Department of Physiotherapy, Communication Science &
Disorders, Occupational Therapy - Faculty of Medicine. University of Sao Paulo

hfwertzn@usp.br

Children with speech sound disorders (SSD) have difficulties with speech and language, with variable severity and intelligibility of speech. Sometimes these children are inconsistent in their production, but are able to produce the sounds, sometimes they are consistent in their errors and fail to produce the sound.

The theoretical models that study the development of speech indicate an interrelation between motor speech, cognitive linguistic and auditory processing. This may explain the manifestations of the SSD that may be related to difficulties in one of these processing resulting in the impairment of the other in varying degrees. Diagnosis is carried by applying speech and language tests such as spontaneous speech, picture naming and imitation of words and sentences, which are phonologically analyzed to identify alterations depending on the child age.

For the assessment of cognitive-linguistic aspects of the SSD after the diagnostic tests, we apply some protocols to supplement information. Some of the protocols are Inconsistency speech, phonological sensitivity test (alliteration and rhyme), Rapid Naming Tests, Memory short, segmentation of words and not words.

Regarding the production of speech motor there are a few tests that can be used, some of which involve the repetition of sounds and sensory stimulus and others use computerized equipment. Among the procedures of the first group is the test stimulability of speech sounds absent at diagnosis, the rate of articulation, diadochokinesia.

On the procedures that use equipment is acoustic analyzes that identify the acoustic characteristics of speech sounds of Brazilian Portuguese as well as the specific of each individual during sound production helping to determine which is the parameter that is harmed in the production of a sound; the electroglottography that is used to identify the presence of vibration in the vocal cords during production of devoiced sounds of Brazilian Portuguese.

Speech ultrasound, which is used to describe the production of coronal sounds more recently have been included in studies of speech therapy evaluation and intervention.

It is worth mentioning that each of the instruments used to assess motor speech production has a specification and a targeted application.

Clinical evidence present in the SSD that encompass gesture motor, auditory perception and phonology, indicate that there are important differences among children, then demonstrating its heterogeneity.

Thus, to understand which of the processing is impaired and interfering with the interaction between them, may contribute to a better classification of the SSD and therefore to more accurate models of intervention.

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