Abstract
This research compared speech inconsistency, PCC-R and presence of otitis background in Brazilian children with and without phonological disorders (PD). 30 children were divided into two groups: typical development (TDG), and with PD (PDG), from 5:0 to 7:11 years. The PDG showed higher inconsistency, lower PCC-R and more children with otitis background. The presence of otitis background is associated with PD and demonstrated impact in the severity of speech and in the speech inconsistency.

Summary

Introduction
Phonological disorders (PD) is defined as a speech disorder of unknown origin, with manifestation in oral language (Wertzner, 2002). However, the presence of otitis background in the first year of life is frequently detected in children with PD (Shriberg, 2003). Forrest, Elbert, Dinnsen (2000) observed that children with PD can produce consistent or inconsistent errors. The inconsistency may be prejudicial to the emergence of new phonemes in the children’s inventory. Several authors proposed different indexes that measure speech inconsistency.

The classification of PD’s severity can be calculated by several indexes. For this research the PCC-R (Percentage of Correct Consonants – Revised) proposed by Shriberg et al. (1997) for English speakers was used.

Aim
The aim of this research was to compare speech inconsistency, the PCC-R index and the presence of otitis background in Brazilian children with and without PD.
Methods

Participated in this research 30 children, 15 with typical phonological development (TD) and 15 with phonological disorders (GPD), from 5:0 to 7:11 years, of both genders. For the assessment of phonology the naming task of the Brazilian Test of Children’s Language - ABFW (Wertzner, 2004) was conducted. Latter the PCC-R (Percentage of Correct Consonants – Revised) was calculated (Shriberg et al 1997). The speech inconsistency test for the Brazilian Portuguese language (Castro e Wertzner, 2008) consists of 25 pictures that have to be named three times, based in Dodd (2005). If the child named at least one of the three words differently from the others, it was considered inconsistent. The word inconsistency was calculated for the test as a whole.

Results

The PCC-R mean was 97.16% for the TD, while for the GPD it was 70.76%. The presence of otitis background occurred in 20% of TD’s children and 60% of the GPD’s children. The speech inconsistency in TD’s children showed mean of 15%, while in GPD’s children the mean was 28%.

In TD, children without otitis background showed PCC-R mean of 97.31% and speech inconsistency mean of 11%. Children with otitis background showed PCC-R mean of 96.66% and speech inconsistency mean of 32%. No children showed PCC-R lower than 85%. The comparison of PCC-R and speech inconsistency demonstrated that children with PCC-R lower than 95% showed speech inconsistency mean of 16%, while children with PCC-R higher than 95% showed speech inconsistency mean of 15%.

In GPD, children without otitis background showed PCC-R mean of 75.82% and speech inconsistency mean of 24.58%. Children with otitis background showed PCC-R mean of 67.39% and speech inconsistency mean of 31.03%. Children with PCC-R lower than 85% showed speech inconsistency mean of 34%, while children with PCC-R higher than 85% showed speech inconsistency mean of 19%.

Discussion
In TD and GPD, children without otitis background showed a better phonological performance detected by the PCC-R and by a lower speech inconsistency. The TD presented higher PCC-R values and lower speech inconsistency compared to the GPD. It was also observed that the lower PCC-R the higher the speech inconsistency.

Comparing both groups, the GPD showed higher inconsistency, lower PCC-R and a higher number of children with otitis background.

So, children with otitis background showed lower PCC-R and highest speech inconsistency, showing that otitis background seems to be associated with speech inconsistency. Also, it was observed that children with lower PCC-R showed higher inconsistency, indicating that more unintelligible children are also more inconsistent.

The presence of otitis background is one of the factors associated with PD and was presented by the majority of children in this research. The otitis background demonstrated impact in the severity and in the speech inconsistency.

References


