

# **PREVALENCE OF DYSPHONIA IN 7-12 YEAR OLD FLEMISH CHILDREN AND THE RELATIONSHIP BETWEEN DYSPHONIA AND TEMPERAMENT**

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## Introduction

Dysphonia is a frequently reported problem in school aged children. In literature we found highly variable rates of prevalence between 4% and 30% (Tavares et al., 2011).

Clinicians report different temperamental patterns in young children with voice problems in comparison with children who have a healthy voice. They describe them as 'children with a high-reactive temperament'.

Previous research support the association between temperament and voice disorders (Roy et al., 2008).

With this research we wanted to examine:

- What is the prevalence of dysphonia in school aged Flemish children?
- Do children with voice problems compared with children without voice problems have other temperamental characteristics?
- If they show other temperamental characteristics, in which way do they differ from children with a healthy voice?
- Is there a relation between temperament and the grade of dysphonia?

## Materials and Methods

553 school aged Flemish children were submitted to auditory-perceptual voice analysis using the GRBASI scale to determine the prevalence and grade of voice problems.

Temperamental characteristics were assessed in a selected group of 27 children with voice problems using the 'Child Behavior Checklist' (CBCL) and compared with a matched control group of 27 children with a healthy voice.

## Results

The prevalence of dysphonia in school aged Flemish children was 3% when taking  $G\text{-score} \geq 2$  and 27% when taking  $G\text{-score} \geq 1$  as the limit for defining dysphonia.

Results of the behavior questionnaire showed significant differences between test and control group on the global CBCL-score ( $p = .030$ ) and in particular on the temperamental characteristics 'social problems' ( $p = .035$ ), 'delinquent behavior' ( $p = .01$ ) and 'aggressive behavior' ( $p = .013$ ). No significant differences were found between the grade of hoarseness and temperamental characteristics.

## Conclusion

The results of this research confirm data found in literature on as well prevalence as the relationship between temperament and voice problems in school aged children. Children with voice problems seem to have other temperamental characteristics than children with healthy voice. Treating school aged children with dysphonia therefore requires attention to the temperament of the child.