

## Introducing Speech Audiometry in Albanian Language

Adrian Xhuvani<sup>1</sup>, Evelyne Ferrary<sup>1,2</sup>, Dritan Vasili<sup>3</sup>, Holta Sulaj<sup>4</sup>, Rémi Hervochon<sup>5</sup>, Bahri Beci<sup>6</sup>, Besim Boci<sup>7</sup>, Frédéric Tankere<sup>1</sup>

<sup>1</sup> ENT Department, Pitié-Salpêtrière Hospital, APHP Sorbonne Université, Paris, France

<sup>2</sup> Technologies et thérapie génique pour la surdité, Institut de l'audition, Pasteur/INSERM, Paris, France

<sup>3</sup> ENT Department Salus Hospital, Tirana, Albania

<sup>4</sup> ENT Department, Hygeia Hospital, Tirana, Albania

<sup>5</sup> ENT Department, Pitié-Salpêtrière Hospital, APHP Sorbonne Université, Paris, France

<sup>6</sup> Phonetician, INALCO, Paris, France

<sup>7</sup> ENT Department Mother Theresa Hospital, Tirana, Albania

---

### Abstract

**Background:** In Albania, there are no validated speech audiometry lists of words.

**Aims and Methods:** The aim of this study was to create and to evaluate lists of words for children and young adults with normal hearing. In total, 20 lists of 10 spondaic dissyllabic words were created (10 for adults and 10 for children), taking into account the idiosyncrasies of the Albanian language. Eighty-three young adults and eighty-six children were included in this study from November 2018 to November 2019. For each patient's ear the difference between the Speech Recognition Threshold (SRT) and the Pure Tone Average threshold (PTA) was calculated to analyse if the value was less or equal to 7 dB in order to validate the 20 wordlists. The

psychometric function slope of the resulted speech audiometry graph was calculated to compare it with the ones of other Indo-European languages.

**Results:** The difference between the SRT and PTA was  $3.2 \pm 2.1$  dB in adults and  $3.3 \pm 2.4$  dB in children. A value  $\leq 7$  dB was observed in 93 % of adults and 92% of children. The psychometric function slope was 7.3%/ dB in adults, and 7.9%/ dB in children, similar to those found in other Indo-European languages.

Speech audiometry in the Albanian language can now be performed using the lists defined in the present study.

These results have been previously presented at the 126 congress of the French Society of ENT (SFORL); October 2020.

**Keywords:** Albania; Audiology; Pediatrics; Hearing loss, Auditory performance.