

Abstract EFAS/DGA 2007

The Adaptive Auditory Speech Test (AAST) - development of of the Polish version.

Coninx, F. (1), Lorens, A. (2), Piotrowska, A. (2), Hübinger, P. (1), Skarzynski, H. (2)

(1) Institut für Audiopädagogik – IfAP – at the University of Cologne, Solingen/Cologne

(2) International Center for Hearing and Speech, Kajetanu/Warsaw, Poland

Aim: the construction, norming and validation a Polish version of the Adaptive Auditory Speech Test (AAST) for children aged 3-4 years and older (and adults).

Method: the Adaptive Auditory Speech Test (AAST) is based on a closed set paradigm and includes - in the original German version - 6 spondee words. The test is relatively independent on the child's vocabulary. The child can click on one of 6 pictures on the computer screen. After a correct response the stimulus intensity is reduced by one step, i.e. after an incorrect response increased by two steps. Step size is 5 dB (and 2 dB for speech in noise). The algorithm automatically stops the up-down procedure after 7 incorrect answers and calculates a threshold value based on the last 6 reversals.

As spondees are not existent in Polish language, trisyllable words were chosen instead. After careful selection of the words in order to meet the construction criteria (easy for children, picture available, group-balanced phoneme representation) sound recordings were made and stimuli were implemented in the software. Internal balancing of the 6 words was based on collective psychometric curves measured in a pilot test group of normal hearing subjects.

Results:

A Polish version of AAST could be established meeting the same quality as the original German test version. Age dependent normdata for speech in quiet as well as for speech in noise were collected and will be presented.

The adaptation process to produce a new language version of AAST has been evaluated. The consequences for the production of more language versions will be discussed.

