EFAS Auditory Processing Working Group



WHY EVERY

AUDIOLOGIST SHOULD

KNOW ABOUT APD



OBJECTIVE

MEASURES FOR APD

EVALUATION



TEST-RETEST OF GREEK SPEECH IN BABBLE PERCEPTION

PROGRESS



TEST BATTERY APPROACH

Behavioural/psychoacoustic tests are to be implemented for auditory processing evaluation. Electrophysiology may assist diagnosis. Contralateral suppression of otoacoustic emissions may be a useful tool provided that results are not averaged across right and left ears and more than one time windows are used for evaluation. **Every audiologist should be aware of the possibility of an APD presence.** Using the different tests for auditory processing evaluation provides the clinician with functional information on hearing skills and impairments during every day life in both children and adults. Evidence based practice When diagnosing APD a test battery approach is the gold standard. Multidisciplinary feedback is essential but diagnosis is made by an Audiologist. includes clinical expertise, best research available and patient values and preferences.

Hearing & Cognition Front. Neurosci., 06 September 2019 | <u>https://</u> doi.org/10.3389/fnins.2019.00953

Hearing is much more complex than the focus on hearing sensitivity that we have on the clinical audiology practice. Hearing sensitivity is the first step for hearing assessment that should be then completed with auditory processing evaluation. For instance, how an individual hears speech in different auditory situations (from the most comfortable ones to the most challenging ones) should be assessed if a normal hearing is to be the outcome of the evaluation. Binaural hearing is another essential process for communication and learning. Pitch and duration pattern discrimination helps monitoring the prosody of a person during running speech. Temporal resolution is a major part of correctly perceiving consonants, especially at noisy situations.

In the event that a hearing loss is present (even a mild unilateral one) short-term memory may be negatively impacted. There is emerging evidence that the same is true for APD. When being evaluated for cognition, it is not rare that the information to be repeated or re-ordered or processed goes through the auditory modality. It is easily explained that if a hearing impairment is present (but not known or diagnosed) then the skills measured will be lower than expected if provision is not taken to treat or manage the auditory deficit.

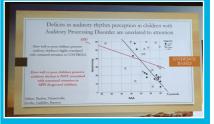
HEAL 2020. Special APD session https://www.heal2020.org



APD may result in measuring a lower cognition.







(a) existence of a nonattention related rhythm perception deficit in APD children and

(b) differential effects of attention on task performance in normal vs. APD children.