Creation Of An Auditory Processing Disorder Screening Test For Canadian French-Speaking Children

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Objectives: To develop a screening test (ST) to identify Canadian French-speaking children that are at risks of an auditory processing disorder (APD).

Background: APD results in listening difficulties and is present in about 2 to 3 % of school-aged children. APD evaluation is based on a test battery assessing different auditory processing skills. To date, there is no validated APD ST available in French. Such a ST would lead in early identification of children in needs of a complete APD evaluation.

Methods: Participants. Twenty-one children met the following inclusion criteria: (1) aged between 7 and 13 years old; (2) with hearing thresholds within 0-15 dBHL from 250 to 8000 Hz in both ears; (3) without known neurological disorder (ex. epilepsy, head trauma). Those with non-medicated attention deficit and/or with intellectual disabilities were excluded.
Material. The ST comprised (1) two questionnaires filled by the parents and teachers of the participants and (2) four behavioral tests: (a) 10 of two-pair dichotic digits, (b) 15 monaural presentations of a frequency identification pattern test, (c) 10 monosyllables in noise in each ear and (d) a digit memory span test.
Procedures. Children who met the above criteria were assessed with the ST, before completing the clinical test (CT) battery.

Results: Among the 21 participants, three failed at least two ST and CT. Among the 18 remaining participants, 11 passed all the four ST, six failed only one ST and one failed two ST. None of the participants failed the CT and did not fail the ST.

Conclusions: These preliminary results suggest that failing two or more of the ST might be a good criterion to predict children at risk of presenting APD and to be referred for a full APD evaluation. They are promising to collect further data.