Digit Triplet Screening Test: tablet application & current research directions

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Overview

Advantages of speech-in-noise screening

Test platform available

Current research directions
Automated Digit Triplet screening Test (DTT)

Relevant

Communication ≠ detection of short tones
Communication = understanding people, often in difficult listening situations
Valid & sensitive

- Strong correlation with pure tone audiometry

- High sensitivity and specificity values (~90%) for detecting persons with early signs of high frequency hearing loss
Fast & precise

- 1 threshold per ear
- test duration = 3 min per ear
- measurement error = 0.8 dB

This means that in 95% of the cases the measured SRT differs less than 1.6 dB from the true SRT.

The smaller the measurement error, the more precisely one can measure subtle changes in time or differences between subjects.
Easy, accessible & affordable

- No need for a high-quality sound-treated booth to obtain reliable results
- No need for specialized equipment
- No need for a trained test administrator
- Low load on cognitive abilities
Tablet application

Portable set-up and support
  tablet (+charger) and headphones
  DTT software
  Flemish and French version exist
  customized software possible
  Local (tablet) and central storage (wifi) of results

  instruction manual
  yearly callibration
De gehoortest

Uw LINKER oor wordt nu getest.

7 8 9
4 5 6
1 2 3
← 0 OK

Reeks: 1/27

- Geef telkens drie cijfers in en klik daarna op Ok.
- Indien u niets heeft verstaan, moet u gokken.
- U kunt een fout corrigeren met de backspace-toets of door op de rode knop te klikken.
Test de l’audition

Votre oreille GAUCHE est maintenant vérifiée.

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Stimulus : 1/27

- Enter the three numbers and click on OK.
- Si vous n’avez rien compris, essayez de deviner et donnez toujours une réponse.
- You can correct a mistake with Backspace or by clicking on the red button.
Current research directions

• Further improvement of sensitivity and specificity

• Shortening of test duration

• Feasibility for school age hearing screening

• Feasibility in preschool children and the elderly, influence of cognitive abilities

• Setting up referral criteria for different age groups
Questions?

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