

Determining normative data for the digit speech-in-noise test in children

Published: 07-04-2011

Last updated: 27-04-2024

To determine normative data for the newly developed digit speech-in-noise test in normal hearing (NH) children.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Hearing disorders
Study type	Observational non invasive

Summary

ID

NL-OMON39228

Source

ToetsingOnline

Brief title

Determining normative data for the DIN-test in children

Condition

- Hearing disorders

Synonym

hearing impairment, hearing loss

Research involving

Human

Sponsors and support

Primary sponsor: Vrije Universiteit Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: children, digits, noise, speech perception

Outcome measures

Primary outcome

To determine normative data for the digit speech-in-noise test in children for three different noise conditions.

Secondary outcome

To determine the reliability of the test.

Study description

Background summary

The effect of hearing impairment in children on participation in everyday life is not only reduced detection of auditory stimuli but also reduced speech understanding abilities. As children are most of the time in acoustically challenging environments (e.g. at school), it is important to know their speech understanding abilities in noise. No valid Dutch speech-in-noise-test for children is available at the moment. Recently, the audiology department of VU University Medical Center developed a new speech-in-noise test with digit-triplets as speech material for adults. This test has the advantage of measuring the ability of understanding speech in noise without a large demand on cognitive skills like e.g., language proficiency.

Studies with the new developed digit-triplet speech-in-noise test were promising. A specific version of this test, a digit speech-in-noise test, suitable for children was developed as well, but age-specific norm data is not available yet. The norm data have to be determined for different noise conditions.

Study objective

To determine normative data for the newly developed digit speech-in-noise test in normal hearing (NH) children.

Study design

Cross sectional survey

Study burden and risks

Not applicable

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Children (2-11 years)

Elderly (65 years and older)

Inclusion criteria

Normal hearing children group (130):

Hearing thresholds: 20 dB or better at all octave frequencies from 250 to 8000 Hz

Age: between 3 and 12 years

Native language: Dutch; Normal hearing adult reference group (20):

Hearing thresholds: 20 dB or better at all octave frequencies from 250 to 8000 Hz

Age: between 18 and 30 years

Native language: Dutch

Exclusion criteria

Abnormal tympanogram
Mental disorder
Speech disorder

Study design

Design

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Diagnostic

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 18-05-2011

Enrollment: 150

Type: Actual

Ethics review

Approved WMO

Date: 07-04-2011

Application type: First submission

Review commission: METC Amsterdam UMC

Approved WMO

Date: 18-02-2013

Application type: Amendment

Review commission: METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL35446.029.11