Second language learning in adolescents with cochlear implants

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Niet van toepassing
Anders
-
Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON26678

Bron NTR

Verkorte titel SENCHA

Aandoening

hearing impairment, deafness, cochlear implant, second language acquisition, second language learning

slechthorendheid, doofheid, cochleair implantaat, tweede taal acquisitie, leren van een tweede taal

Ondersteuning

Primaire sponsor: Universitair Medisch Centrum Groningen **Overige ondersteuning:** NWO

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Second language proficiency as measured in self- and proxy-reports, as well as in accuracy and reaction times on different tasks.

Toelichting onderzoek

Achtergrond van het onderzoek

Children with cochlear implants (CIs) learn Dutch through the input of their CIs, which offers qualitatively different sensory input than ears. Therefore, these patients are thought to develop auditory processing patterns different from normal-hearing (NH) populations. Also, decoding auditory input into meaningful linguistic information is likely requiring greater processing capacities than for NH children.

We postulate that these two CI-related factors (sensory and cognitive) may limit the capactity to learn a second spoken language (English) successively to their native language (Dutch). Mastering a second language, particularly English, has direct advantages for implanted adolescents, for example for pursuing internationally oriented careers. Also, speaking a second language likely improves cognitive control, helping these adolescents to communicate better.

The objectives of the current study are

(1) To evaluate the abilities of implanted adolescents to learn a second language in the current school settings compared to normal-hearing and hearing-impaired peers;

(2) To identify and quantify environmental, sensory and cognitive aspects that affect second language acquisition in implanted adolescents;

(3) To assess positive effects of successful L2 acquisition on CI adolescents' speech perception in adverse listening situations.

The first stage of the project (questionnaire stage) assesses self-perception of second language learning; the second stage of the project (behavioural testing) allow objective testing of second language abilities. Adolescent participants and their parents and teachers will answer questions regarding their language-, hearing and cognitive functioning, as well as demographics and environmental factors. Standard behavioural tests for language-, hearing and cognitive functioning will also be administered.

All participants will be Dutch and healthy, except for their hearing status. The population of interest is adolescents who underwent paediatric cochlear implantation. They are expected to experience difficulties during second language learning. Control groups are normal-hearing adolescents, and hearing impaired adolescents not implanted with cochlear implants.

There is no known risk, nor benefit associated with participation. Questionnaires will take maximally 3 hours to complete. Participation in experiments will take maximally 6 hours (2 sessions, maximally 3 hours per session) with adequate breaks to prevent fatigue.

Doel van het onderzoek

Children with cochlear implants (CIs) learn Dutch through the input of their CIs, which offers qualitatively different sensory input than ears. Therefore, these patients are thought to develop auditory processing patterns different from normal-hearing (NH) populations. Also, decoding auditory input into meaningful linguistic information is likely requiring greater processing capacities than for NH children.

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Onderzoeksopzet

Not applicable

Onderzoeksproduct en/of interventie

3 - Second language learning in adolescents with cochlear implants 7-05-2025

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Age: 12- 17 years
- Cognitive capacities within normal-to-above-normal range (non-verbal IQ > 80 points)
- Native Dutch speakers, English at school
- Enrolled in secondary education ('voortgezet onderwijs'), can be either special education or standard education, but not primary education ('basisschool')

• Hearing status: Normal-hearing, hearing impaired without cochlear implant, hearing impaired with cochlear implant

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Only applicable for behavioural stage, not questionnaire stage:

- Low cognitive capacities (non-verbal IQ <80 points)
- Communication disorder (i.e., diagnosed with autism spectrum disorder)
- A history of neurological and psychiatric disorder other than a diagnosis of ADD/ADHD

Onderzoeksopzet

Opzet

Туре:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Controle: N.v.t. / onbekend	

Deelname

Nederland	
Status:	Anders
(Verwachte) startdatum:	17-05-2015
Aantal proefpersonen:	294
Туре:	Onbekend

Ethische beoordeling

Niet van toepassing Soort:

Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 45218 Bron: ToetsingOnline Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL4999
NTR-old	NTR5154
ССМО	NL51608.042.14
OMON	NL-OMON45218

Resultaten

Samenvatting resultaten

Not applicable