The role of specific brain regions in false auditory perceptions using tDCS

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1) There will be an effect of anodal stimulation to the left STG with reduced response bias on the signal detection task 2) This effect is specific for speech signal detection.

Ethische beoordeling	Niet van toepassing
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON29461

Bron
NTR

Verkorte titel
tDCS in false signal detection

Aandoening

None

Ondersteuning

Primaire sponsor: Department of Psychology, Durham University, UK;
University Medical Center Groningen
Overige ondersteuning: For the UK part: Wellcome Trust Centre (grant no: WT108720)
For the NL part: University Medical Center Groningen

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Effect of tDCS on detection bias

Toelichting onderzoek

Achtergrond van het onderzoek

Transcranial direct current stimulation (tDCS) is a noninvasive brain stimulation technique.Previously we effect of tDCS detection bias during signal detection task. The present study will replicate and extend a previous study into the effect of tDCS applied to the left superior temporal gyrus on basic auditory signal detection, as well as testing whether any effect is specific to speech-based stimuli. Control condition is now both placebo and active.

Doel van het onderzoek

1) There will be an effect of anodal stimulation to the left STG with reduced response bias on the signal detection task

2) This effect is specific for speech signal detection.

Onderzoeksopzet

Participants recruitment immediately after METC approved;

2. Measurements finalized as soon as enough participants are found;

3. Primary and secondary outcomes up to 6 months after the data were collected for the last subject.

Onderzoeksproduct en/of interventie

transcranial direct current stimulation

Contactpersonen

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1) There will be a main effect of stimulation condition; specifically, that anodal stimulation to the left STG will lead to a reduced response bias (â, see section 2.6.1) on the signal detection task, compared to the other conditions.

2) We will also test for an interaction between stimulation condition and stimulus type; that is, to test for a difference in the effect of stimulation on response bias (â) to voice and tone stimuli. If any effect of stimulation is specific to voice stimuli, this would imply the effects are due to stimulation of language specific areas of cortex (e.g., Wernicke’s area). In contrast, if there is an effect of stimulation on all types of auditory signal detection, this would imply a more general effect of stimulation on auditory stimuli.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1) (suspected) pregnancy

2) not signing the informed consent

3) family history of epilepsy

4) non-removable metallic objects on the head or arms,

5) a history of skin conditions (e.g., eczema).

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	N.v.t. / één studie arm
Blindering:	Dubbelblind
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	20-04-2018
Aantal proefpersonen:	108
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing

Soort:	Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL6925
NTR-old	NTR7121

Register	ID
Ander register	: UMCG Research Register: 201700875

Resultaten