Inhibition and orienting processes in the human brain - overlap and differences between stop-P3 and novelty-P3

Published: 28-10-2013
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: To investigate the overlap and differences in neurophysiological activity related to inhibition and orienting responses in the human brain.

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

Summary

ID

NL-OMON38565

Source
ToetsingOnline

Brief title
Inhibition and orienting processes in the human brain

Condition

- Other condition

Synonym
but rather focuses on a fundamental question regarding mechanisms of inhibition and orientation., The aim of the current research does not pertain to a specific pathology

Health condition

Geen aandoening, het onderzoek richt zich op mechanismen van inhibitie en oriëntatie bij gezonde deelnemers.

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Utrecht
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Cognition, EEG, P3

Outcome measures

Primary outcome

Event Related Potentials (ERPs) as recorded by EEG related to inhibitory

mechanisms (stop-P3) and to orienting mechanisms (novelty-P3) will be assessed.

Secondary outcome

Not applicable

Study description

Background summary

Neurophysiologically, the cognitive processes of inhibition and orienting evoke so-called event-related potentials, which can be measured by electroencephalogram. Both processes and their neurophysiological representations have been studied independent of each other as of yet frequently. However, there is a paucity regarding studies on the overlap and differences between these processes and their neurophysiological representations.

Study objective

: To investigate the overlap and differences in neurophysiological activity related to inhibition and orienting responses in the human brain.

Study design

In the current experiment we plan to implement two neuropsychological tasks assessing brain activity as recorded by electroencephalogram during inhibition and during orienting.

Intervention

Not applicable

Study burden and risks

No risk is involved in this study. EEG is a non-invasive measurement. The burden on the participants is expected to be minimal.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

between 18-45 years old.

Exclusion criteria

- (history of) epilepsy
- psychopathology
- current drug use;Note, that the decision whether a potential subject meets the exclusion criteria is based on self-reports of the subjects.

Study design

Design

Study type:	Observational non invasive
Intervention model:	Crossover
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Other

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	04-12-2013
Enrollment:	25
Type:	Actual

Ethics review

Approved WMO

Date:	28-10-2013
Application type:	First submission
Review commission:	METC NedMec

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	NL44111.041.13