The role of dopamine and noradrenaline in probability and reward value processing.

No registrations found.

Ethical review	Positive opinion
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON27311

Source
NTR

Health condition

dopamine antagonism, noradrenaline antagonism, subjective probability processing, subjective value processing, dopamine antagonisme, noradrenaline antagonisme, subjectieve waardevolheid, subjectieve waarschijnlijkheid.

Sponsors and support

Primary sponsor: Utrecht University
Source(s) of monetary or material Support: Netherlands Organisation for Scientific Research (NWO)

Intervention

Outcome measures

Primary outcome

Cue specific P200 event-related potential relative to no cue, cue specific P300 event-related potential relative to no cue. Independent variables: Subjective value, Subjective probability, dopaminergic antagonism by haloperidol and noradrenergic antagonism by clonidine.

Secondary outcome

- Velocity scaling measurement

- Spontaneous motor activity measurement

- Event related potentials in response to the target

- Reaction times in response to the target

- Target omissions and percentage correct responses

- Questionnaire scores (attentional control, State-trait anxiety inventory)

Study description

Study objective

We hypothesize that the brain dopamine system plays a role in subjective probability processing and we hypothesize that both the brain dopamine and noradrenaline system play a role in subjective value processing.

Study design

Participants will be tested during 3 separate sessions.
Measurements will be made 3 hours after capsule intake.

Intervention

- one capsule containing 150 microgram clonidine

- one capsule containing 2 milligram haloperidol

- one capsule containing placebo

Contacts

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Eligibility criteria

Inclusion criteria

Male, non-smoking, age between 18-45 years and passing the screening (assessing medical history and blood pressure/heart rate)

Exclusion criteria

Psychopathology, current medication use, (history of) serious medical condition(s), low blood pressure, heart rate above 100 bpm or below 60 bpm in rest.

Study design

Design

Study type:	Interventional
Intervention model:	Crossover
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-05-2015
Enrollment:	36
Type:	Anticipated

Ethics review

Positive opinion

Date:	04-03-2015
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

ID: 44020
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL4917
NTR-old	NTR5019
CCMO	NL51144.041.14
OMON	NL-OMON44020

Study results