

The neural mechanism of social reward and punishment anticipation in social anxiety disorder

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This aim of this study is to investigate the neural mechanisms of the anticipation of a social evaluation during task induced brain activity, and secondly during the anticipation of a public speech.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Anxiety disorders and symptoms
Study type	Observational non invasive

Summary

ID

NL-OMON33511

Source

ToetsingOnline

Brief title

social reward and punishment in SAD

Condition

- Anxiety disorders and symptoms

Synonym

social anxiety, social phobia

Research involving

Human

Sponsors and support

Primary sponsor: Universiteit Leiden

Source(s) of monetary or material Support: Ministerie van OC&W,NWO VIDI subsidie (Dr. K. Roelofs)

Intervention

Keyword: fMRI, punishment, reward, social anxiety disorder

Outcome measures

Primary outcome

Behavioural measures: reaction times on Social incentive delay task. Neural measures: Blood-oxygen-level-dependent (BOLD) response during the SID task

Secondary outcome

Neural measures: BOLD connectivity patterns during the anticipation of a speech

Study description

Background summary

Social anxiety Disorder (SAD) is characterised by persistent fear of social interaction and social evaluation. While brain research so far has focussed mainly on the processing of emotional stimuli, the neural basis of other crucial cognitive processes remains unclear. In this project the focus will be on brain activity and connectivity during the anticipation of social evaluation measured with two different experimental manipulations. First participants will perform a social reward and punishment paradigm. It is expected that SAD patients will show greater sensitivity to social punishment, this sensitivity is hypothesized to be reflected by alterations of nucleus accumbens activity. The second focus will be on the anticipation of social evaluation in the form of preparing a presentation in the scanner. For this aim we will apply resting state scans before and after the instruction to give a free speech. Here it is to be expected that SAD patients will show greater arousal, accompanied by amygdala activity and connectivity related to larger anticipatory anxiety.

Study objective

This aim of this study is to investigate the neural mechanisms of the anticipation of a social evaluation during task induced brain activity, and secondly during the anticipation of a public speech.

Study design

Static group comparison design: SAD patients compared to healthy control participants.

Study burden and risks

Participants will be tested in an MRI scanner, which can be of some discomfort because of load noise and the instruction to move as little as possible. Especially SAD patients might experience some psychological distress after the social interaction and arithmetic task. It should be noted however that these procedures have been applied elsewhere repeatedly, and long-term risk are negligible. This project will not be of direct benefit to the SAD patients, but will be of importance in the understanding of the neural basis of dysfunctional social behaviour in SAD.

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

Diagnosis of social anxiety according to the Structural clinical interview for DSM-IV axis I disorders (SCID-I)

Exclusion criteria

- The use of benzodiazepines more than the equivalent of 20 mg of oxazepam
- The use of antipsychotic medication
- Substance abuse and/or addiction (alcohol and drugs)

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Primary purpose:	Other

Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	28-11-2009
Enrollment:	40
Type:	Actual

Ethics review

Approved WMO	
Date:	09-10-2009
Application type:	First submission
Review commission:	METC Leids Universitair Medisch Centrum (Leiden)

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	NL28478.058.09