

# Neurocognitive differences between anger and disappointment in negotiations.

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<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruiting
<b>Health condition type</b>	Economic and housing issues
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON32873

### Source

ToetsingOnline

### Brief title

ADN

### Condition

- Economic and housing issues

### Synonym

n.a.

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Universiteit Leiden

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** Anger, Disappointment, Interpersonal emotions, Negotiations

## Outcome measures

### Primary outcome

We aim to understand how different regions within the PFC and the limbic structures are important for the decision of how much to offer opponents in a negotiation and how these brain regions are influenced by opponents emotions (anger and disappointment). To this end, we will acquire fMRI data and behavioral responses of participants aged 18-25 years.

### Secondary outcome

n.a.

## Study description

### Background summary

Negotiations can be very emotional. But how do emotions affect the bargaining process? Research on the interpersonal effects of emotions in negotiations has focused mainly on the effects of anger. We, however, are also interested in the effects of another negative emotion that is often communicated in negotiations, namely disappointment. Anger and disappointment are two negative emotions, but have been shown to have different effects on others. Previous research has shown that in high power positions anger and disappointment are both advantageous: people make high offers to high power disappointed and angry opponents. In low power positions, however, anger backfired but disappointment did not: people offered more to low power disappointed than to low power angry opponents. Previous results showed that anger was reciprocated (anger evoked anger in others), but disappointment was complemented. Disappointment evoked guilt in others, which caused opponents to offer more. As these behavioral results already revealed, anger and disappointment may activate different parts of the brain. Indeed the experience of anger has been shown to be correlated with activity in the left prefrontal cortex and the experience of guilt with activity in the anterior ventromedial prefrontal cortex. This study further aims to examine the processes that underlie the interpersonal effects of anger

and disappointment.

### **Study objective**

The main objective is to examine whether different negative emotions have different behavioral and physiological effects on opponents in bargaining and whether these behavioral or physiological effects influence each other. We focus on anger and disappointment, for these are two of the most often communicated emotions in bargaining.

### **Study design**

This study uses an experimental design. Participants will perform a computerized decision-making task, and we will measure brain activation using functional Magnetic Resonance Imaging (fMRI) while they are performing the task.

### **Intervention**

n.a.

### **Study burden and risks**

There are no risks associated with behavioral testing except the occasional possibility of some frustration with poor performance or fatigue. Testing will stop if a subject displays frustration or appears tired. Moreover, there are no known risks associated with participating in an fMRI study.

Although there is no direct benefit to the participants from this proposed research, there are greater benefits to society from the potential knowledge gained from this study. In this study we strive to better understand social decision making behavior by taking into account the cognitive and neural constraints on this process, as investigated by psychology and neuroscience. Moreover, as social decision making is a very emotional process, it is important to include people's experienced emotions. In addition, our results may give insight on the effectiveness of certain emotions.

The importance of the benefits gained from this research thus far outweighs the minimal risks involved.

## **Contacts**

### **Public**

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Participants between 18 and 25 with no history of neurological disorder/disease and no counter-indications to MRI will be included in this study. All participants will be right-handed native Dutch speakers with normal vision or contact lenses.

### Exclusion criteria

Potential participants will be prescreened for contraindications for fMRI, which include metal implants, heart arrhythmia, claustrophobia, and possible pregnancy (in adult females). They will additionally be prescreened for head trauma, premature birth, learning disabilities, and history of neurological or psychiatric illness and/or use of psychotropic medications. Because of the difficulties in interpreting cognitive studies in subjects with Dutch as a second language, only native-Dutch speakers will be asked to participate in the study. Finally, left-handed individuals will be excluded from the study because some left-handers have substantially different brain organization relative to right-handers.

## Study design

### Design

**Study type:** Interventional

Masking: Single blinded (masking used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruiting

Start date (anticipated): 22-01-2010

Enrollment: 20

Type: Actual

## Ethics review

Approved WMO

Date: 26-10-2009

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	NL29840.058.09