

# Recognition of facial emotions, their reinforcement values and related approach and avoidance behavior in psychopathy.

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This study is a systematic evaluation of the (explicit and implicit) processing of facial emotions and learning based on facial emotions. In the first part we will investigate recognition of different facial emotions, at varying intensities....

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Personality disorders and disturbances in behaviour
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON32319

### Source

ToetsingOnline

### Brief title

Facial emotions and emotional learning in psychopathy.

### Condition

- Personality disorders and disturbances in behaviour

### Synonym

Psychopathy

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Universitair Medisch Centrum Sint Radboud

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

## Intervention

**Keyword:** Facial emotions, Learning, Performance monitoring, Psychopathy

## Outcome measures

### Primary outcome

Part 1 facial recognition task: behavioral data and eyetracking data

Part 2 approach/ avoidance taak: behavioral data

Part 3 learning task: behavioral data and the rERN, fERN, and Pe as a psychophysiological response to error or negative feedback.

### Secondary outcome

Mini Neuropsychiatric Interview (MINI): assessment of DSM-IV Axis 1 disorder

SCID-II: assessment of DSM-IV Axis II disorder

PCL-R: Checklist designed to measure levels of Psychopathy

PPI: self-report assessment of psychopathy

STAI/ STAXI: self-report measures of state and trait anger and anxiety

## Study description

### Background summary

Research has shown that psychopathy is associated with in the recognition of facial emotions. However, studies show mixed results with respect to which emotions are less well recognized, e.g. negative emotions only or also positive emotions. Unclear is also whether this recognition deficit is only found under condition of low emotional intensity or also at full blown expressions. Till now, results are based on explicit task (naming the emotion seen on visual stimuli), but not on implicit tasks such as task measuring approach and avoidance reactions to facial emotions.

Besides abnormalities in facial emotion recognition, individuals with psychopathy show problems with certain forms of learning. Reserach in this

field is mostly based on behavioral data. Only one study has related this deficit to psychophysiological markers of learning. It was found that people with psychopathy show deficits in using the Response and Feedback Related Negativity (rERN and fERN), two ERP components generated in response to errors or negative feedback. Smaller Error Positives (Pe), markers for conscious error detection were also found.

One form of learning that has received no attention so far in the research of psychopathy is social referencing. This form of learning is based on using facial emotions as feedback cues, and is thought to be important for learning in social situations.

Goal of therapy for treating psychopathy is resocialization. Insight into different aspects relevant for social learning could help make therapies more effective in the future.

## **Study objective**

This study is a systematic evaluation of the (explicit and implicit) processing of facial emotions and learning based on facial emotions. In the first part we will investigate recognition of different facial emotions, at varying intensities. Eyetracking will be used to examine how faces are scanned during the recognition task. In the second part an approach/ avoidance task based on facial expressions will be used as an implicit measure of how people with psychopathy react to facial emotions. In the last part we will use a learning task in which facial emotions are used as feedback cues to investigate behavioral difficulties in social referencing. Additionally learning related ERP components (rERN, fERN, and Pe) will be examined to investigate whether the processing of errors and feedback is affected by psychopathy and underlying behavioral learning difficulties.

## **Study design**

The study has a cross-sectional design with a healthy control group matched to the patient group on age, sex and educational level.

## **Study burden and risks**

There is no risk associated with participation.

# **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

- Patients sentenced for commission of serious crime(s)
- Patients meeting the DSM-IV criteria for antisocial personality disorder (ASPD) scoring below 26 on the Psychopathy Check List Revised (PCL-R)
- Patients scoring  $\geq 26$  on the PCL-R (meeting criteria for psychopathy)

### Exclusion criteria

- DSM-IV Axis I disorder
- DSM-IV Axis II disorder
- Somatic disorders
- Pre-test use of drugs and substances

## Study design

## Design

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

**Primary purpose:** Basic science

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-09-2008
Enrollment:	60
Type:	Anticipated

## Ethics review

Approved WMO	
Application type:	First submission
Review commission:	CMO regio Arnhem-Nijmegen (Nijmegen)

## 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	NL23222.091.08