Neural correlates of moral vs. immoral behavior in group contexts

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

Summary

ID

NL-OMON34070

Source
ToetsingOnline

Brief title
MOR

Condition

- Other condition

Synonym
n.a.

Health condition

geen aandoening

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Leiden
Source(s) of monetary or material Support: NWO - Spinoza

Intervention

Keyword: brain activity, groups, morality

Outcome measures

Primary outcome

The project will include three studies in which we will examine whether people are more motivated to perform well on a moral task compared to a competence task and what brain activation is associated with this heightened motivation (study 1), whether people are more motivated to perform well on a moral task compared to a competence task when they are observed by and given feedback from an ingroup or outgroup member and what brain activation is associated with this feedback (study 2), and whether people are more sensitive to moral behavior compared to competent behavior of an ingroup or outgroup member and what brain activation is associated with the reaction to that behavior (study 3). To this end, we will perform three studies to acquire fMRI data and behavioral responses of participants aged 18-25 years.

Secondary outcome

The goals of the current project are to use functional Magnetic Resonance Imaging (fMRI) to:

1. Identify brain regions that are associated with performance on a task indicative of morality (compared to a task indicative of competence).

2. Identify brain regions that are associated with receiving feedback from ingroup vs. outgroup members concerning performance on a task indicative of morality (compared to a task indicative of competence).

3. Identify brain regions that are associated with the reaction to an ingroup vs. outgroup member*s performance on a task indicative of morality (compared to a task indicative of competence).

4. Correlate this brain activation with the actual performance on the task.

5. An additional objective of these studies is to examine whether this brain activation is related to the motivation to be moral (studies 1 and 2) or to the keenness to monitor whether other ingroup members transgress moral group norms as indicated by participants on self-report questionnaires.

Study description

Background summary

Moral behavior is an important factor in social evaluation, particularly in group contexts. People want to connect the self to groups (Leach, Ellemers, & Barreto, 2007) or organizations (Ellemers, et al., in press) that seem moral, and are motivated to display behavior that is seen as moral as a way to secure inclusion in the group (Ellemers, Pagliaro, Barreto & Leach, 2008). Due to the desire to self-present as a moral person to important others, conventional (self-report) measures make it difficult to assess the underlying processes (e.g., experience of threat, motivation to suppress immoral behavior) relevant to these responses. The proposed research aims to assess motivational and cognitive processes associated with the social implications of morality more directly and continuously, by examining brain activity associated with moral vs. immoral behavior in group contexts. Importantly, this project thus focuses on the neural correlates of moral behavior, rather than moral reasoning which has been studied more extensively in previous research (for a review see Moll, Zahn, De Oliviera-Souza, Krueger, & Grafman, 2005) and it includes moral behavior in group contexts.

Study objective

The main objective of this project is to examine the neural correlates of the motivation to be moral in group contexts. We will address three related issues: how the desire to be seen as moral affects people*s self-views and motivation to display behavior attesting to their morality and what brain activation is associated with this motivation (study 1), how they respond to feedback from ingroup vs. outgroup members regarding their own moral behavior and what brain activation is associated with this feedback (study 2), and how they respond to the moral vs. immoral behavior displayed by other ingroup vs. outgroup members - depending on how they think this reflects on the self - and what brain activation is associated with the reaction to that behavior (study 3).

Study design

In the three studies of this project an experimental design is used.
Participants will perform an Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998) and we will measure brain activation using functional Magnetic Resonance Imaging (fMRI) while they are performing the task.
In the Implicit Association Test (IAT), two target concepts are associated with two attributes. The two target concepts in this study consist of female faces with headscarves (i.e., resembling out-group members) and female faces without headscarves (i.e., in-group members). Attributes consist of positive and negative pictures. During the test, participants learn to press a left or right key for each type of picture. In the congruent condition, female faces without a headscarf are associated with positive pictures (i.e, these types of pictures are assigned to the same key respons) and female faces with a headscarf are associated with negative pictures. In the incongruent condition female faces without a headscarf are associated with negative pictures, and female faces with a headscarf are associated with positive pictures. Because females without headscraves are expected to resemble in-group members, it is expected that participants show a negative bias in the incongruent condition (i.e., more errors and greater reaction times on trials in this condition), because people tend to be more positive towards their in-group members than towards out-group members (i.e., ingroup favoritsm). Moreover, because we are interested in the motivation to be moral, we add an instruction to the implicit association test in which either the moral implications or implications concerning competence are emphasized: in the introduction of the IAT, participants are either told that the test measures their values concerning equal treatment of and discrimination against groups (morality instruction) or that the test measures how precise they are in sorting pictures and how well they are able to process new information (competence instruction).
The IAT with two types of instructions will be used in all three studies. However, feedback given by an ingroup or outgroup member is included in study 2, and in study 3, participants are not performing the task themselves. Instead they observe and are asked to respond to an ingroup or outgroup member*s performance on the task.

Study burden and risks

There are no risks concerning this research project.

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

1. Healthy adults without a history of neurological disorders
2. Right-handed
3. No counter-indications for MRI
4. Native Dutch speakers

Exclusion criteria

1. Lefthanded
2. No history of psychiatric and/or neurological disorders
3. Counter-indications for MRI (such as metal implants, heart arrhythmia, claustrophobia, and possible pregnancy)

Study design

Design

Study type: Observational non invasive

Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Other

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	03-03-2011
Enrollment:	120
Type:	Actual

Ethics review

Approved WMO

Date:	11-02-2011
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	NL34488.058.10