

The Neurobiology of Buying Behavior

Published: 26-07-2011

Last updated: 29-04-2024

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Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Lifestyle issues
Study type	Observational invasive

Summary

ID

NL-OMON36085

Source

ToetsingOnline

Brief title

The Neurobiology of Buying Behavior

Condition

- Lifestyle issues

Synonym

Excessive buying, shopaholic

Research involving

Human

Sponsors and support

Primary sponsor: Rijksuniversiteit Groningen

Source(s) of monetary or material Support: Subsidie van de Gratama Stichting van de Rijksuniversiteit Groningen

Intervention

Keyword: award, excessive buying, fMRI, inhibition

Outcome measures

Primary outcome

BOLD response in the brain regions involved in inhibition and reward processing.

Secondary outcome

Not applicable.

Study description

Background summary

The current knowledge about excessive buying is largely based on knowledge obtained from interviews and survey studies. There is very little neurobiological research on excessive buying. There are only two functional MRI studies available, of which one study is based on only three excessive buyers. More insight into the neurological basis of this common and dysfunctional kind of consumer behavior is required.

Moreover, the currently available fMRI studies on excessive buyers focus on the activation in the "reward center" of the brain. Differences between excessive and non-excessive buyers regarding the inhibition system have not been studied yet, while excessive buyers often experience a lack of control over their buying behavior (Dittmar et al, 2007).

Through functional imaging we want to study (the difference in) the brain activity of excessive and non-excessive buyers and the influence of friendship on excessive buying. With excessive buyers we expect a lower activation in the brain areas involved in response inhibition than with non-excessive buyers, while confronted with attractive products. We also expect that excessive buyers are better at self-regulation (i.e. a relatively high activation in the brain areas involved in response inhibition) when being reminded of a close friendship.

Study objective

The purpose of this study is to investigate whether excessive buyers are less able to inhibit their response to attractive stimuli than non-excessive buyers. Both because of a lower activation in the brain areas involved in response inhibition and increased activation of the reward -related brain areas, when confronted with attractive products. Secondary objective of this research is to

study the role of friendship in the capacity for inhibition.

Study design

Based on an existing paradigm we developed a Go / No-go task. Based on this task, both the behavioral response and the neural response are measured. Individual adjustments in the task will be made; for each subject, a photograph of the subject with good friend to be inserted. Furthermore, the task will be performed both by a group of excessive and a group of non-excessive buyers. Subjects are classified as 'excessive' or 'non- excessive' buyer based on the excessive buying scale (Ridgway et al, 2008). Before the scan will be conducted, participants will be asked to fill in the Panas questionnaire, and the Go / No-go task will be explained. The subsequent fMRI scan, in which participants will do the Go / No-go task, will take around 60 minutes. Halfway through the scan, participants will be asked to describe an experience in which they have experienced close friendship. This will take 5 minutes. After this description participants will continue with the Go / No-go task. After the scan, participants are asked to complete a short questionnaire about their buying urge and buying intentions. Also, the purpose of the study will be explained and remaining questions will be answered. In total, the study will last up to 2 hours.

Study burden and risks

There are no risks associated with this research. Subjects will be exposed to a magnetic field of 3 Tesla and rapidly changing magnetic gradients and radiofrequency fields. This field is used on a routine basis in MRI and fMRI research. To date, no adverse effects have been described. In rare cases, a peripheral nerve (abdomen) is stimulated by the changing magnetic gradients. This causes a tickling sensation, but is harmless.

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

Healthy women

Age: 18-25 years

Use of oral contraceptive pill

Right handed

Score on Excessive Buying Scale (Ridgway et al., 2008) lower than 15 or greater than 25.

Exclusion criteria

1. MR incompatible implants in body
2. Neurological and psychiatric disorders (epilepsy, neuro-trauma, psychosis, depression, anxiety disorders (including claustrophobia), both present and past)
3. Use of medications that may affect task performance
4. Drug or alcohol abuse
5. Claustrophobia
5. The desire not to be informed of any brain abnormalities that may be observed as a result of the scans
6. (Suspicion of) pregnancy
7. Any tattoos and / or non-removable piercings

Study design

Design

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 26-10-2011

Enrollment: 50

Type: Actual

Ethics review

Approved WMO

Date: 26-07-2011

Application type: First submission

Review commission: METC Universitair Medisch Centrum Groningen (Groningen)

Approved WMO

Date: 09-01-2012

Application type: Amendment

Review commission: METC Universitair Medisch Centrum Groningen (Groningen)

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

CCMO

ID

NL36758.042.11