The Effect of Exposure to Thinness and Fatness Comments on Female Relative Right Frontal Cortical Activity

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The primary objective of this study is to examine whether sociocultural pressures can activate the neural substrates of avoidance behaviour i.e. increased relative right frontal cortical activity. A secondary objective is to determine whether...

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

Summary

ID

NL-OMON31449

Source
ToetsingOnline

Brief title
Thinness, Fatness and Frontal EEG Asymmetry

Condition

- Other condition

Synonym
Healthy females

Health condition

Healthy females

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Groningen
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: Fatness and Frontal EEG Asymmetry, Thinness

Outcome measures

Primary outcome

Right frontal asymmetry should increase either because participants are *thinspired* after being primed with the social rewards of thinness and/or because participants *fear fatness* after being primed with the social punishments associated with fatness.

Secondary outcome

We also expect that because people are in general more strongly influenced by negative information than positive information, the negative fatness messages should induce greater right frontal cortical activity than thinness messages when females are faced with the high calorie food.

Study description

Background summary

A significant body of literature has linked western culture*s promotion of thinness and stigmatisation of fatness with food restriction in females. This study is an attempt to link sociocultural pressures to physiological changes in brain state that are thought to theoretically underpin such eating behaviour. In doing so, the findings of this study could provide an important insight into dieting and disordered eating behaviour in females.

Study objective

The primary objective of this study is to examine whether sociocultural pressures can activate the neural substrates of avoidance behaviour i.e. increased relative right frontal cortical activity. A secondary objective is to determine whether negative fatness messages have a greater impact upon right relative frontal cortical activity than positive thinness messages.

Study design

Female participants (all right handed) will be randomly assigned to either a thinness or a fatness comments condition. Resting EEG will be recorded for eight minutes before being exposed to 10 sequences of 3 positive thinness comments (or 3 negative fatness comments) followed by an image of a chocolate food reward in which they indicate their preference for this reward. After the experiment stimuli resting EEG will again be taken for a period of 8 minutes.

Study burden and risks

EEG experiments are not invasive. The nature of stimulation is similar to that used regularly in body image research and results in a temporary mild discomfort in healthy females. All participants will be debriefed about the experiment.

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

Between 18 and 40 years
Healthy right-handed females

Exclusion criteria

Females with a history of eating pathology (anorexia or bulimia) cannot participate in this experiment.
Females younger than 18 or older than 40 years.
Females presently engaged in a weight-loss diet.

Study design

Design

Study type: Observational non invasive

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

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	22-02-2008
Enrollment:	30
Type:	Actual

Ethics review

Approved WMO Date:	22-02-2008
Application type:	First submission
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	ID
CCMO	NL21239.042.07