

The Neurobiology of Being in Love

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The purpose of this research is the studying the neurobiology of being in love and related aspects, such as age, duration of the relation, differences in sex, jealousy and the ending of a relationship.

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

Summary

ID

NL-OMON34071

Source

ToetsingOnline

Brief title

The Neurobiology of Being in Love

Condition

- Other condition

Synonym

n.a.

Health condition

geen

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: age, fMRI, jealousy, lovesickness

Outcome measures

Primary outcome

The differences/similarities in brain activity in men and women being in love, the effect of age and the influence of the duration of the relationship will be related, also cultural influences will be included.

The pattern of brain activity after voluntary or forced ending of a relationship will be related to the pattern of brain activity of depressive patients.

Secondary outcome

n.a.

Study description

Background summary

Very little neurobiological research is performed being in love/lovesickness. The few available fMRI-studies concerned especially young people. One study investigated with women if a relation after 20 years still generates identical patterns as with young people being in love. It is unclear if the brain of men shows the same patterns of activity after a relation of 20 years. Moreover not studied at all are the effects of cultural differences, age, jealousy and sex on brain activity during being in love. There is also information lacking about the effect of ending a relationship and to what degree this pattern of brain activity shows similarities with depression.

Study objective

The purpose of this research is the studying the neurobiology of being in love and related aspects, such as age, duration of the relation, differences in sex, jealousy and the ending of a relationship.

Study design

The study consists of a pilot followed by projects. Each project consist of two parts on different days: a preparation part outside the MRI scanner, the second part inside the scanner.

The preparation consists of an intake interview, filling in two questionnaires about being in love, the duration of the relationship and a questionnaire about present mood. Duration is maximum of 60 minutes.

During the second part, consisting the fMRI study, pictures of (un)familiar people and of the loved one will alternated be shown: a neutral condition with which a blank background will be presented with a fixation cross. Total duration of one project for one subject will be 150 minutes.

Study burden and risks

There are no risks connected to this research.

Subjects will be exposed to a magnetic field of 3 Tesla and rapid alternating magnetic gradients and radiofrequency fields. These field intensities are being used on routine basis in fMRI and MRI research. Up till now no side effects have been prescribed. In rare occasions a peripheral nerve (abdomen) is stimulated by the changing magnetic gradients. This causes an itchy feeling, but is not harmful.

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

The inclusion criteria for the pilot are according the definitions of project 1, beschreven in deelproject 1, age group:18-25 y.o.a.;Project 1.

1. Healthy heterosexual men and women
2. Between 18 - 25 y.o.a (group A)
3. Between 40 - 48 y.o.a (group B)
4. Duration of relationship 1 - 3 months
5. Passionate Love Scale (PLS) score >> 6;Project 2.

1. Healthy heterosexual women
2. Between 18 - 25 y.o.a.
4. Finished relationship << 1 month
5. Passionate Love Scale (PLS) score << 6 ;Project 3.

1. Healthy heterosexual men and women
2. Between 18 - 25 y.o.a.
3. 2nd and/or 3rd generation Chinese, Turkish or Moroccan Dutchman/Dutchwomen
4. Passionate Love Scale (PLS) score >> 6

Exclusion criteria

1. MR incompatible implants in the body
2. Neurological or psychiatric complaints in present or past
3. Use of medication which may influence task performance
4. Claustrophobia
5. The wish not to be informed in case of discovered brain abnormalities
6. (Suspected) pregnancy
7. Red tattoos

Extra Exclusie criterium voor deelproject 2:

- Deelname aan deelproject 1, groep A.

Extra Exclusie criterium voor deelproject in groep B:

- Vrouwelijke deelnemers in menopauze

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): 16-05-2011

Enrollment: 132

Type: Actual

Ethics review

Approved WMO

Date: 09-05-2011

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

CCMO

ID

NL34689.042.10