Out of body illusion in anorexia nervosa

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The primary objective of this study is investigating whether AN patients and healthy controls differ in how they estimate the size of their shoulders, waist, and hips before and after induction of the OBI. We will specifically investigate whether…

Ethical review	Approved WMO
Status	Will not start
Health condition type	Eating disorders and disturbances
Study type	Observational non invasive

Summary

ID

NL-OMON49778

Source
ToetsingOnline

Brief title
OBI in AN

Condition

- Eating disorders and disturbances

Synonym
anorexia nervosa; eating disorders

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Utrecht
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: anorexia nervosa, body illusion, body image, multisensory processing

Outcome measures

Primary outcome

The primary study parameter is the estimation error that participants have before and after induction of the OBI. We will calculate the percentage of misestimation for shoulders, waist, hips before the OBI is induced and after the OBI is induced.

Secondary outcome

We will investigate whether the OBI does not only affect size estimation of the body, but whether it also affects other aspects of body image. The main study parameters are the score on the cognitive measure of body image (VAS scale), the average size estimate over all trails in the tactile measure of body image, the percentage of misestimation for the hoop that one's body would still fit through in the movement task assessing bodily action.

Study description

Background summary

Anorexia nervosa (AN) is one of the most invasive psychosomatic disorders with a relatively high mortality rate. In order to ensure successful treatment it is crucial to understand the underlying mechanisms of AN. One of the central symptoms of AN is a disturbed experience of the own body. To date, not all aspects of body image disturbance have been investigated fully. Nevertheless, research shows that body image disturbances appear to be the key to full recovery of AN. Therefore the current study wil focus on bodily illusions and body size experience.
In two of our previous studies we found that AN patients overestimate their body size compared to healthy controls. However, after inducing a bodily illusion (rubber hand illusion, body swap illusion) the amount of overestimation in the AN group was reduced.
In our previous studies we focused on presenting another body (part) to participants during bodily illusions. in the current study we want to

investigate whether giving participants a different view on their body in virtual reality (Out of Body Illusion, OBI) reduces overestimation of body size in the AN group as well. We expect that changing the perspective from which the patients sees her own body will result in changes in body size experience.

Study objective

The primary objective of this study is investigating whether AN patients and healthy controls differ in how they estimate the size of their shoulders, waist, and hips before and after induction of the OBI. We will specifically investigate whether the percentage of misestimation at pre and post OBI differs between AN patients and controls.

The secondary objective of the study is investigating whether the OBI does not only affect visual estimates of body size, but also other measures of body image.

Study design

Quasi-experimental research

Study burden and risks

It is not expected, but it is theoretically possible that participants experience negative emotions during the study, for example in response to induction of the OBI in which the participants has the illusonary experience of looking at her body from a distance. However, the chance of experiencing negative emotions is thought to be minimal, as before the experiment takes place the participants will be informed about the procedures and what they can expect during the experiment. From previous experience with (AN) studies we learned that participants understand why certain methods are important for the study, and that explaining these methods to participants reduces concerns. In addition, this study will result in valuable insights in body image disturbance in AN.

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

Patients: Female, 18-35 years of age, diagnosed with AN, physically non-disables (i.e. able to perform the tasks during the experiment.;Controls: Female, 18-35 years of age, BMI between 19-25, no severe mental healthy problems, physically non-disables (i.e. able to perform the tasks during the experiment.

Exclusion criteria

Patients: Use of medication that may influence task performance due to sedative effects, drowsiness of (psycho)motor impairments, comorbid dissociative disorder, Borderline personality disorder or contact disorder, pregnancy.;Controls; Use of medication that may influence task performance due to sedative effects, drowsiness of (psycho)motor impairments, pregnancy.

Study design

Design

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

Recruitment

NL

Recruitment status:	Will not start
Enrollment:	60
Type:	Anticipated

Ethics review

Approved WMO Date:	24-01-2017
Application type:	First submission
Review commission:	METC NedMec
Approved WMO Date:	08-05-2019
Application type:	Amendment
Review commission:	METC NedMec

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	NL59210.041.16