

# Automatic processes in Anorexia Nervosa and obesity

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This study aims to contribute from a cognitive-motivational perspective to a better understanding of the processes involved in dysfunctional eating behavior in anorexia nervosa and obesity.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Eating disorders and disturbances
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON37996

### Source

ToetsingOnline

### Brief title

Automatic processes in Anorexia Nervosa and obesity

### Condition

- Eating disorders and disturbances

### Synonym

Anorexia, eating disorder

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Rijksuniversiteit Groningen

**Source(s) of monetary or material Support:** Ministerie van OC&W, Accare

## Intervention

**Keyword:** anorexia, attention, motivational orientation, obesity

## Outcome measures

### Primary outcome

The main outcome measures are attentional bias, motivational orientation and implicit self esteem.

### Secondary outcome

Other important outcome measures are BMI and severity of the disorder (measured by EDE-Q).

## Study description

### Background summary

Present project is a longitudinal study to the role of dysfunctional information processing in anorexia nervosa (AN) and obesity among adolescents. Because little research has been done in this area, the project was inspired by recent research on addiction where inability to restrict is the core problem. Recent models of addiction attribute a central role to attentional bias and automatic approach tendencies. Similar processes could play a role in obese people. However, opposite processes can play an eminent role in the ability of AN patients to restrict their food intake. In two relatively independent lines of research the hypothesis will be tested that AN patients are indeed characterized by a tendency to direct their attention away from food and / or the absence of automatic approach tendencies. In the third line of research implicit self-esteem will be tested. More specifically will be examined whether anorexia patients are characterized by a low (implicit) self-esteem and whether this is even further reduced when they judge themselves on their appearance.

1. Attentional bias. Recent research with the exogenous cueing task (ECT) has shown that restrained eaters are characterized by a reduced (spatial) attention to high-calorie food items. On this basis the hypothesis will be tested that adolescents with AN focus in a similar way their attention less to food items and obese person will focus more than controls. This pattern helps anorexics logically to maintain their food restriction but makes it more difficult for obese people. If attentional bias (AB) has indeed the presumed crucial role in the onset and persistence of AN and obesity, this will normalize under

influence of a successful treatment and a residual AB will be a predictor of relapse. To determine this, the indices of eating pathology and AB are measured at baseline, after 1 year and after 3 years follow up. Attentional processes have besides a spatial component also a temporal dimension. If food stimuli are longer present in the working memory, they will probably be processed deeper and this will in turn increase the chance of craving. Variation in temporal AB could therefore at least partly explain why some people do (AN) and others do not (obesity) succeed in their attempt to restrict their food intake. To get more insight in temporal attentional bias the so called Rapid Serial Visual Presentation Task will be administered.

2. Automatic approach / avoidance tendencies. According to recent dual process models, a relatively strong automatic approach tendency towards food may contribute to the inability to regulate eating behavior of obese people. Conversely, the absence of such a tendency could explain the ability of AN patients to maintain their restrictive food intake. For more insight into the presumed reciprocal relationship between the absence of automatic approach tendencies and eating pathology, this project will not study whether anorexic patients are characterized by an absent automatic approach tendency and whether obese persons have in turn a stronger automatic approach tendency, but will also investigate whether indices of treatment success are associated with an increase (after 1 and 3 years follow up) in approach tendencies in patients with anorexia and a decrease in the approach tendencies in obese individuals. For the same reason will be tested whether the remaining (lack of) tendencies during one year follow-up are predictive of the return (or persistence) of eating pathology during the 3-year follow up for both the anorexics and the obese people. The automatic tendency will be measured with an Affective Simon Test manikin version (AST-manikin). In this task food is a task irrelevant feature, what is making the task particularly sensitive to bottom-up activated approach tendencies. An important question therefore remains whether the apparent ability of AN to prevent food activating automatic approach tendencies is limited to situations where food cues are outside the focus of attention or also include situations where the decision to approach or avoid food is central (like during the meal). In order to study the role of the more top-down activated tendencies also the Stimulus-Response Compatibility Task (SRC manikin) will be administered in a separate sample. In this task food is a task relevant feature and the required response (approach or avoidance) is dependent on the presence or absence of food cues.

### 3. Implicit self-esteem

Anorexia Patients seem to have a low (implicit) self-esteem that they largely depend on their appearance and weight. The last line of research focuses on whether this is particularly the case when they assess themselves through the eyes of another (observer perspective). The task that will be used is a new developed variant of the Implicit Associate Task (de Jong et al, 2001) compared with the traditional IAT (Greenwald et al, 1998), the most widely used measure of implicit self-esteem. The new developed learning variant of the IAT examines how easily patients associate themselves with something positive if they think they are judged by the critical eyes of others. To test the hypothesis that

anorexia patients depend their self-esteem largely on their appearance a condition is added where participants before the task will be primed on their appearance.

### **Study objective**

This study aims to contribute from a cognitive-motivational perspective to a better understanding of the processes involved in dysfunctional eating behavior in anorexia nervosa and obesity.

### **Study design**

This project is a longitudinal design to study automatic processes in anorexia and obesity at start of treatment, after 1 year and after 3 year follow up.

### **Study burden and risks**

There are no risks associated with participation.

## **Contacts**

### **Public**

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### **Scientific**

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## **Trial sites**

### **Listed location countries**

Netherlands

## Eligibility criteria

### Age

Adolescents (12-15 years)

Adolescents (16-17 years)

### Inclusion criteria

Inclusion criteria;Anorexia group

- Patiënts of the centre for eating disorders Accare in Smilde or Almere
- Patiënts who meet the DSM-IV criteria for Anorexia Nervosa of Eating Disorder NOS
- Age 12-18;Obesity groep:
- Obese patients of the centre of eating disorders in Smilde or Almere with a BMI >30
- Age 12-18;Control groep:
- Adolescents age 12-18, matched on age and sex

### Exclusion criteria

Anorexia group:

- EDNOS patients with features of bulimia (binge eating episodes)
- not speaking Dutch fluently
- IQ<80 ;Obesity group:
- obesity is not caused by a disturbed energy balance
- not speaking Dutch fluently
- IQ<80 ;Control group

Not speaking Dutch fluently

## 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:	Basic science

## Recruitment

NL  
Recruitment status: Recruitment stopped  
Start date (anticipated): 21-06-2012  
Enrollment: 224  
Type: Actual

## Ethics review

Approved WMO  
Date: 22-02-2012  
Application type: First submission  
Review commission: METC Universitair Medisch Centrum Groningen (Groningen)  
Approved WMO  
Date: 26-02-2014  
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	ID
CCMO	NL35045.042.11