

# Oxytocin, friendship and dealing with emotions

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Objectives: 1) To investigate whether attachment security, autonomy-connectedness, and childhood experiences moderate effects of social support during stress; 2) To investigate the influence of oxytocin on the ability to be close to others (in an...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Other condition
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON45277

### Source

ToetsingOnline

### Brief title

Oxytocin and friendship

### Condition

- Other condition

### Synonym

stress reactivity

### Health condition

stress reactiviteit

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Universiteit van Tilburg

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

## Intervention

**Keyword:** attachment, oxytocin, social support, Stress reactivity

## Outcome measures

### Primary outcome

Main study parameters/endpoints: The main outcome is stress reactivity (self-reported stress and physiological reactivity) during the Trier social stress test and Cold pressor test, as a function of oxytocin and social support status. Oxytocin is hypothesized to moderate the stress-buffering effects of social support. Another endpoint is interpersonal distance (distance between participant and a virtual person)

### Secondary outcome

Other moderators of the effect of oxytocin include attachment, parenting styles and autonomy-connectedness.

## Study description

### Background summary

Rationale: Susceptibility for stress-related psychopathology, e.g. anxiety disorders, may arise in part when individuals are not able to form stable, long-lasting bonds, and to profit from the stress-buffering effects of social support. Oxytocin has been shown to play an important role in attachment to others and prosocial behaviour. However, it is yet unclear whether, how, and for whom oxytocin may be used in a clinical setting, most notably because many individual differences exist in the stress-buffering effects of oxytocin. We hypothesize that oxytocin may increase the stress-buffering effects of social support, but that this effect depends on individual variations in attachment,

parenting styles and autonomy-connectedness. These effects may also be more pronounced in socially stressful situations, compared with a general stressor. Further, in line with the hypothesis that interpersonal functioning is essential for psychological well-being, this study tests whether oxytocin and social support affect the interpersonal closeness one is comfortable with, and whether this varies for different emotions of the other person. Individual differences in attachment, parenting experiences during childhood and autonomy-connectedness are hypothesized to influence preferred interpersonal closeness and stress during this task.

## **Study objective**

Objectives:

1) To investigate whether attachment security, autonomy-connectedness, and childhood experiences moderate effects of social support during stress; 2) To investigate the influence of oxytocin on the ability to be close to others (in an interpersonal distance task); 3) To investigate the influence of oxytocin and social support on stress and anxiety levels induced by a social stress test (a virtual Trier Social Stress Test); 4) To investigate the influence of oxytocin and social support on pain perception with a cold pressor test

## **Study design**

Study design: A 2x2 experimental study, in which participants are randomly assigned to 1) an oxytocin or placebo nasal spray, and 2) a social support (bringing a friend) or no support condition. Participants complete a virtual reality interpersonal closeness test, a virtual Trier Social Stress Test, and a Cold Pressor Test. In between, measures of stress, cortisol, heart rate, blood pressure and skin conductance are completed.

Intervention: Half of participants receive 6 puffs of an oxytocin nasal spray. The other half receives an equivalent number of puffs of a placebo nasal spray.

## **Intervention**

24 IU oxytocin or placebo nasal spray

## **Study burden and risks**

Participants will spend approximately 30 minutes on filling out online questionnaires before the lab session, and a maximum of 2 hours during the lab session. Participants will be drawn from a psychology student sample, and will be rewarded by participant credits. There are no risks in participating in this experiment. Some emotional distress might occur during the stress tasks, but we expect that the debriefing procedure will eliminate this stress after the tasks

have been performed.

## Contacts

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### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- Female
- Age 18-30

### Exclusion criteria

Use of medication (except oral contraceptives), drug or alcohol abuse, psychiatric disorder, neurological or cardiovascular disease, nasal disease or obstruction, pregnancy, and breast

feeding

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	28-09-2017
Enrollment:	180
Type:	Actual

### Medical products/devices used

Product type:	Medicine
Brand name:	Syntocinon
Generic name:	oxytocin
Registration:	Yes - NL outside intended use

## Ethics review

Approved WMO	
Date:	07-03-2017
Application type:	First submission
Review commission:	METC Brabant (Tilburg)
Approved WMO	
Date:	01-05-2017

Application type: First submission  
Review commission: METC Brabant (Tilburg)

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

ID: 25216

Source: Nationaal Trial Register

Title:

### In other registers

Register	ID
EudraCT	EUCTR2017-000298-35-NL
CCMO	NL60593.028.17
OMON	NL-OMON25216