# Effect of relaxation on responses to erotic stimuli

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1. Guided relaxation using a breathing biofeedback tool will result in less pelvic floor muscle activity, and in more intense and pleasurable experience of gentle non-genital tactile stimulation compared to quietly laying down. 2. Higher levels of...

**Ethische beoordeling** Positief advies **Status** Werving gestart

Type aandoening -

Onderzoekstype Interventie onderzoek

## **Samenvatting**

#### ID

NL-OMON29103

**Bron** 

NTR

**Verkorte titel** 

RelaxStudy

**Aandoening** 

Sexual dysfunction

#### **Ondersteuning**

**Primaire sponsor:** LUMC

Overige ondersteuning: Stimuleringsfonds creative industrie

#### Onderzoeksproduct en/of interventie

#### **Uitkomstmaten**

#### Primaire uitkomstmaten

Pelvic floor activity assessed by vaginal surface EMG, and experience of non-genital tactile stimulation assessed by self-report of intensity, pleasurableness and sensuality of sensation.

## **Toelichting onderzoek**

#### Achtergrond van het onderzoek

In several theories of female sexual function it is assumed that stress inhibits sexual responding, while relaxation facilitates it. It is thought that mental relaxation enables optimal processing of visual, auditory, or tactile sexual stimuli, which can instigate sexual arousal, reflected in feelings of sexual excitement, and in increases in genital blood flow. At the same time, physical relaxation, counteracting inhibitory central nervous system influences and promoting relaxation of the pelvic floor muscles, is thought to help in optimal blood flow to the genitals during sexual arousal. Laboratory studies on stress and sexual functioning have demonstrated significantly lower genital responses in women with higher levels of chronic stress, and pointed to possibly optimum levels of central nervous system activity for sexual responding. Also, studies showed increased pelvic floor muscle activity during anxiety states, and provided initial evidence for an association of higher pelvic floor activity and lower levels of vaginal blood flow. Thus, taking together, there is increasing empirical evidence for negative effects of stress on female sexual functioning.

In line with the evidence for negative effects of stress, many treatments for female sexual dysfunction, such as treatments for sexual arousal and desire, orgasmic, and sexual pain disorders include interventions aimed at enhancing mental and physical relaxation, including relaxation of the pelvic floor. These interventions vary from instructed relaxation to mindfulness exercises. Research directly testing the potentially beneficial effects of relaxation on female sexual response is however very scarce. Recently, initial studies have observed facilitating effects of relaxation, but more research is needed. For the present research project we collaborate with an industrial design company that developed several tools aimed at the facilitation of female sexual health. One of these tools is a biofeedback tool aimed to facilitate general relaxation, and another tool is a 'brush' for gentle non-genital self-caressing. Using these tools and psychophysiological research methods we will investigate in healthy sexually functional women the effect of relaxation (with the help of the bio-feedback tool) on pelvic floor activity, and on the experience of non-genital tactile stimulation (using the brush), as well as the association of relaxation level with levels of sexual arousal and pleasure in response to visual erotic stimulation.

#### Doel van het onderzoek

- 1. Guided relaxation using a breathing biofeedback tool will result in less pelvic floor muscle activity, and in more intense and pleasurable experience of gentle non-genital tactile stimulation compared to quietly laying down.
- 2. Higher levels of mental and physical relaxation will be associated with stronger genital and subjective sexual arousal responses to erotic film

#### **Onderzoeksopzet**

Single session with continuous (physical response) or repeated (self-report) assessment of the primary and secundary outcomes in experimental blocks with 1. relaxation instruction with the feedback tool, 2. quietly lying down instruction, 3. non-genital tactile stimulation, and 4. erotic film viewing

#### Onderzoeksproduct en/of interventie

Single session of guided relaxation using a breathing biofeedback tool

## Contactpersonen

#### **Publiek**

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#### Wetenschappelijk

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## **Deelname** eisen

## Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Female
- Age > 18 and < 46 years.
- No sexual complaints for at least one year
- Have been sexually active including intercourse, during the last year.

## Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Unable to speak, understand and write the Dutch language
- Homosexual orientation (because of the heterosexual stimulus material)
- Pregnancy or lactation

- Current serious affective, or psychotic problems
- Having undergone a radical hysterectomy or prolapse surgery
- Current or recurrent use (less than 4 weeks before participation) of medication that may affect sexual response. To determine possible sexual side-effects the latest version of the 'Farmacotherapeutisch kompas' will be used.
- Current or previous disorders of the genitals that may influence the sexual response or the measurement of the response.
- Other medical disorders that may influence the sexual response or the measurement of the response.

## **Onderzoeksopzet**

#### **Opzet**

Type: Interventie onderzoek

Onderzoeksmodel: Anders

Toewijzing: N.v.t. / één studie arm

Blindering: Open / niet geblindeerd

Controle: N.v.t. / onbekend

#### **Deelname**

Nederland

Status: Werving gestart

(Verwachte) startdatum: 03-05-2021

Aantal proefpersonen: 50

Type: Verwachte startdatum

#### Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

## **Ethische beoordeling**

Positief advies

Datum: 23-06-2021

Soort: Eerste indiening

## **Registraties**

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

#### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

#### In overige registers

Register ID

NTR-new NL9563

Ander register METC Leiden Den Haag Delft : METC Leiden Den Haag Delft P20.081

## Resultaten