

# The effect Of Preferred music on menTal workload and laparoscoplc perforMance In a Simulated sEtting (OPTIMISE): A crossover study

Gepubliceerd: 15-08-2019 Laatst bijgewerkt: 18-08-2022

The purpose of this study is to investigate the effect of recorded music on surgical task performance and mental workload in a simulated setting. The study hypothesis is that preferred music will improve surgical task performance and decrease mental...

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving nog niet gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON24136

### Bron

Nationaal Trial Register

### Verkorte titel

OPTIMISE

### Aandoening

Not applicable

### Ondersteuning

**Primaire sponsor:** Erasmus MC, Rotterdam

**Overige ondersteuning:** None

### Onderzoeksproduct en/of interventie

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

The primary objective is to investigate the effect of participant-preferred music on laparoscopic task performance as defined by time to task completion.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

Rationale: The effect of recorded music on laparoscopic surgical performance and mental workload has varying reported results. This crossover study will investigate the effects of participant-preferred music on laparoscopic task performance and mental workload.

Objective: The objective is to investigate whether listening to recorded participant-preferred music has a positive effect on laparoscopic task performance and mental workload.

Study design: This study will be a four-sequence, four-period, two-treatment crossover study.

Study population: 90 Medical students and / or residents.

Intervention (if applicable): Participants will perform a laparoscopic task whilst listening to recorded, participant-preferred music. The control group will perform a laparoscopic task without music, but with recorded surgical background noise.

Main study parameters/endpoints: The primary endpoint is laparoscopic task performance as defined by time to task completion. Secondary endpoints are additional laparoscopic task performance parameters (path length, jerk, economy of motion and error score), subjective mental workload (SURG-TLX) and objective mental workload (heart rate variability).

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Music has no known deleterious effects. The music volume will be limited in order to prevent noise induced hearing loss.

### **Doel van het onderzoek**

The purpose of this study is to investigate the effect of recorded music on surgical task performance and mental workload in a simulated setting. The study hypothesis is that preferred music will improve surgical task performance and decrease mental workload

### **Onderzoeksopzet**

Start inclusion 01-09-2019, end inclusion 31-12-2019, data analysis finished 01-02-2020, manuscript draft 01-03-2020

# Contactpersonen

## Publiek

Erasmus MC, University Medical Center Rotterdam  
Victor Fu

+31107040704

## Wetenschappelijk

Erasmus MC, University Medical Center Rotterdam  
Victor Fu

+31107040704

## Deelname eisen

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

In order to be eligible to participate in this study a subject must meet all of the following criteria.

- Age  $\geq$  18 years
- Medical students and / or residents
- Provision of written informed consent by the subject.

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

A potential subject who meets any of the following criteria will be excluded from participation in this study:

- Severe hearing impairment, defined as no verbal communication possible.
- Severe visual impairment, defined as not able to see the monitor on which the laparoscopic task is projected.
- Any physical handicap that impairs laparoscopic performance (unable to stand for 10 minutes, unable to hold and use both instruments), to be judged by a member of the research team.
- Use of cardiac medication

# Onderzoeksopzet

## Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blinding:	Enkelblind
Controle:	Placebo

## Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-09-2019
Aantal proefpersonen:	90
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:	15-08-2019
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**

<b>Register</b>	<b>ID</b>
NTR-new	NL7961
Ander register	METC Erasmus MC : MEC-2019-0537

## **Resultaten**