

# Real time telemonitoring of physiological processes and self-reported craving processes in alcohol addiction

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

## Summary

### ID

NL-OMON43159

### Source

ToetsingOnline

### Brief title

Craving monitoring study

### Condition

- Other condition

### Synonym

Alcohol addiction OR Alcohol dependence

### Health condition

alcohol verslaving

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Universiteit Twente

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

## Intervention

**Keyword:** Craving monitoring, Ecological Momentary Assessment, Electrodermal activity, Heart Rate

## Outcome measures

### Primary outcome

The main study parameters are self-reported alcohol craving, self-reported (re)lapse, Blood alcohol concentration, Electrodermal activity, Blood volume pulse.

### Secondary outcome

The second study parameters are negative affect, stress, alcohol permitted, alcohol available, severity of nicotine craving and social activities.

## Study description

### Background summary

Alcohol abuse is a major societal challenge. It is currently the fourth leading unhealthy lifestyle behaviour contributing to morbidity and mortality and has devastating effects on individuals and their families. Despite the availability of different treatment options, many clients fall back into their addictive behaviour. Such relapse is typically preceded by internal (e.g. stress) or external influences such as exposure at a party. Unfortunately, these critical moments typically occur in-between counselling sessions and when (online) support is not readily available. Moreover, many clients do not recognize such early responses in time and fail to take necessary precautions. As such, to improve addiction treatment, the client would need to be supported at his/her most vulnerable moments at whatever time and place. Therefore the aim of this project is to research the possibility of a remote monitoring system that can determine craving based on self-reported and physiological data. This system unobtrusively monitors, with wearable bio-sensors, the clients physiological

craving responses in everyday life, jointly with an app to monitor self-reported psychological craving thoughts.

## **Study objective**

The primary objective of the study is to assess whether or not physiological craving can be determined as different fluctuations prior to subjective craving or (re)lapse events when compared to non-events. The study has two secondary objectives: 1) to study the predictive value of self-reported alcohol craving to (re)lapse and whether these relations are moderated by own believe in the effectiveness of own coping skills; 2) to investigate whether negative affect, stress, alcohol permitted, alcohol available, severity of nicotine craving and/or social activities predicts subjective alcohol craving or (re)lapse.

## **Study design**

An observational study, with an Intensive Repeated Measures in Naturalistic Settings Case-study design where participants are monitored with wearable bio-sensors and fill out questionnaires approximately six times a day for a total of 100 days. Additionally, participants fill out questionnaires at the baseline of the study and at the end of the study they take part in a semi-structured interview.

## **Study burden and risks**

A participant attends a briefing, which entails filling out a baseline questionnaire and getting instructions on the experiment with an investment of 90 minutes, during the experiment they keep an Electronic diary where they fill out 5 questionnaires with 4 questions which take 2-3 minutes and at the end of the day the participant fills in a daily diary, which costs 8-15 minutes depending on the amount of craving moments and drinking behaviour during that day. Once a week a participant is asked to fill in an additional questionnaire with five questions, with a time investment of 3-5 minutes. Expected effort is 21-35 minutes a day over the whole 3 month period. It is assumed that during the course of the experiment the participant will get used to the questions and therefore be able to answer the questions quicker. In a debriefing session of 90 minutes at end of the experiment the experiences of participant will be discussed in a semi-structured interview.

Participants are free to collaborate in the study. They may quit the study without reason and without consequences. At the end of the experiment a participant can receive a short report of their personal data, showing them insight into their craving, mood and the other parameters collected in this experiment. This will not be a medical report, only a global overview of the results of the individual participant. A possible side effect of the study, is reactivity, the possibility that research methods themselves affect behaviour under study (Shiffman, 2009a). The participant might become more aware of their

craving, mood and believe in own coping strategies during the day, causing them to change behaviour which already might lead to less (re)lapse. This awareness can also be a risk causing rumination, sadness or even (re)lapse. However, throughout the entire study, participants are enrolled in a treatment of Tactus addiction care meaning that they always have (online) sessions with a therapist during the study.

## 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

Moderate or sever alcohol use disorder according to de DSM-5 en under treatment at Tactus Addiction Care.

## Exclusion criteria

Multiple user (except for nicotine)

Diagnosed with a psychiatric disease, suicidality, schizophrenia or panic disorder

## Study design

### Design

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 29-11-2016

Enrollment: 12

Type: Actual

## Ethics review

Approved WMO

Date: 27-09-2016

Application type: First submission

Review commission: METC Twente (Enschede)

Approved WMO

Date: 01-11-2016

Application type: Amendment

Review commission: METC Twente (Enschede)

## 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**

<b>Register</b>	<b>ID</b>
CCMO	NL58392.044.16