# Internet-based cognitive bias modification for binge drinking prevention ('binge drinking' chez les jeunes: etude pilote de la prévention de l'alcoolisme par un réentrainement attentionnel en ligne)

Submission date	Recruitment status	[X] Prospectively registered
27/05/2015	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
05/06/2015	Completed	☐ Results
Last Edited	Condition category	Individual participant data
08/05/2017	Mental and Behavioural Disorders	<ul><li>Record updated in last year</li></ul>

#### Plain English summary of protocol

Background and study aims

Binge drinking is a term used to describe the consumption of lots of alcoholic drinks in a short period of time (hours to days) with the sole purpose of becoming drunk (intoxicated). Binge drinking is well known to have many negative effects on a person's physical and mental health, particularly in young people whose brains are still developing. There is some evidence to suggest that people who regularly binge drink are more sensitive to environmental stimuli related to alcohol, such as advertising. This is called attentional bias. An attentional bias towards alcohol may make a person who binge drinks more likely to engage in that behaviour. It may also make it harder for them to not drink, even if that is what they feel they would prefer, because it affects their will power. The aim of this study is to test an online attentional bias modification programme. The study will assess whether people who engage in binge drinking behaviour show reduced attentional bias towards alcohol-related stimuli following completion of the programme.

#### Who can participate?

Adults aged 18-29 who exhibit binge drinking behaviour and have a good command of French.

#### What does the study involve?

Participants are randomly allocated into one of two groups. Those in group 1 (intervention group) take part in 8 online sessions of the attentional bias modification programme. Those in group 2 (control group) take part in 8 online sessions of a modified version of the attentional bias modification programme; it is not considered to have any therapeutic effect for the participant. All participants take part in the programme sessions over a four week period. Each session takes approximately 20 minutes to complete. Participants are asked to complete questionnaires at the start of the study, at the end of the 8 programme sessions, and again 1 month later.

What are the possible benefits and risks of participating?

There are foreseeable risks related to the use of the Attentional Bias Modification procedure. Meanwhile, we expect two potential benefits to the participants, a possible reduction in alcohol consumption after the completion of eight sessions of the intervention task and a monetary remuneration at the end of the study.

Where is the study run from? University of Geneva (Switzerland)

When is the study starting and how long is it expected to run for? July 2013 to March 2016

Who is funding the study? Information Technology Commission of the University of Geneva (Switzerland)

Who is the main contact? Dr G Ceschi Ekaterina.Plys@unige.ch

#### Study website

http://icbm.unige.ch/

# Contact information

#### Type(s)

Scientific

#### Contact name

Dr Grazia Ceschi

#### **ORCID ID**

http://orcid.org/0000-0002-2065-6870

#### Contact details

40, boulevard du Pont-d'Arve Geneva Switzerland 1211 +41 22 379 8064 Ekaterina.Plys@unige.ch

# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

#### Scientific Title

Internet-based cognitive bias modification for binge drinking prevention: protocol for a randomised controlled trial

#### **Acronym**

iCBM-A Binge Drinking

#### **Study objectives**

- 1. Binge drinkers trained to attend to alcohol-unrelated stimuli will decrease their attentional bias towards alcohol and their alcohol consumption. We expect this effect to last for at least one month.
- 2. The attentional bias modification will mediate changes in alcohol consumption. Additionally, we will explore the effects of the Cognitive Bias Modification of Attention procedure on participants' subjective craving for alcohol. We expect that the reduction of attentional bias will be accompanied by a decrease in craving.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Ethics Committee of the University of Geneva, 19/07/2013.

#### Study design

Randomised controlled singe-centre interventional study

#### Primary study design

Interventional

# Secondary study design

Randomised controlled trial

#### Study setting(s)

Internet/virtual

## Study type(s)

Prevention

#### Participant information sheet

Not available in web format, please use contact details to request a participant information sheet.

## Health condition(s) or problem(s) studied

Alcohol consumption (binge drinking behaviour)

#### **Interventions**

- 1. Intervention group: eight sessions of an internet-based attentional bias modification programme. During the intervention, 95% of the probes will appear at the spatial location previously occupied by the alcohol-unrelated picture (contingency ratio of 95:05). The intervention takes place over four weeks, and each session lasts about 20 minutes.
- 2. Control group: eight sessions of the internet-based control task. For the control sessions, probes will replace alcohol-related pictures as often as alcohol-unrelated pictures (contingency of 50:50). The sessions take place over four weeks, and each session lasts about 20 minutes.

#### Intervention Type

Behavioural

#### Primary outcome measure

Baseline and post-intervention:

- 1. Self-reported assessment of alcohol consumption during last two weeks (Time-Line-Follow-Back)
- 2. Attentional bias towards alcohol (Dot Probe Detection Task) One month follow-up:
- 1. Self-reported assessment of alcohol consumption during last two weeks (Time-Line-Follow-Back)

#### Secondary outcome measures

- 1. Self-reported assessment of binge drinking behaviour. Participants will be asked to evaluate their average alcohol consumption during last six months using the following questions:
- 1.1. How many times per week do you consume alcoholic drinks?
- 1.2. On a typical day when you are drinking, how many alcoholic drinks do you have?
- 2. Self-reported drug consumption (Alcohol, Smoking and Substance Involvement Screening Test) Baseline:
- 1. Self-reported craving for alcohol (Alcohol Craving Experience Questionnaire)
- 2. Self-reported readiness to change alcohol use (The Stages of Change Readiness and Treatment Eagerness Scale)
- 3. Self-reported depressive symptoms (Beck depression inventory)
- 4. Self-reported anxiety (Spielberger State-trait anxiety inventory)
- 5. Social desirability (Crowne-Marlowe Social Desirability Scale)
- 6. Demographic data

Post-intervention and one month follow-up:

1. Self-reported craving for alcohol (Alcohol Craving Experience Questionnaire)

#### Overall study start date

15/07/2013

#### Completion date

30/05/2016

# **Eligibility**

# Key inclusion criteria

- 1. Aged 18-29
- 2. Presents with binge drinking behaviour: consumption of over five (for men) or four (for women) standard alcoholic drinks in a row at least once per fortnight during the previous 6 months

- 3. Attentional bias towards alcohol
- 4. Internet access
- 5. Good command of French

#### Participant type(s)

Healthy volunteer

#### Age group

Adult

#### Lower age limit

18 Years

#### Upper age limit

29 Years

#### Sex

Both

#### Target number of participants

80

#### Key exclusion criteria

- 1. Scores more than 3 on the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) for all addictive substances except alcohol and nicotine
- 2. No psychotropic medication change or dosage change within the past three months from study start
- 3. Introduction of, or change in, psychotherapeutic treatments within 3 months preceding study start

#### Date of first enrolment

20/08/2015

#### Date of final enrolment

15/03/2016

# Locations

#### Countries of recruitment

Switzerland

# Study participating centre University of Geneva

Abnormal Emotion and Trauma Laboratory 40, boulevard du Pont-d'Arve Geneva Switzerland 1211

# Sponsor information

#### Organisation

University of Geneva

#### Sponsor details

Abnormal Emotion and Trauma Laboratory 40, boulevard du Pont-d'Arve Geneva Switzerland 1211

#### Sponsor type

University/education

#### Website

http://www.unige.ch/fapse/psychoclinique/upcet-1/

#### Organisation

Geneva University Hospitals

#### Sponsor details

Service d'addictologie 70C, Grand pré Geneva Switzerland 1206

#### Sponsor type

Hospital/treatment centre

#### Organisation

University Hospital of Geneva

#### Sponsor details

#### Sponsor type

Not defined

#### Website

http://www.hug-ge.ch/

#### **ROR**

# Funder(s)

#### Funder type

University/education

#### **Funder Name**

Information Technology Commission of the University of Geneva (Switzerland)

#### **Funder Name**

Social Affaire and Health Department of the State of Geneva Grant: N 180490

# **Results and Publications**

#### Publication and dissemination plan

The protocol of our randomized controlled trial is expected to be published in a peer-reviewed journal Frontiers in Psychiatry in November 2015. The results about efficacy of our internet-based cognitive bias modification platform are planned to be submitted to international peer-reviewed journals after the end of the experiment (expected for December 2016).

Intention to publish date

Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Not provided at time of registration