# A brief digital intervention targeting prevention of alcohol and other substance use among adolescents and young adults

Submission date	Recruitment status	[X] Prospectively registered
11/09/2019	No longer recruiting	[_] Protocol
Registration date	Overall study status	Statistical analysis plan
24/09/2019	Completed	[_] Results
Last Edited	Condition category	Individual participant data
22/11/2022	Mental and Behavioural Disorders	[_] Record updated in last year

#### Plain English summary of protocol

#### Background and study aims

The teenage years and young adulthood is a period in life when people may be especially vulnerable to harmful drug and alcohol use. Young people's brains are undergoing important development processes at this time, and substance use can negatively affect mental health and social development in the short and long term. From a public health point of view, it is important to prevent or delay substance use to reduce harm to individuals and society. There is a need for cost-effective and easily distributed interventions aimed at reducing substance use in young people. This study aims to test how well an online intervention reduces drug and alcohol use in teenagers and young adults aged 15-25 years.

Who can participate?

Teenagers and young adults aged 15-25 years who have access to the internet.

#### What does the study involve?

The participants will be randomly allocated to one of two groups. One group will receive the the intervention aimed at reducing substance use and some general health information. The other group will receive the health information only. Before the intervention and at 3 and 6 months after the intervention, all participants will be asked about their drug and alcohol use, their experience of peer pressure, their wellbeing and their sexual behaviour.

#### What are the possible benefits and risks of participating?

All participants will be provided with health information that might increase their understanding of health-related issues. Those who receive the intervention aimed at reducing substance use might benefit from reduced substance use and risky behaviours. Participants will be asked to reflect on their use of alcohol and other substances and answer questions on their mental health and family relationships. This might cause some discomfort or upset. Participants are informed that their participation is voluntary and they can interrupt or stop their participation at any time, without explanation. They will be given details of websites and phone numbers to contact for support if they have any concerns about their substance use or other problems. Any issues raised by the participants during the study will be documented and managed. The research team includes experienced healthcare professionals, such as a psychiatrist and a nurse, who can refer participants to healthcare clinics if needed.

Where is the study run from? STAD, Centre for Psychiatry Research, Karolinska Institutet/Stockholm County Council (Sweden)

When is the study starting and how long is it expected to run for? May 2019 to October 2023

Who is funding the study? 1. National Public Health Agency of Sweden 2. Alcohol Research Council of the Swedish Alcohol Retailing Monopoly 3. Swedish Research Council

Who is the main contact? Dr Pia Kvillemo, pia.kvillemo@ki.se

### **Contact information**

**Type(s)** Scientific

**Contact name** Dr Pia Kvillemo

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#### **Contact details**

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### Additional identifiers

EudraCT/CTIS number Nil known

**IRAS number** 

**ClinicalTrials.gov number** Nil known

**Secondary identifying numbers** PK

### Study information

#### Scientific Title

A brief digital intervention targeting prevention of alcohol and other substance use among adolescents and young adults: a randomised controlled trial

#### **Study objectives**

The intervention will have positive effects with regard to alcohol and other substance consumption among young people with risk use, and potential and benefit may include decreased or ceased risk behaviours

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 03/07/2019, Swedish Ethical Review Authority (Box 2110, 750 02 Uppsala, Sweden; +46 010-475 08 00; registrator@etikprovning.se), ref: 2019-03249

#### Study design

Intervention study with double-blind two-arm randomised controlled trial (RCT) design

**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

Risky substance use

#### Interventions

**Randomisation process** 

The study is double-blind, thus neither the participant or the researchers know which participant is allocated to the intervention or to the active control condition. After baseline assessment, the participants will be automatically randomised to one of the two study groups by a computer program using an unrestricted randomisation protocol. Participants will then be informed about the name of their program and given access immediately.

#### Intervention arm

The intervention is interactive, digitally delivered in a fully automated form, and requires approximately 20 minutes to complete. Tailored feedback is given to the participants based on their responses to previous assessment and suggestions on how to respond to this feedback are

provided. This interactivity imitates a face-to face 'dialogue' with techniques from motivational interviewing (MI) such as an empathic approach, rolling with resistance, aiming at creating a dissonance between actual and desired behaviour, raising self-efficacy, and at the same time avoiding argumentation. The intervention consists of three main components and additional health-related information.

#### Control arm

The control group will receive the same general health-related information as those in the intervention group, i.e., the additional information provided to the intervention group.

#### Follow-up

Baseline assessment at study entry and two follow-up assessments at 3 and 6 months will be carried out for both groups (intervention and active control). The primary outcome is reduction in alcohol use. Secondary outcomes concern other substance use, mental health, sexual risk behaviours, and perceived peer pressure. Moreover, the study involves analyses of potential moderators including perfectionism, openness to parents, help-seeking, and background variables.

#### Intervention Type

Behavioural

#### Primary outcome measure

Current primary outcome measure as of 10/01/2020: Reduction in alcohol use, assessed by AUDIT-C and Daily Drinking Questionnaire (DDQ). Self-reported at baseline and 3-month follow-up (primary endpoint)

Previous primary outcome measure:

Reduction in alcohol use, assessed by AUDIT-C and Daily Drinking Questionnaire (DDQ). Self-reported at baseline, 3-month follow-up (primary endpoint) and 6-month follow-up

#### Secondary outcome measures

Self reported at baseline, 3-month follow-up and 6-month follow-up:

- 1. Drug use measured by Drug Use Disorder Identification Test (DUDIT)
- 2. Wellbeing measured by the WHO-5 Well-Being Index
- 3. Peer pressure measured by the Peer pressure inventory
- 4. Multiple choice questions regarding sexual risk behaviour.
- 5. Binge drinking measured by AUDIT-C (added 10/01/2020)
- 6. Frequency of alcohol consumption measured by AUDIT-C (added 10/01/2020)

7. Amount of alcohol consumed a typical day when alcohol is consumed measured by AUDIT-C (added 10/01/2020)

#### Overall study start date

01/05/2019

Completion date 15/12/2023

## Eligibility

Key inclusion criteria

1. 15-25 years old
2. Positive CRAFFT screen (=2 or more)
3. Access to Internet
4. Understand Swedish language

Participant type(s)

Healthy volunteer

Age group

Mixed

**Sex** Both

**Target number of participants** 800

**Key exclusion criteria** 1. Not meeting inclusion criteria 2. Declined to participate after screening

Date of first enrolment 15/01/2020

Date of final enrolment 15/10/2020

### Locations

**Countries of recruitment** Sweden

**Study participating centre STAD, Centre for Psychiatry Research, Karolinska Institutet/Stockholm County Council** Norra Stationsgatan 69 Stockholm Sweden 113 64

### Sponsor information

**Organisation** Karolinska Institutet

#### Sponsor details

Norra Stationsgatan 69 Stockholm Sweden 113 64 +46 070 673 48 64 pia.kvillemo@ki.se

**Sponsor type** University/education

Website http://www.ki.se

ROR https://ror.org/04hmgwg30

### Funder(s)

**Funder type** Government

**Funder Name** National Public Health Agency of Sweden

**Funder Name** Alcohol Research Council of the Swedish Alcohol Retailing Monopoly

**Funder Name** Svenska Forskningsrådet Formas

**Alternative Name(s)** Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, Swedish Research Council Formas, Formas

**Funding Body Type** Government organisation

Funding Body Subtype National government

**Location** Sweden

### **Results and Publications**

#### Publication and dissemination plan

Study protocol to be published in a scientific journal (eg BMJ Open). Pre-post, and long-term follow-up results to be published in a scientific journal (eg BMJ Open).

#### Intention to publish date

31/10/2024

#### Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date.

#### IPD sharing plan summary

Data sharing statement to be made available at a later date