

# Subject information letter (EN)

### Introduction

You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please contact the research team if anything is unclear or if you need more information.

### Background

When making choices we often favor rewards in the near future, and we usually prefer more rewards rather than less. This behavior can have negative repercussions for our long term health when we choose immediately gratifying "rewards", such as inactive behavior, or are making unhealthy choices: Should we take a walk now despite the weather, or should we just relax watching a movie? Relaxing may have a clear perceived benefit here and now, whereas the future benefits of walking are somewhat unclear in the moment, however the choices we make repeatedly over time have a very real effect on our health.

In this study we look at motivation to engage in healthy behaviors, and the tendency to prefer immediate gratification over long term health, called delay discounting, which is the degree to which future rewards seem to drop in value.

### The study

Participating in this study you will be asked to choose one health goal to work with throughout the 3 week study period. This could e.g. be a desire to increase physical activity, eat healthier, reduce alcohol consumption, reduce smoking, or establish better sleeping habits.

As part of the study you will randomly be assigned to one of three groups working with group-dependent materials/exercises all aiming to help you achieve your goal.

You may be asked to work with "Episodic Future Thinking" (EFT), Goal Oriented EFT or to work with educational/motivational materials that aim to promote long-term decision making, by bringing the future closer to the present.

If you participate in a group working with EFT or Goal Oriented EFT, you will actively reflect on the future through a number of regular sessions prompting you to create "cues" representing a concrete event in the future or reflect on the created cues. This in turn aims to reduce delay discounting, help you make decisions with a positive impact on your health and keep you motivated to achieve your health goals.

All participants will also be asked to complete a number of questionnaires throughout the study period (see the "Data gathering" section).

### Additional information

The Principle Investigator (PI) is:

Per Bækgaard

DTU COMPUTE, Department of Applied Mathematics and Computer Science Technical University of Denmark, Richard Petersens Plads, Building 321, room 132, 2800 Kgs. Lyngby. pgba@dtu.dk, Mobile +45 93 51 05 43.

You can contact the principal investigator if you have any questions.

# Data gathering

**Summary:** In order to accomplish the aims of the study (see overview - background ) i.e., In order to assess the motivation to engage in healthy behaviors and the tendency to prefer immediate gratification over long term health, we need to collect different types of data such as: general information about you, your delay discounting, motivation and information about your behavior.

A more comprehensive list is found below:

**Detailed content:** The DTU-EFT study/app collects and stores the following types of data:

- Personal information:
  - Your full name and email address (will only be retained for the duration of the study, afterwards data will be anonymized).
- Demographic information:
  - This includes your, age, sex, height, weight, race/ethnicity, household income.
    Household income and race/ethnicity may be omitted if you don't want to state this.
- Questionnaires:
  - Weekly measures of delay discounting.
  - Weekly measures of motivation to engage in chosen health behavior.
  - Weekly questions about the experiences and perceptions of engaging in the chosen health behavior.
  - In addition, we will also ask questions related to motivation to engage in healthy activities.
  - Questionnaire on app usability (e.g. ease of use, complexity and potential frustrations).

- Automatically collected behavioral information and app usage:
  - This includes activity (step counts/mode of transport) and location data from GPS.
  - Device information like device name, model, manufacturer, operating system, and hardware profile.
  - App usage statistics.

### Data use

**Summary:** Data will be used for scientific purposes only. Data will be shared with involved study researchers associated with the Copenhagen Center for Health Technology (CACHET) from DTU and KU, and will be published only in an anonymized format.

**Detailed content:** The study is hosted at the Copenhagen Center for Health Technology (CACHET), which consists of researchers from the Technical University of Denmark (DTU) and the University of Copenhagen (KU). Data collected in this study will be analyzed and shared among involved study researchers in CACHET only. Results from this study will be published in an anonymized format in scientific journals and other scientific places, and may also be presented at scientific conferences. Dissemination of the research results will be completely anonymous and will NOT contain any person-identifiable information. We strive for open-access publication, which means that access to the research results is available for all for free.

# Privacy

**Summary:** The Technical University of Denmark (DTU) is the data responsible for this study and all data will be collected and stored on secure servers, protecting your privacy.

### **Detailed content:**

This study uses the CACHET Research Platform (CARP). CARP is used by researchers in CACHET to collect, store, manage, and analyze data for research purposes. CARP is operated by the Technical University of Denmark (DTU) at the Department of Health Technology, who is the data controller for CARP. CARP complies with the privacy policy of DTU. The full CARP privacy policy can be found at: https://carp.cachet.dk/privacy-policy/

The Technical University of Denmark is the data responsible for this study. Data is collected and stored on secure servers operated by DTU. The Data Protection Officer (DPO) at DTU is:

DTU Att. DPO Mail: dpo@dtu.dk Tlf: +45 25 25 25 25 You can contact the DPO for any questions you may have regarding the data processing of this study. You can get a digital copy of the data being collected by you in this study by contacting the principal investigator.

# Study Tasks and Time Commitment

**Summary**: As a participant in this study you will be asked to choose one health or wellness goal to work with throughout the 3-week study period. This could, for example, be a desire to increase physical activity, eat healthier, reduce alcohol consumption, reduce smoking, or establish better sleeping habits.

Participants working with (Goal Oriented) Episodic Future Thinking will be asked to use the app daily. Participants working with the motivational materials will be asked to initially read related material and use these as they see fit.

All participants will be asked to complete weekly questionnaires through the app.

#### **Detailed content:**

All participants are asked to download the application, provide consent to participate and engage in the activities listed below:

Participants asked to engage in Episodic Future Thinking (including goal-oriented) are asked to engage in daily use of the application, as part of working with their health goal. Daily use of the application includes generating detailed and vivid descriptions of future events and reflecting on these, facilitated by the app. We recommend at least 2 reflection sessions per day. Additionally, the app will send reminders of these future events by presenting your chosen image representation throughout the day.

Participants asked to engage in educational & motivational materials will be asked to do so through links in the application. We encourage participants to use these as a starting point but also as inspiration to find other materials online.

Participants will be asked to complete a number of weekly questionnaires, such as motivation to engage in a chosen health behavior. Initial tasks include providing general demographic information and assessing baseline delay discounting and motivation. For the remainder of the study period, participants will be asked to complete weekly measures of delay discounting, motivational questionnaires and supplementary questions on the experience of working with your health goal/exercises. On the last day of the study, participants will receive a final delay discounting questionnaire, motivational questionnaire and an end-of-study questionnaire.

# **Clinical Information**

**Summary:** This is NOT a clinical study, and you will NOT receive any clinical or health feedback on data collected as part of this study. If you in any way feel uncomfortable or ill during the study, you should contact your regular healthcare professional.