**Supplemental file for 2022 paper A 6-Month Randomized Trial of a Smartphone Application, UControlDrink, in Aiding Recovery in Alcohol Use Disorder**

**Supplemental Files.**

**Components of Smartphone App UControlDrink.**

1. Onboarding process. A 15-minute web-based evaluation of the participant completed face to face by the research assistant on completion of the paper-based evaluations. There were 2 primary components of the onboarding process.

1a: Completion of an online AUDIT score, with immediate feedback to the participant regarding their AUDIT score, -mild score 0-8: participant given web based feedback of the significance of a low AUDIT score; - Moderate score 8-20: participant given web-based feedback of the significance of a medium AUDIT score; - High score 20 +: participant given web-based feedback of the significance of a high AUDIT score. Participants were also asked to enumerate what their baseline weekly consumption of alcohol was in units of alcohol.

1b: Completion of a personal drinking profile. Participants were asked the following questions and asked to enter their answers into the system:

A: How would you describe your drinking type: Participants given a number of options, such as heavy drinker, or anxious drinker, to which they could add their own choice, that led to the heading on their personal app landing screen.

B: Participants were asked to detail their personal triggers for drinking, either using a prepopulated set of answers or through identifying their own personal triggers.

C: Participants were asked to briefly detail their bad experiences with alcohol. Suggestions were made, e.g.: I ruined a relationship, or participants were asked to briefly enter their own bad experiences.

D. Participants were asked to briefly detail their motivations to change their drinking habits. Suggestions were made, e.g.: I want to improve my physical health, or participants were asked to enter their own motivations.

E. Participants were asked what lifestyle changes they might consider to help their recovery. Suggestions were made, e.g.: I want to go to the gym, or I want to attend AA meetings, or participants were asked to enter their own lifestyle changes.

F. Participants were asked by what percentage they wished to reduce their alcohol consumption. They could enter anything from 0%– 100%. This was immediately translated into the appropriate number of units per week based upon their previous entering of their baseline number of units per week currently consumed.

Participants were then asked to download the app to their phone from the appropriate android or apple app store. The downloaded app was populated with the profile detailed on the onboarding process.

This individualized profile included a landing page profile on the smartphone app, detailing baseline drinking and choice of % reduction of alcohol desired (ranging from 0-100%); their choice of a profile cartoon or avatar, which the participant chooses from a range suggested on intake; a record of their baseline AUDIT score, and their current “recovery” score.

The components of the app were:

Twice daily text messaging support. All participants received a twice daily motivational message at 8 am and 8 pm. These messages were developed by a team of psychologists, addiction therapists and patients (13).

Daily Drink log. All participants were asked to log their alcohol consumption daily even if no alcohol was consumed. This was logged graphically into the app, and participants could track their weekly consumption totals.

Daily recovery activity log. All participants were asked to log their daily recovery activity, based upon the activities detailed in their onboarding process. If they wished to detail another type of activity, they could enter it and it would automatically subsequently be offered as a choice of activity for the daily log. Participants were able to track their weekly log of activity on the app.

12 Relapse Prevention (RP) /Cognitive therapy session. A total of 12 RP session, each approx. 20 minutes long were developed for the app. Each session consisted of an animated introduction, followed by a series of screens with questionnaires with feedback on completion, graphic instructions, written information. 3 of the sessions had additional animated videos. These sessions were designed by a team of psychologists and technologists to cover the cognitive-behavioral coping skills therapy manual for Project MATCH, issued by NIAAA. (Project Match, 1997)(12). They were adapted for a smartphone after previously being used on a web-based intervention. Participants were encouraged to view these RP sessions themselves at the rate of 3 per week for the first 4 weeks.

Craving video intervention. Participants who experienced subjective sensations of craving were encouraged to play a 5-minute craving programme consisting of a relaxation video, motivational messages taken from their own onboarding questionnaire, and craving intervention instructions. This intervention was modelled on research upon the effects of stress upon drug and alcohol craving (40).

Engagement/Retention features. Participants received “Recovery Points” for engagement with the app, completion of daily drink log and recovery logs, completion of relapse prevention therapy sessions, and achievement of weekly drinking reduction targets. Points achieved were displayed on the participant’s app landing screen. Participants also had access to weekly tracking screens that displayed their weekly achievements in drink and recovery logs, therapy sessions, and total points achieved.

Instruction Video. All participants could play an instructional video, detailing the functionality of the app in a series of easy to understand app screens.

Ref:

40. Sinha R: Modeling stress and drug craving in the laboratory: implications for addiction treatment development. Addiction Biology 2009, 14 (1) 84-98.