THE DRINKWARE APP

The Drinkaware Track and Calculate Units app is a free mobile application that aims to help people who regularly drink more than the lower risk alcohol consumption guidelines to moderate their drinking.

The Drinkaware app allows users to:
- track their alcohol consumption (units and calories)
- set personal goals and recognize achievements when making positive changes in their drinking behaviour.

It also provides:
- Information about the health benefits of cutting down alcohol
- Support and motivation with personalized feedback

The app uses geo-fencing technology to provide users with extra support in locations they self-identify as drinking ‘weak spots’.

EVALUATION AIMS

With the independent evaluators it was decided to examine (taking an exploratory and hypothesis testing approach):

(a) the current patterns of usage
(b) end-user perceptions of usability, acceptability and satisfaction
(c) changes in drinking behaviour with usage of the Drinkaware app

PRELIMINARY FINDINGS: WHO ARE APP USERS?

Demographics

Age data were obtained in just over half of users (57% of the sample) and gender in the majority (96% of the sample).

- The mean age of users was early middle age (38.7 years) and ranged from 17 – 86 years.
- There are more female (56%) than male users (43%).
- 54% of users are classified as ‘low risk’, 29% are classified as ‘increasing risk’, and 17% as ‘high risk’ based on their self-reported drinking behaviour at baseline. There was no difference in the composition of the risk profiles in terms of gender.
- The mean age of the ‘low risk’ users was 37.4 years. There was a significant difference between the risk profile scores in terms of age, with users classified as ‘high risk’ being older, on average than individuals classified as ‘low’ and ‘increasing risk’.

Motivation to download the app

For women, weight loss was the most frequently specified motivation for downloading the app, whilst men more often stated they were just curious.

For individuals classified as ‘low risk’, the most common reason for downloading the app was just curious, followed by weight loss. For individuals classified as ‘high risk’, to reduce drinking was the most common motivation.

CONCLUSIONS AND NEXT STEPS

- The initial data extraction and analysis has offered essential learning – and we are now considering this a ‘test run’.
- We are preparing another data extraction and have refined the process of data cleaning and data fields required.
- A qualitative process and user feedback evaluation will be added over the summer and autumn 2015.
- Future plans include an A/B test to determine the value of new individually tailored/personalised behaviour change features to be added in the autumn.

For more information about the Drinkaware app and/or the evaluation process, please contact Dr. John Larsen: jlarsen@drinkaware.co.uk

DATA ANALYSIS

Data was extracted from 49,291 users who downloaded the application from its launch on 12th August 2014 until 23rd January 2015.

The data was anonymised before sharing with independent evaluators who explored:

- Who the users of the Drinkaware app are
- Their patterns of usage and retention over time
- The change in drinking behaviour with Drinkaware app use

Data Analysis

- To determine the user profile: descriptive analysis of users’ demographics (age & gender), motivations for downloading the application (e.g., ‘to lose weight’, ‘to reduce drinking’ etc.), baseline drinking habits and initial risk level classifications (using self-reported data derived from ‘typical week’ entries).
- To determine pattern of usage: descriptive analyses of the application features accessed (i.e. goals and weak spots).
- To determine user retention: exploration of the number (and characteristics) of users who continue to engage with the application and enter data at the specified primary end points (1, 4 and 12 weeks).
- To determine change in drinking behaviour with usage of the app: multiple regression analyses to explore how on boarding characteristics (user demographics & motivation) predict change in drinking behaviour over the specified follow-up period (1, 4 and 12 weeks).

PROCESS LEARNING: MAKING SENSE OF THE DATA

A key question for the evaluation is to understand whether and how the app helps people to change their drinking behaviour:

- Does using the Drinkaware app help people to reduce harmful drinking?

The initial data extract showed the following pattern in average units at baseline, week 1, week 4 and week 12:

However, further examination revealed that a large number of users in the dataset had the value ‘0’ for their baseline drinking. This was found to be due to a data recording mistake in the first version of the app, resulting in a lower average figure at baseline.

When all data fields (more than 8,000) with ‘0’ at baseline were removed from the analysis the baseline figure was considerably higher:

The preliminary data analysis highlighted other issues to be addressed, for example:

What to do if some days in a week are missing data?
- Exclude the full week as ‘incomplete’?
- Average out days with data entered?
- Set a maximum of days in week (e.g. 3) with ‘missing data’?

KEY LEARNING:

Extracting meaningful data from the app requires careful attention:

- Be prepared to spend considerable time and resource to check and ensure the accuracy of data.
- Be clear on data extraction requirements and how the data reflect app functionality.