DrinksRation – An alcohol app for help-seeking veterans

Results of a Randomised Controlled Trial

www.drinksration.app

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@DrinksRation

Faculty/Presenter Disclosure

I am funded by the **Forces in Mind Trust** as a Research Fellow.

I am a member of the UK Armed Forces Army Reserve.

Co-Authors

A Simms is a full-time member of the UK armed forces seconded to King's College London.

N Fear is part funded by a grant from the UK Ministry of Defence and is a trustee of a charity supporting the health and wellbeing of service personnel, veterans and their families.

E Carr is part funded by the National Institute for Health and Care Research Biomedical Research Centre at South London and Maudsley NHS Foundation Trust.

Disclosure of Financial Support

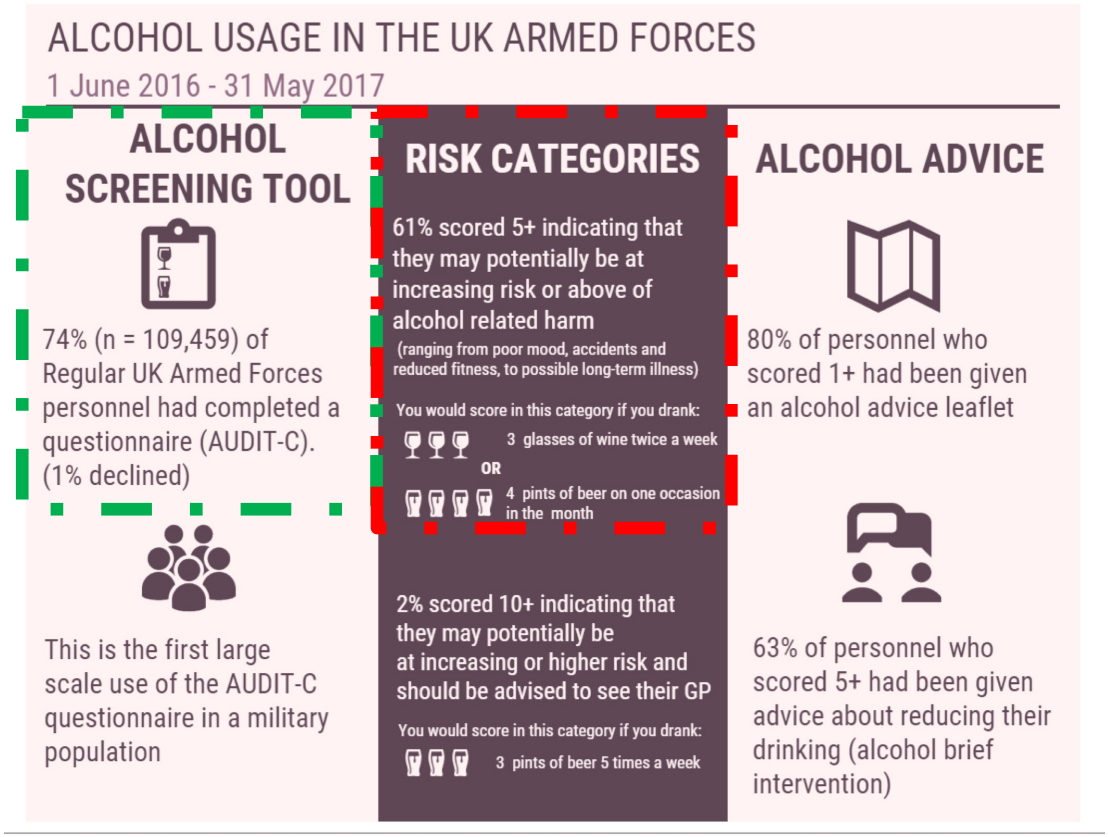
- This project has received financial support from the **UKRI Medical Research Council** and the **Forces in Mind Trust** in the form of research grants.
- This project has received in-kind support from Combat Stress in the form of in-king knowledge support and clinical oversight support.

Mitigating Potential Bias

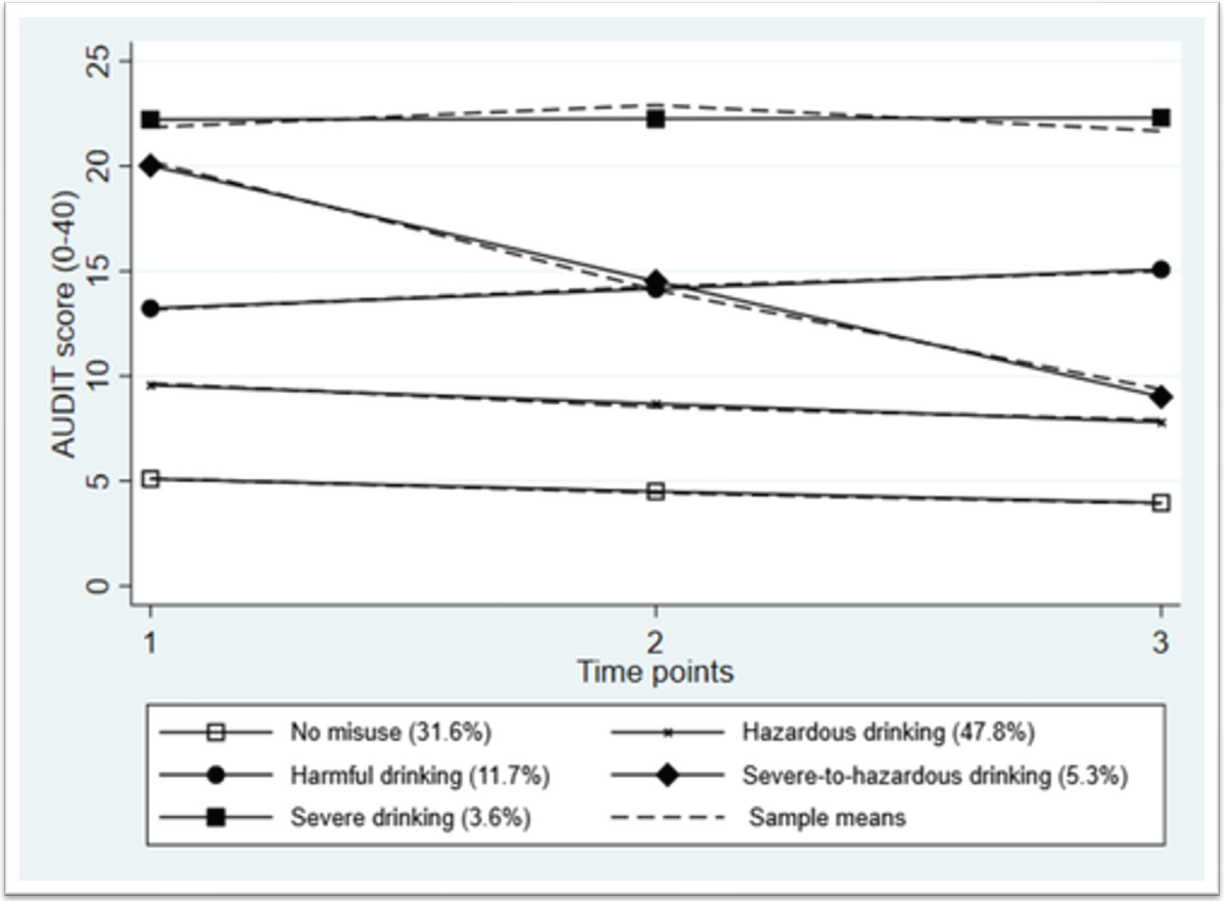
- The UK Ministry of Defence, Forces in Mind Trust and UKRI Medical Research Council had no input in the analysis or interpretation of results.
- All results have been peer reviewed.

Learning Objectives:

- At the conclusion of this presentation participants will be able to describe a randomised controlled trial, and outline the findings of the study.



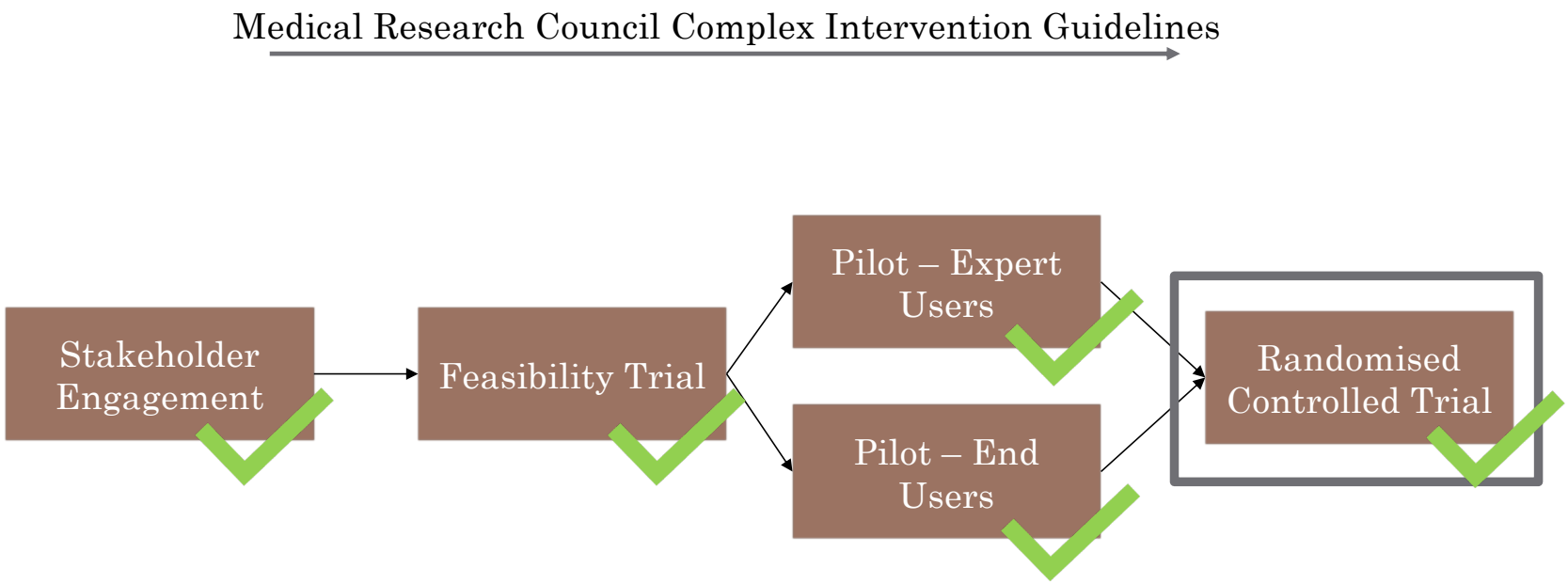
Is there a problem with drinking in the UK military?



Is there a problem with drinking after leaving service?

Trajectories of alcohol misuse among the UK Armed Forces over a 12-year period. Palmer *et al.* 2021. Addiction. doi:10.1111/add.15592

The story so far…

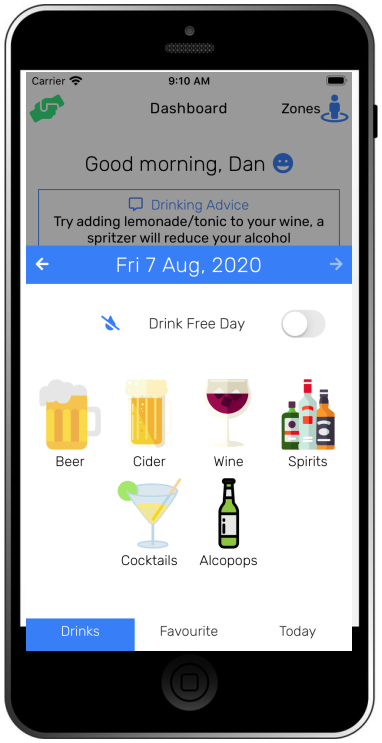


How is DrinksRation different to other apps?

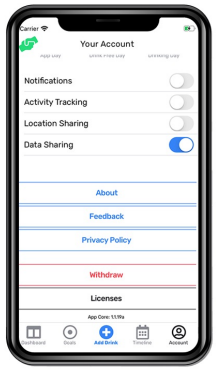
Content tailored to ex-serving personnel	Focused on shorter term outcomes e.g. impact on relationship	Content driven by user feedback and interaction
Daily *personalised* text messages and/or push notifications	Weekly assessments of mood and drinking behaviours to inform personalisation	App split into stages using HAPA model

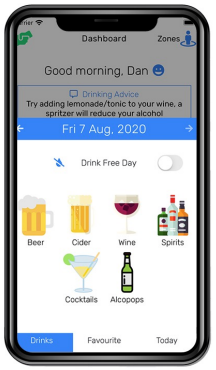
Behavioural Change Theory underpins all DrinkRation components

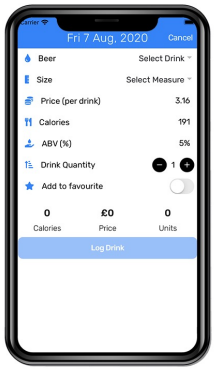
DrinksRation Overview

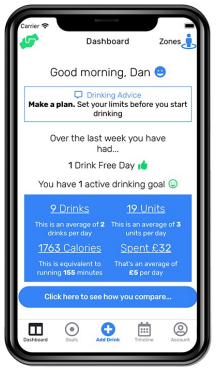


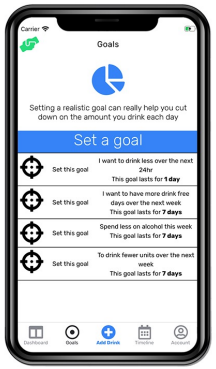
- **Designed as a 28-day intervention using a staged approach:**
  - **Stage 1:** Normative feedback, promote self-efficacy and self-monitoring
  - **Stage 2:** Maintenance of self-efficacy and introduce goal/action planning
  - **Stage 3**: Managing self-efficacy and coping development.
- User interaction **required.**
- Log alcohol and drink free days.
- Log mood and mental health state.

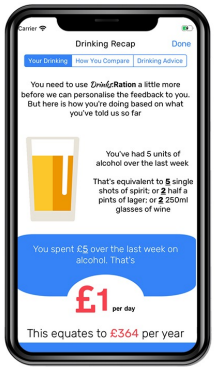


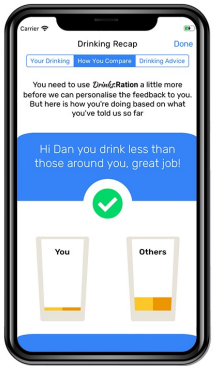


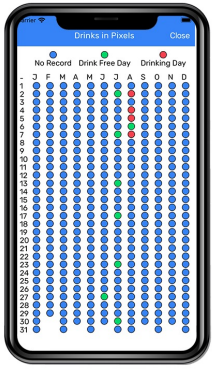












DrinksRation Screenshots

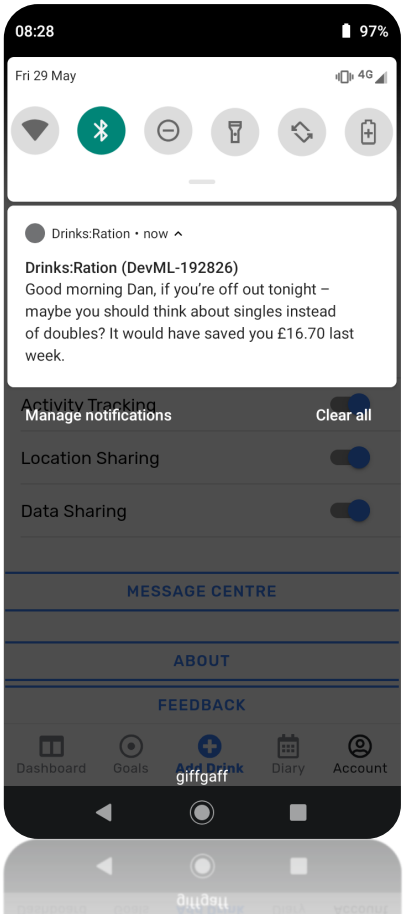
Personalising the ‘message’ - Example

Past behaviour (which day of week)

Good morning Dan, if you’re off out tonight – maybe you should think about singles instead of doubles? It would have saved you £16.70 last week.

User generated goal (to save money)

Behaviour change (reduce consumption)



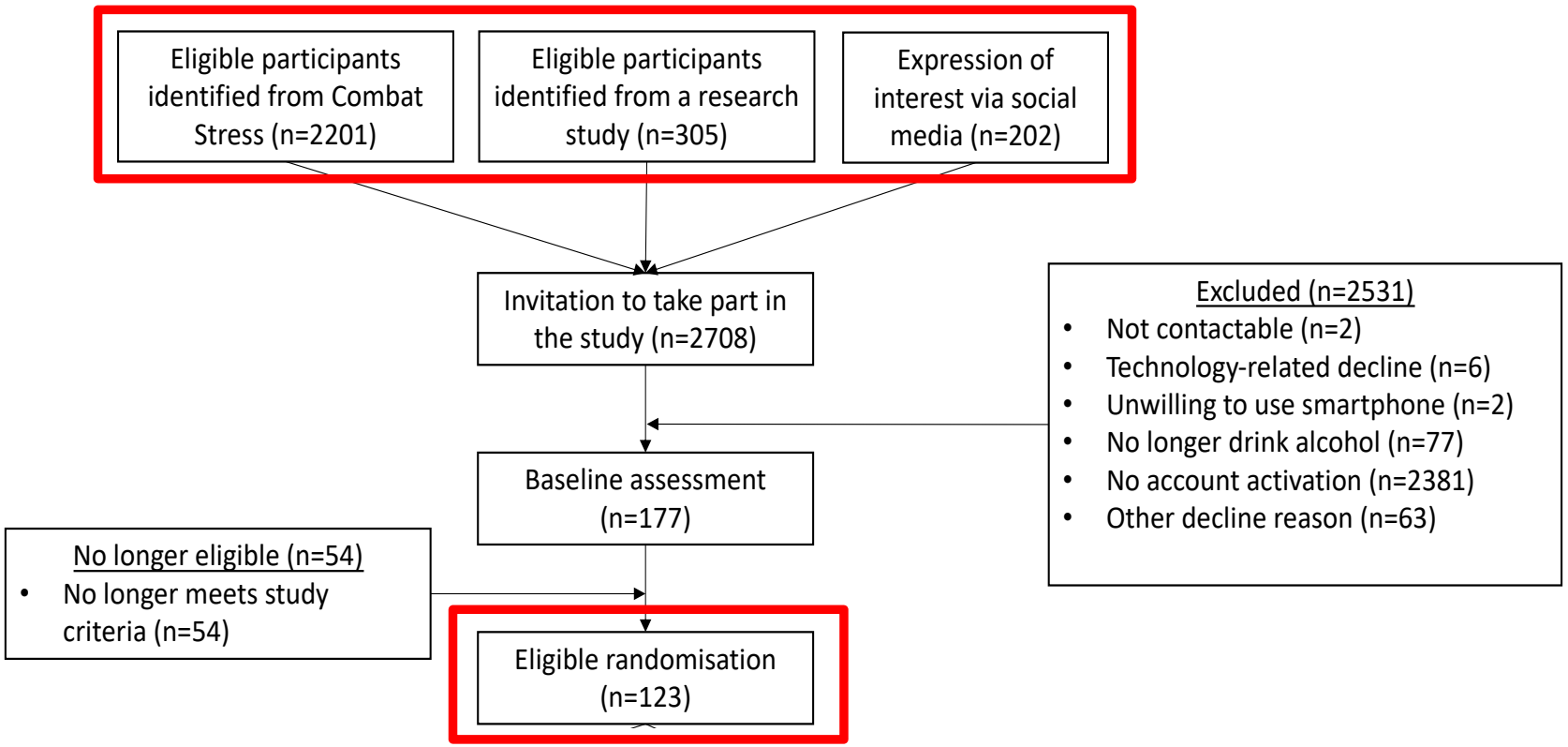
Study design

Hypothesis: The intervention arm would be more efficacious in **reducing alcohol consumption** compared with the control arm.

Design: Two-arm randomised controlled trial powered to detect a **four unit decrease** in alcohol consumption at follow-up.

Control Arm	Intervention Arm
No monitoring features except CMO guidance on alcohol consumption	Full functionality including individualised normative feedback

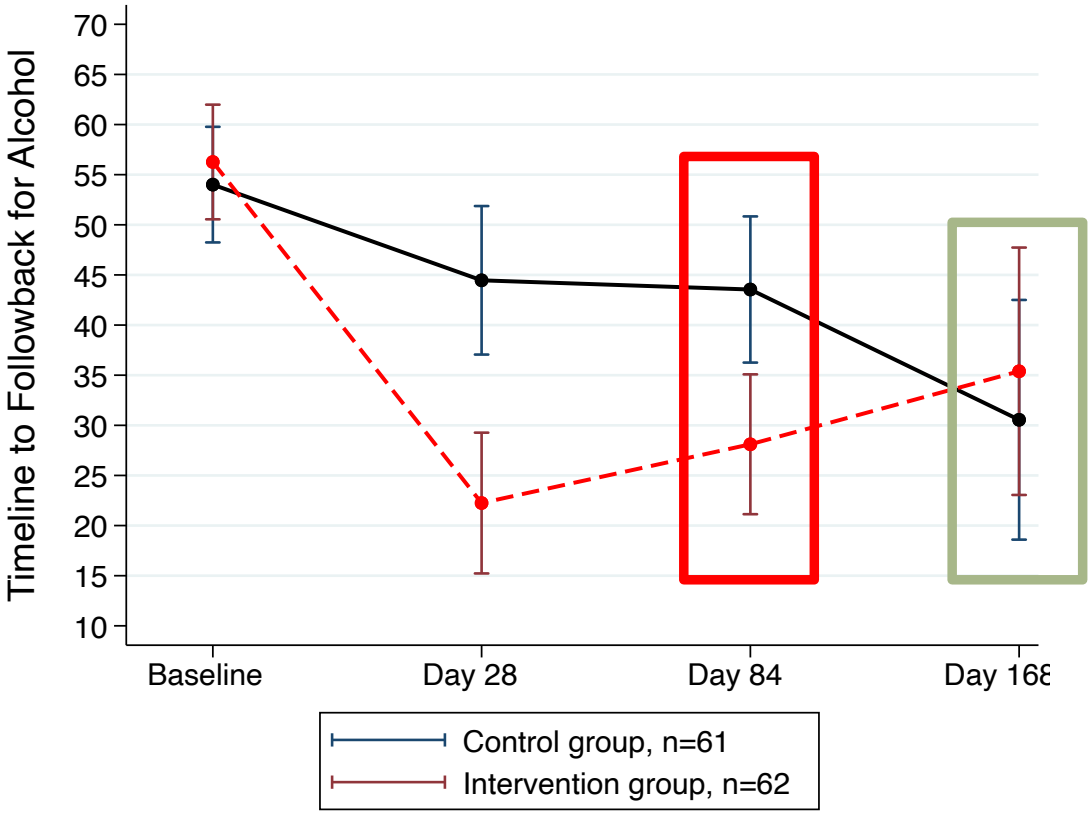
Outcomes: Primary outcome is **change in alcohol consumption between baseline (day 0) and 3-month follow-up (day 84).**



Recruitment

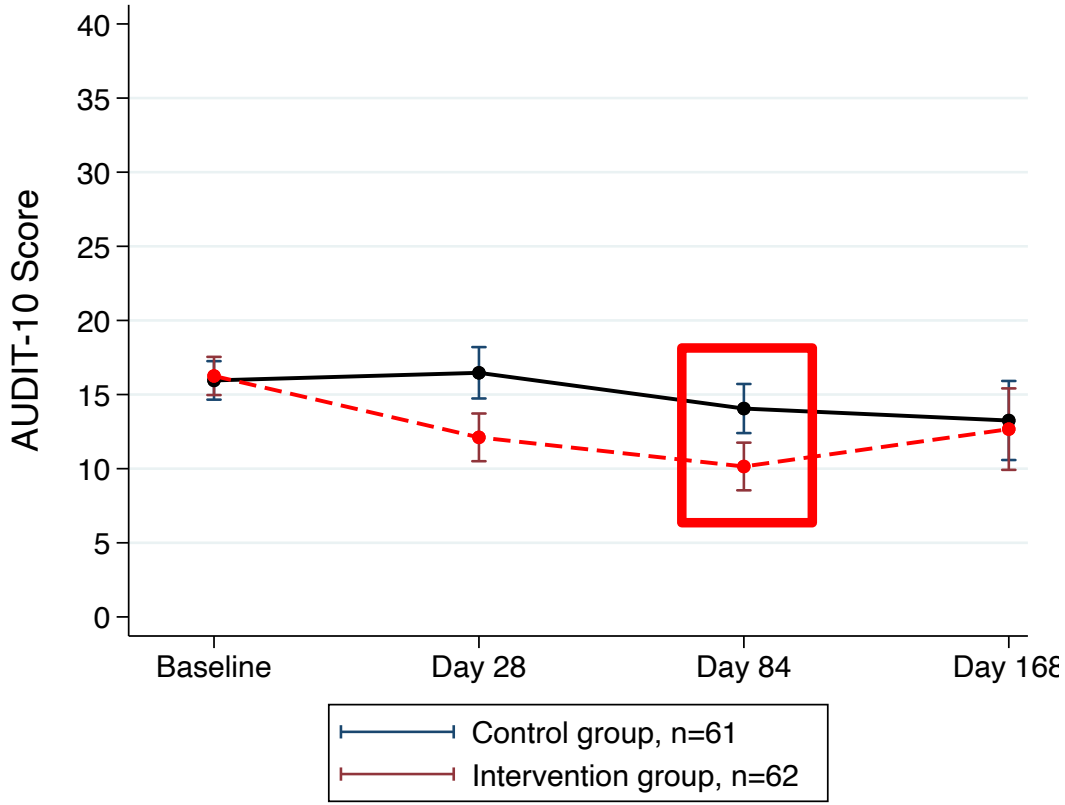
Characteristic	Control (n=61)	Intervention (n=62)
Age (mean, 95% CI)	47.42 (44.86 to 49.98)	47.67 (45.25 to 50.09)
Gender (%)		
Male	**95.1**	95.2
Female	4.9	4.8
Military branch (%)		
Royal Navy/Royal Marines	9.8	12.9
Royal Air Force	13.1	13.1
Army	**73.2**	69.6
Other	4.9	4.9
Length of military service (median, IQR)	15 (8 to 22)	12 (7 to 22)
Post-Traumatic Disorder (%)		
Probable PTSD	**42.6**	50.0
Depression (%)		
Probable depression	49.2	56.5
Anxiety (%)		
Probable anxiety	52.5	46.8
AUDIT score (mean, 95% CI)	16.2 (14.0 to 18.4)	17.2 (15.3 to 19.1)
Device type		
iOS	52.5	38.7
Android	47.5	61.3

Demographics

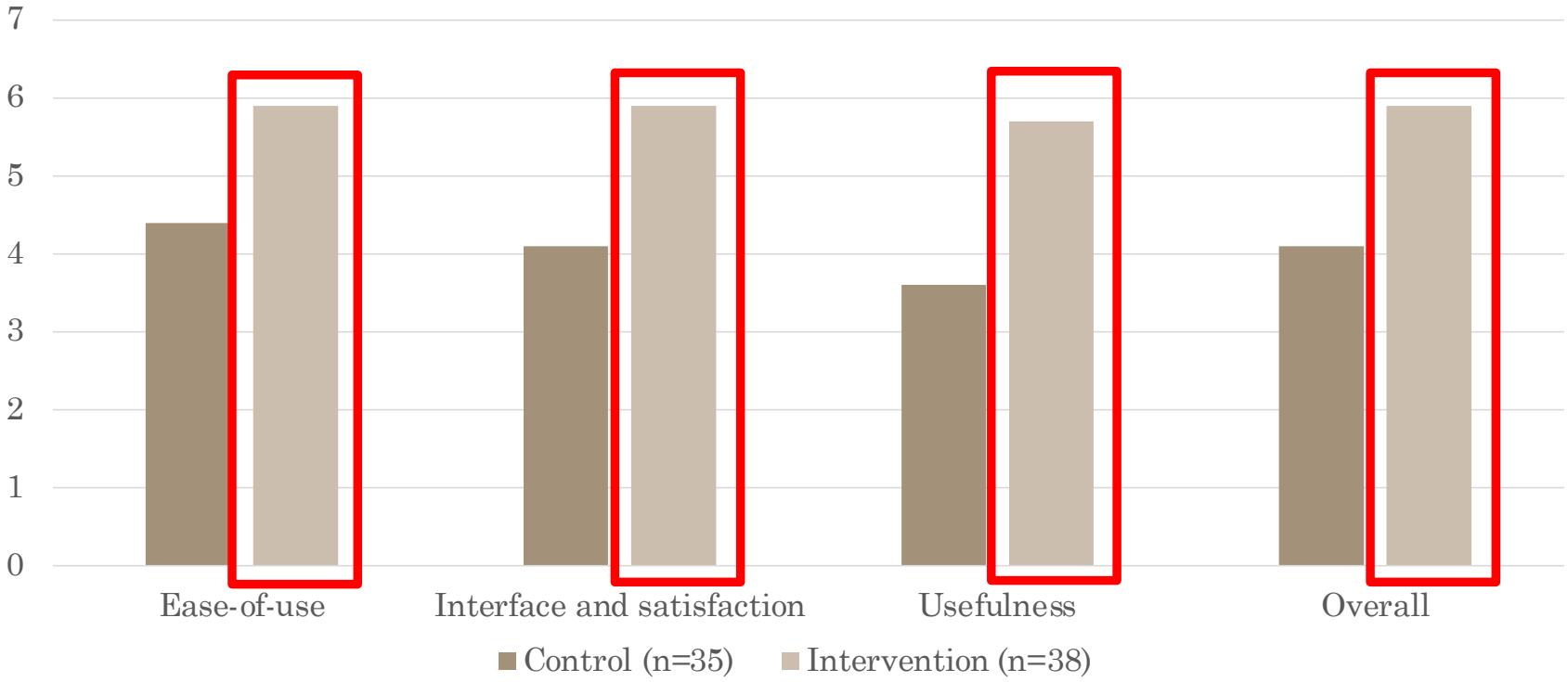


Mixed models. Adjusted for age, sex and predictors of missingness

Does DrinksRation reduce self-reported alcohol consumption?



Does DrinksRation reduce self-reported AUDIT score?



App usability scoring

Conclusions and implications

- Measures of engagement were encouraging across the study.
- Most users used the app primarily for self-monitoring;
  - Use of goal setting was limited.
  - Related to perceived need to change drinking.
- DrinkRation was found to be efficacious in reducing alcohol consumption in help-seeking veterans at **day 84**.
- Covid-19 may have had an impact on the study or drinking behaviours.
- These findings support the dissemination of DrinkRation.

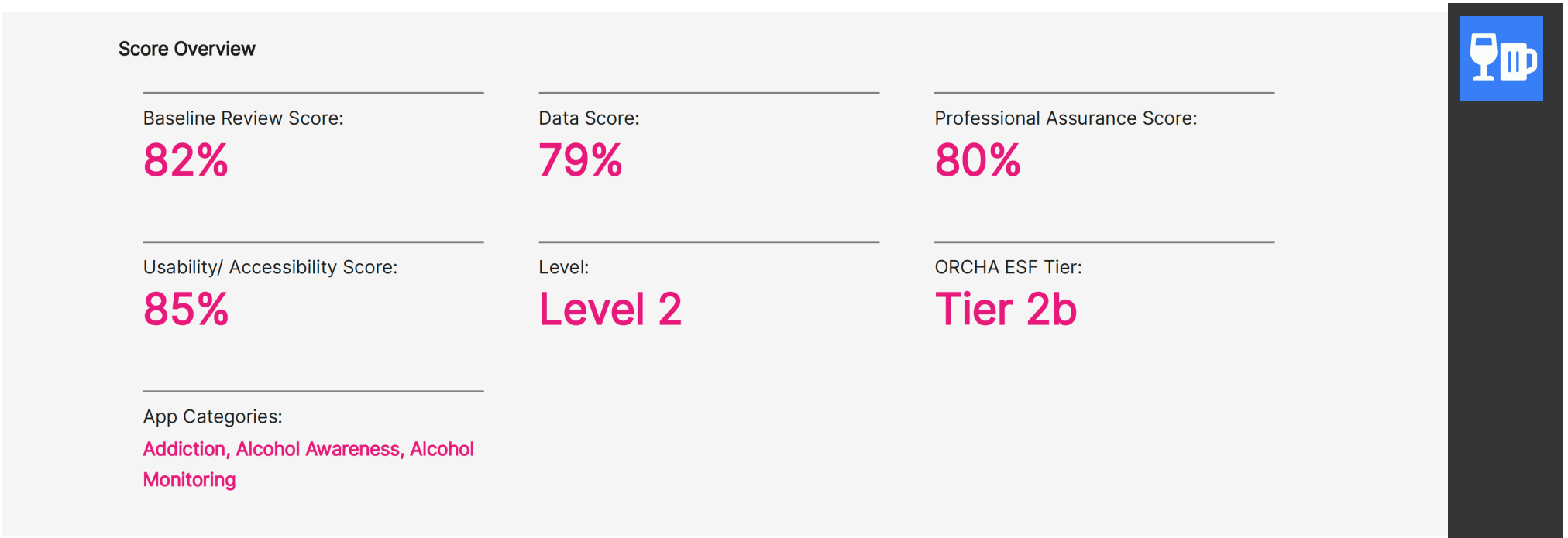
FiMT Funder Report

www.kcmhr.org/pdf/2022_ration_report.pdf

Combat Stress Partnership

Armed Forces Trial

Led by Surgeon Commander Kate King



DrinksRation Download

- DrinksRation is available for **download** via iOS and Android app stores (search DrinksRation).
- ORCHA Health is a company which screens and evaluates health apps for use in a healthcare setting.

See our full reports here: www.drinksration.app/transparency

Thank You

Research Team.

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