



Understanding Society

THE UK HOUSEHOLD LONGITUDINAL STUDY

Protocols to Invite Survey Respondents to Data Collection Using Mobile Apps: Effects of Survey Mode, Incentives and Feedback on Participation Rates and Bias

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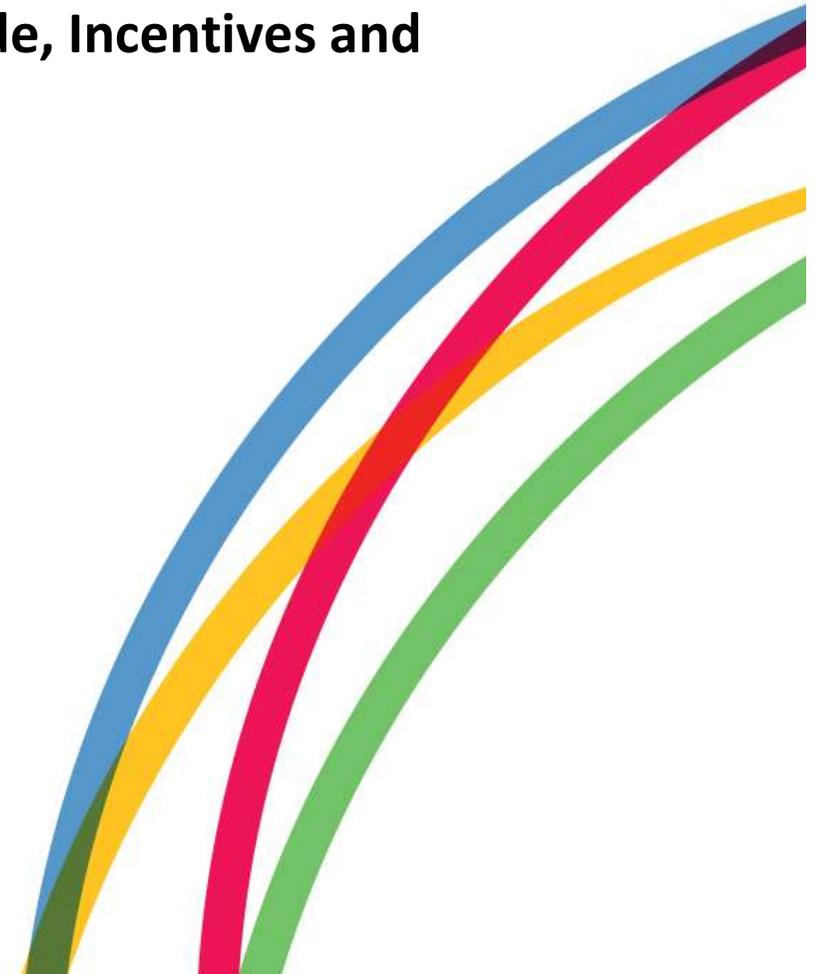
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Mick Couper (University of Michigan)

MASS workshop (22/06/2023)



**Economic
and Social
Research Council**



BodyVolume app study

- **Study design**

Innovation Panel sample

N=2,536 respondents

Invited to app in 2022 interview

iOS + Android, phones + tablets

- **Experiments**

Survey mode: CAPI-first /
web-first mixed modes

Incentives: £5 conditional for
BodyVolume app data /
£5 unconditional for survey

Feedback promised: body fat /
visceral body fat /
no feedback

← Your Profile

Please answer these questions about yourself. The answers are needed to compute your body measures from the body scans.

Age

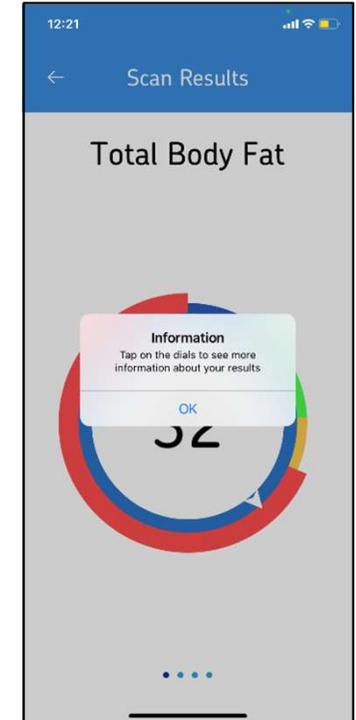
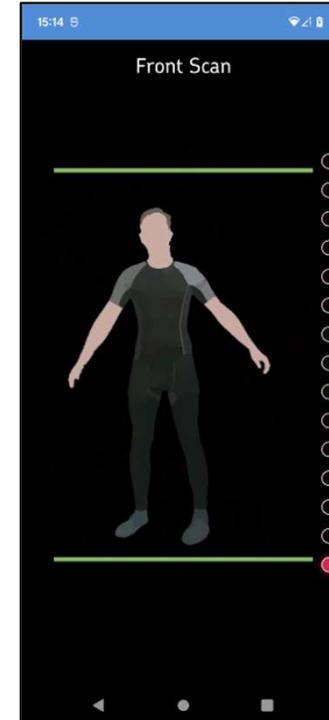
Gender at Birth

Height

Weight

Activity Level

Continue



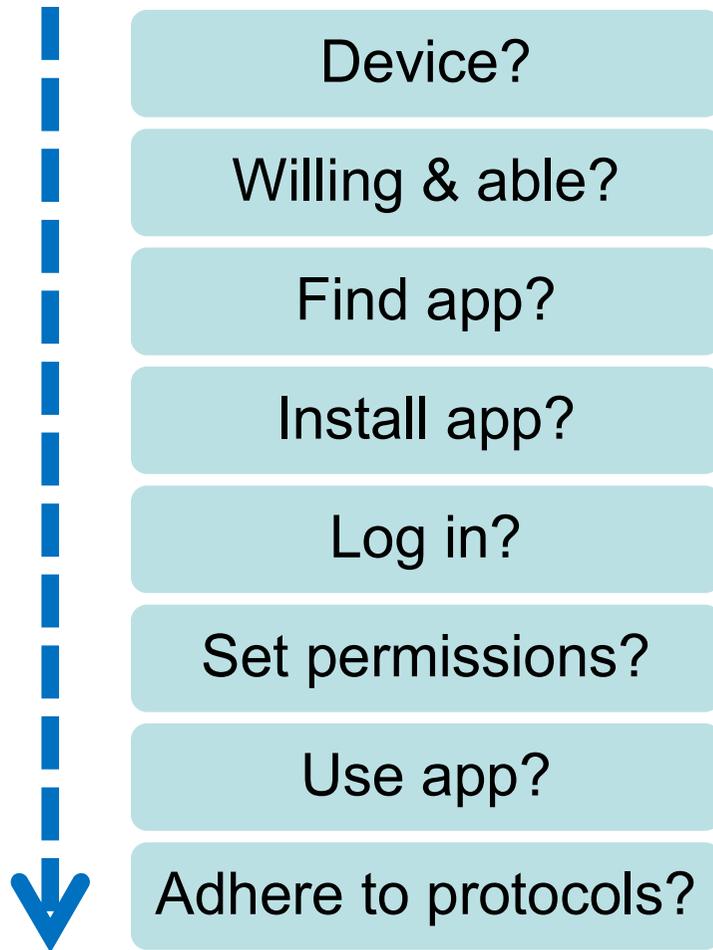
- **Research questions**

Effects of experimental treatments on participation rates / bias?

Where in the process do we lose respondents?

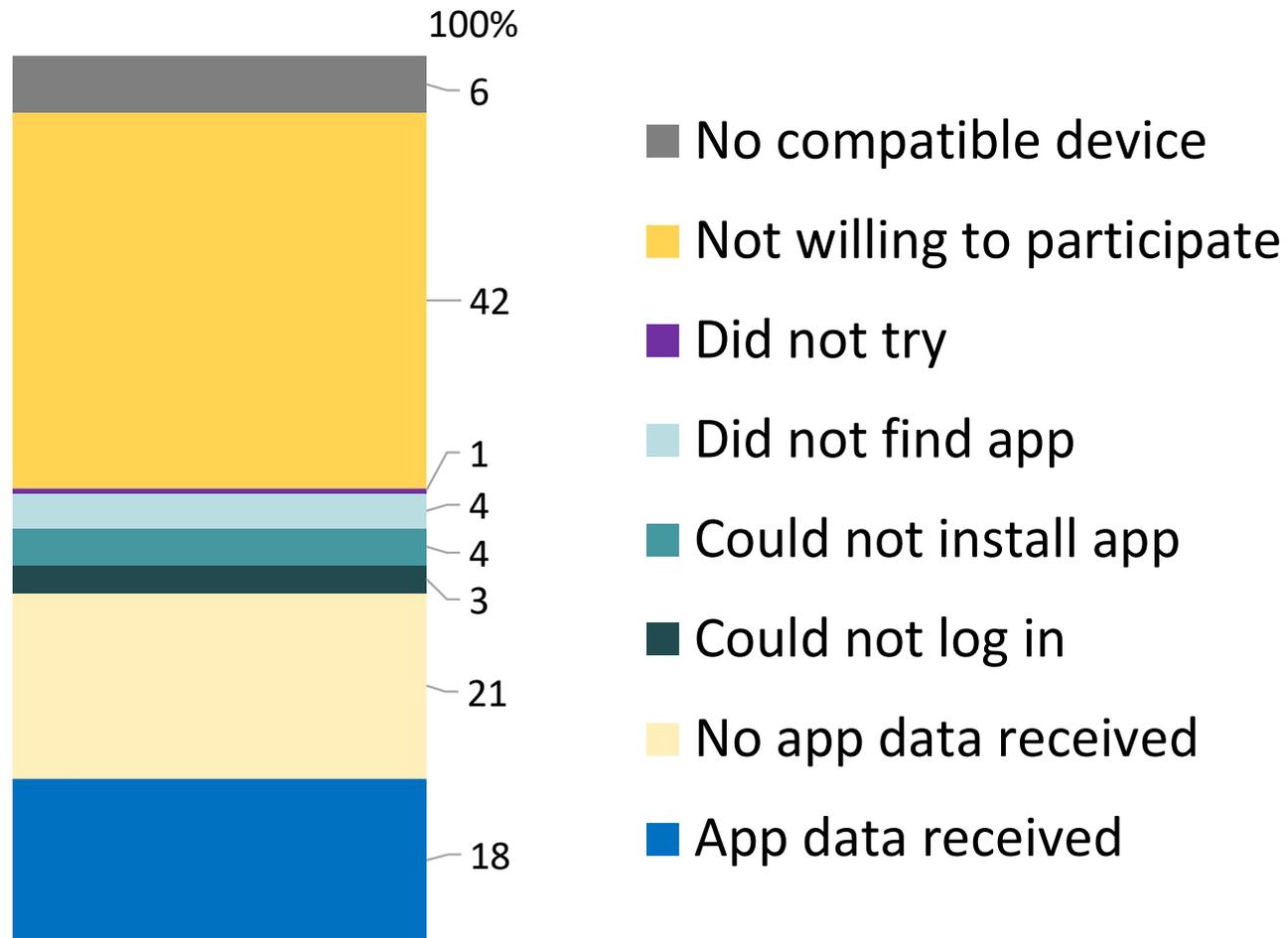
In-survey recruitment to app studies

Invited sample



App data

BodyVolume app outcomes

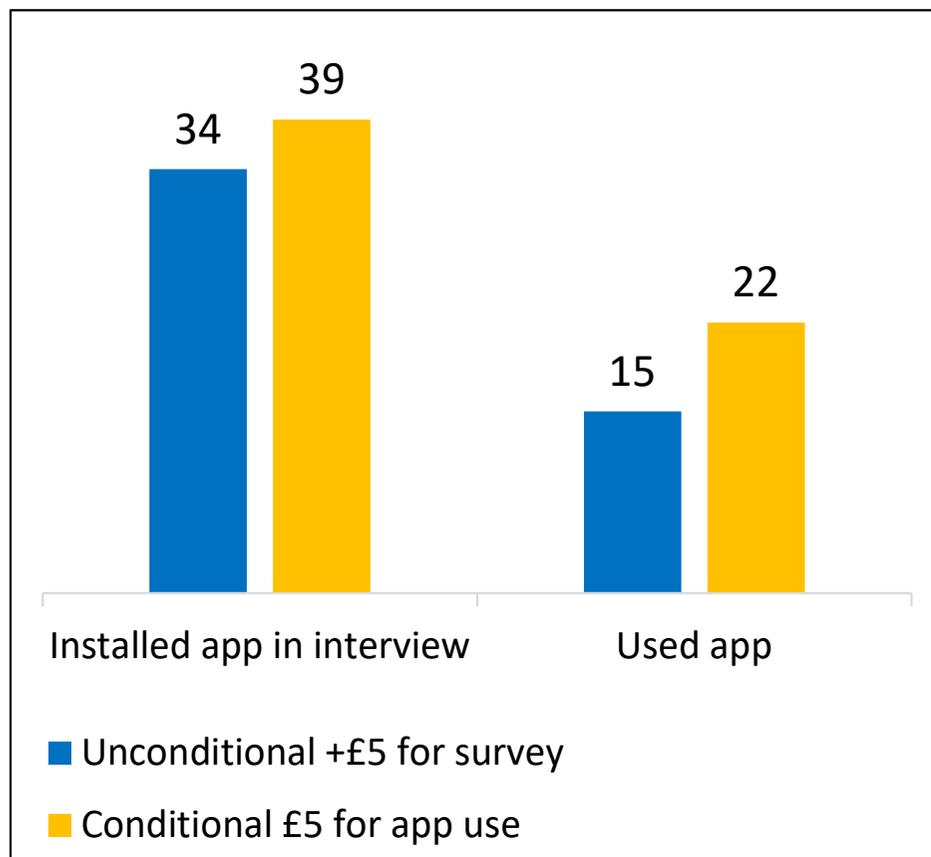


What can we do to reduce barriers?

Device	<ul style="list-style-type: none">• Loan device• Compatibility: OS / OS version / tablet & phone
Willing & able	<ul style="list-style-type: none">• Incentives• Feedback• Length of task (# days / daily time)• Wording: purpose / privacy / data security...• Mode of invitation: letter / in interview• Placement of invitation in interview
Find app	<ul style="list-style-type: none">• Search / link / QR code• Name and logo of app
Install app	<ul style="list-style-type: none">• App size
Log in	<ul style="list-style-type: none">• User name and/or password• Password usability
Set permissions	<ul style="list-style-type: none">• Wording: justification• Incentives
Use app	<ul style="list-style-type: none">• App design & instructions
Adhere to protocols	<ul style="list-style-type: none">• Reminders• Bonus incentives

BodyVolume app experiments

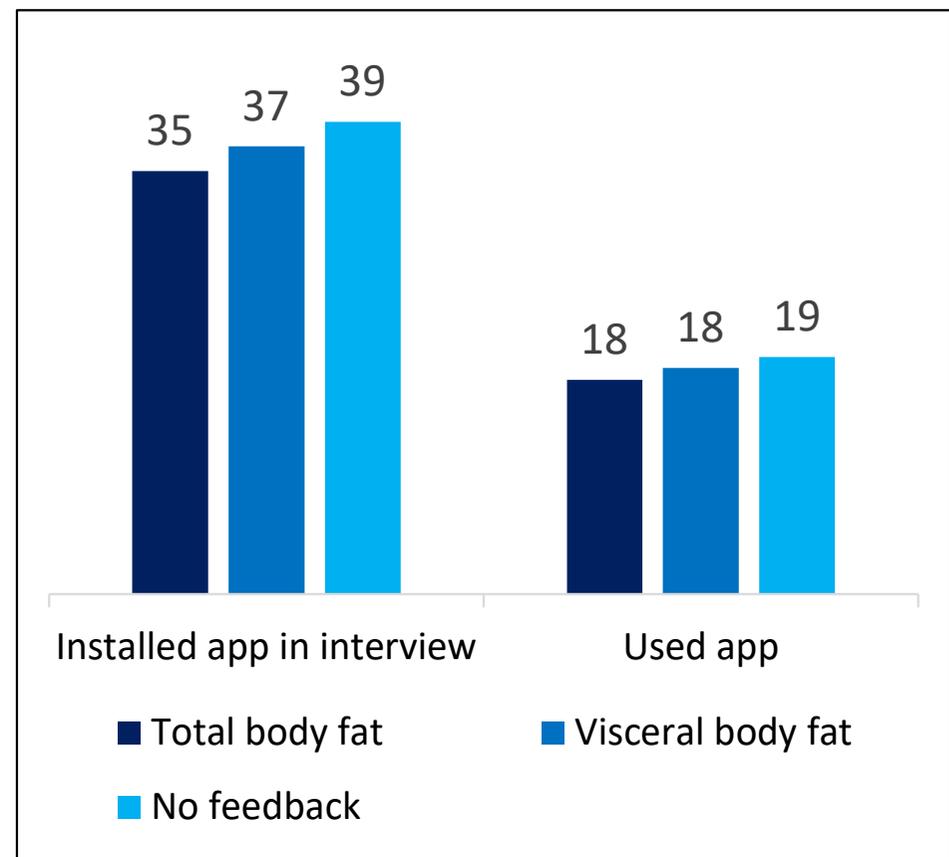
Incentives



Bonus for installation of spending study app – no effect (Jäckle et al 2019)

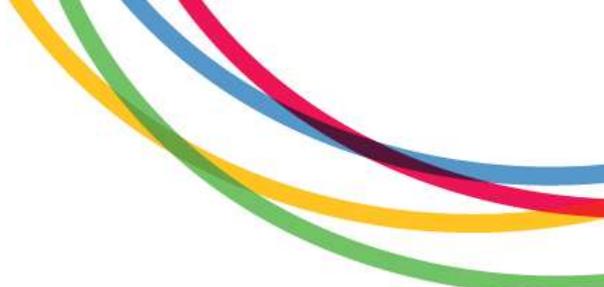
Bonus for completing 14 day wellbeing study – see Burton (Jäckle et al 2023)

Feedback promised in app



Feedback vs no feedback in spending study app – no effect (Wenz et al 2022)

References



- Jäckle, Burton, Couper and Perelli-Harris (2023) Participation of household panel members in daily burst measurement using a mobile app: Effects of position of the invitation, bonus incentives, and number of daily questions, *Understanding Society Working Paper 2023-01*, Colchester: University of Essex.
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 - Jäckle, Wenz, Burton and Couper (2022) Increasing participation in a mobile app study: The effects of a sequential mixed-mode design and in-interview invitation, *Journal of Survey Statistics and Methodology*, 10(4): 898–922.
<https://doi.org/10.1093/jssam/smac006>.
 - Jäckle, Burton, Couper and Lessof (2019) Participation in a mobile app survey to collect expenditure data as part of a large-scale probability household panel: Coverage and participation rates and biases, *Survey Research Methods*. 13(1):23-44. <https://doi.org/10.18148/srm/2019.v1i1.7297>.
 - Wenz, Jäckle, Burton and Couper (2022) The effects of personalized feedback on participation and reporting in mobile app data collection, *Social Science Computer Review*, 40(1):165-178. <https://doi.org/10.1177/0894439320914261>.
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Thank you.

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