ISRCTN10512908 https://doi.org/10.1186/ISRCTN10512908

Do social norms play a role in explaining the impact on food selection of increasing the proportion of healthier food available?

Submission date 24/01/2020	**Recruitment status** No longer recruiting	[X] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [_] Record updated in last year
Registration date 31/01/2020	**Overall study status** Completed	
Last Edited 07/01/2021	**Condition category** Other	

Plain English summary of protocol

Background and study aims
Increasing the relative availability of healthier and more plant-based foods increases the likelihood that they are selected. The mechanisms by which this intervention has its effect are little explored. The aim of the two studies described here is to provide the first exploration of the role of perceived popularity – as a marker of descriptive social norms – as a possible mechanism underlying the effects of availability interventions.

Who can participate?
Adults over the age of 18

What does the study involve?
This study has two components that will be conducted at the same time, an online study and a lab study. Participants will be able to take part in one or the other.

Online Study: The study will be conducted online. Participants are shown eight images, each with a mix of healthier and less-healthy food or drink options on cafeteria shelves, and asked to indicate the percentage of sales they think would be of the healthier (over the less-healthy) options. These images will show either 75% healthier, 50% healthier, or 25% healthier options. The shelves in the images will either be full (i.e. have same number of units of products in each row), or emptier (i.e. have a varied number of units of products in each row, with maximum number of units equal to that in fuller shelf condition). Participants will be randomised to see one of these six options (3 availability x 2 shelf fullness). The data from the study will be used to assess whether altering the relative availability of healthier food alters the perceived popularity of these healthier foods.

Lab Study: Participants will be invited to take part in another study. After completion of this main study, and prior to debriefing, participants will be presented with a tray of food options and asked to select a snack, ostensibly as a thank you for their participation. Participants will be randomised to a particular arrangement of snacks on the tray. Trays will have either a 1:2 healthier:less-healthy snack ratio or 2:1 healthier:less-healthy snack ratio. Trays will also either

be set out so that the tray appears full - suggesting greater consumption by others for options which have more units remaining – or so the tray appears emptier - suggesting greater consumption by others for options which have fewer units remaining. Participants' selection of a healthier (over less-healthy) snack will be recorded. This study will assess the impact of manipulating perceptions of the popularity of healthier (over less-healthy) options on food selection.

What are the possible benefits and risks of participating?
Participants in the online study will be paid standard market research panel rates for participating in this study, and in the lab study will be paid for the main study they have been recruited to. There are no known risks of participating in either study.

Where is the study run from?
Behaviour and Health Research Unit, University of Cambridge (UK)

When is the study starting and how long is it expected to run for?
February 2020 to August 2020

Who is funding the study?
Wellcome Trust (UK)

Who is the main contact?
Dr Rachel Pechey
rachel.pechey@phc.ox.ac.uk
(updated 07/01/2021, previously: rachel.pechey@medschl.cam.ac.uk)

Contact information

Type(s)
Scientific

Contact name
Dr Rachel Pechey

ORCID ID
http://orcid.org/0000-0002-6558-388X

Contact details
Nuffield Department of Primary Care Health Sciences
University of Oxford
Radcliffe Primary Care Building
Radcliffe Observatory Quarter
Woodstock Rd
Oxford
United Kingdom
OX2 6GG
-
rachel.pechey@phc.ox.ac.uk

Additional identifiers

EudraCT/CTIS number
Nil known

IRAS number

ClinicalTrials.gov number
Nil known

Secondary identifying numbers
Pre.2019.100

Study information

Scientific Title
Increasing the relative availability of healthier vs. less-healthy food: Exploring the role of social norms

Study objectives
Online Study:
1. Increased availability of healthier (less-healthy) foods increases the perceived popularity of healthier (less-healthy) foods – when shelves are full
2. When shelves are emptier, decreased availability of healthier (less-healthy) foods decreases the perceived popularity of healthier (less-healthy) foods
3. Increased perceived popularity of healthier (less-healthy) foods increases selection of healthier (less-healthy) foods
4. Manipulating availability at the product-level will have a smaller impact than manipulating availability at the category-level

Lab Study:
Increased availability of healthier (less-healthy) foods increases selection of healthier (less-healthy) foods when in line with perceived popularity (i.e. when offered a full tray), but this impact is countered when perceived popularity acts against increased availability (i.e. when tray is emptier)

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 14/01/2020, Cambridge Psychology Research Ethics Committee (The Administrator of the Cambridge Psychology Research Ethics Committee, School of the Biological Sciences, 17 Mill Lane, Cambridge, UK; +44 (0)1223 76689; Cheryl.Torbett@admin.cam.ac.uk), ref: Pre.2019.100

Study design
Interventional randomized controlled trial

Primary study design
Interventional

Secondary study design
Randomised controlled trial

Study setting(s)
Other

Study type(s)
Prevention

Participant information sheet
Not available in web format, please use the contact details to request a patient information sheet.

Health condition(s) or problem(s) studied
Unhealthy diet

Interventions
The online and lab parts of the study will be conducted simultaneously.

Online Study: Mixed design, with 3x2 between-subjects conditions (3 availability conditions x 2 shelf fullness conditions), and one within-subjects condition (manipulation level)
Online Study:
Participants are asked to estimate the percentage of sales – as a measure of perceived popularity – accounted for by healthier (over less-healthy) products displayed in a series of photos. For each set of food and drink options, participants will be randomised to one of six groups to see displays that contain:
Group 1: 75% healthier & 25% less-healthy options, fuller shelves;
Group 2: 50% healthier & 50% less-healthy options, fuller shelves;
Group 3: 25% healthier & 75% less-healthy options, fuller shelves;
Group 4: 75% healthier & 25% less-healthy options, emptier shelves;
Group 5: 50% healthier & 50% less-healthy options, emptier shelves;
Group 6: 25% healthier & 75% less-healthy options, emptier shelves
The primary endpoint is the perceived percentage of sales accounted for by healthier (over less-healthy) options.
Randomisation for the online study will be conducted via the inbuilt randomisation procedures on the Qualtrics platform.

Lab Study: Between-subjects design, with 4 groups (2 availability x 2 tray fullness conditions)
Lab Study:
Participants are offered a snack food at the end of a different study. They are randomly allocated to one of four conditions, which vary in terms of the mix of healthier and less healthy foods offered and the fullness of the tray on which the snacks are offered:
Group 1: 75% healthier & 25% less-healthy options, full tray;
Group 2: 25% healthier & 75% less-healthy options, full tray;
Group 3: 75% healthier & 25% less-healthy options, half-empty tray;
Group 4: 25% healthier & 75% less-healthy options, half-empty tray.
The primary endpoint is the selection of a healthier (over less-healthy) option.
Random numbers will be generated – using Stata - to assign participant numbers to each study condition.

Intervention Type
Behavioural

Primary outcome measure

Online Study:
Perceived percentage of sales of healthier (over less-healthy) products measured using the slider questions on the Qualtrics platform

Lab Study:
Food selection, measured by observing the selection of food (healthier or less healthy) from the tray during the study

Secondary outcome measures
Online study:
Selection of products during the study

Overall study start date
01/12/2019

Completion date
31/08/2020

Eligibility

Key inclusion criteria
1. Adults aged over 18 years
2. Currently residing within the UK

Participant type(s)
Healthy volunteer

Age group
Adult

Lower age limit
18 Years

Sex
Both

Target number of participants
Online Study: 2,340; Lab Study: 279

Total final enrolment
2480

Key exclusion criteria
None

Date of first enrolment
03/02/2020

Date of final enrolment
16/03/2020

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
University of Cambridge
Behaviour and Health Research Unit
Institute of Public Health
University Forvie Site
Robinson Way
Cambridge
United Kingdom
CB2 0SR

Sponsor information

Organisation
University of Cambridge

Sponsor details
Trinity Lane
Cambridge
England
United Kingdom
CB2 1TN
+44 (0)1223 333543
research_governance@medschl.cam.ac.uk

Sponsor type
University/education

Website
http://www.cam.ac.uk/

ROR
https://ror.org/013meh722

Funder(s)

Funder type

Charity

Funder Name
Wellcome Trust

Alternative Name(s)

Funding Body Type
Private sector organisation

Funding Body Subtype
International organizations

Location
United Kingdom

Results and Publications

Publication and dissemination plan
1. Planned submission of the main results of this study for publication in a peer-reviewed journal
2. Dissemination of the results to the public, policy makers and other researchers through targeted social media

Intention to publish date
31/12/2020

Individual participant data (IPD) sharing plan
The data sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary
Data sharing statement to be made available at a later date