Understanding public attitudes towards healthy eating policies

Submission date	Recruitment status	[X] Prospectively registered		
10/11/2020	No longer recruiting	☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
16/11/2020	Completed	Results		
Last Edited	Condition category	Individual participant data		
18/11/2021	Nutritional, Metabolic, Endocrine	Record updated in last year		

Plain English summary of protocol

Background and study aims

Obesity rates are high and rising in the UK, and one route to tackling obesity is by the government implementing healthy eating policies. However, public support for healthy eating policies is low which can be a barrier to implementation. Recent research has suggested that if people receive evidence that a policy is effective, then they are more likely to support that policy, however, the best method of communicating complicated evidence is unclear.

The evidence for this study comes from a recent trial in a worksite cafeteria which shows that two healthy eating policies can reduce energy purchased by 11.5%. The current study aims to test two different methods of improving the communication of evidence. The methods tested will be visualising the evidence into an infographic and converting calorie information into its equivalent amount in a familiar food (analogising).

The aim of this study is to investigate whether visualising and analogising evidence can be more effective and changing people's beliefs about policy effectiveness.

Who can participate?

Any person who is over the age of 16 and living in England can take part.

What does the study involve?

To take part in the study, participants complete an online survey.

At the start of the survey, participants see information about obesity and about two changes to the food environment that can reduce the number of calories people eat. The changes mentioned are replacing some higher calorie foods with lower calorie foods and reducing the portion sizes of some larger foods.

Participants will be split into five different groups, and each group will see different information:

1. Group 1 only sees written information about the current rates of obesity and a description of the two changes

2. Group 2 also sees written information about the current rates of obesity and a description of the two changes. They also see how effective the two changes were at reducing calorie intake

- 3. Group 3 also sees the same information as Group 2, however, the information is converted from writing into an infographic
- 4. Group 4 also sees the same written information as Group 2, however, they also see the effectiveness converted from calories into the equivalent amount of calories in a familiar food product: Mars bars
- 5. Group 5 also sees the same infographic as Group 3, however, this also contains the Mars bars conversion as in Group 4

After seeing these different forms of evidence, participants from all groups are given the same questionnaire. Participants are asked to rate how effective they think the changes were at reducing calorie intake, whether they support the changes being implemented, and whether the evidence was communicated clearly.

What are the possible benefits and risks of participating? There are no foreseeable risks in taking part. Similarly, there are no specific benefits to taking part.

Where is the study run from? The University of Cambridge (UK)

When is the study starting and how long is it expected to run for? From June 2020 to June 2021

Who is funding the study? Wellcome Trust (UK)

Who is the main contact? Dr James Reynolds j.reynolds4@aston.ac.uk

Study website

https://www.behaviourchangebydesign.iph.cam.ac.uk/

Contact information

Type(s)

Scientific

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Type(s)

Public

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number

Nil known

Secondary identifying numbers

Nil known

Study information

Scientific Title

Visualising and analogising evidence of policy effectiveness: a population-based survey experiment

Study objectives

- 1.Communicating evidence of policy effectiveness increases its perceived effectiveness relative to not communicating evidence
- 2. Communicating evidence of policy effectiveness by visualising information has a larger impact on perceived effectiveness than presenting the same information using text alone
- 3. Communicating evidence of policy effectiveness using an analogy to translate the effect size has a larger impact on perceived effectiveness than presenting the same information without an analogy

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 29/10/2020, Cambridge Psychology Research Ethics Committee (School of the Biological Sciences, University of Cambridge, 17 Mill Lane, Cambridge CB2 1RX; +44 (0)1223 766894; Cheryl.Torbett@admin.cam.ac.uk), ref: PRE.2020.102

Study design

A between-participants randomized online survey experiment

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Internet/virtual

Study type(s)

Other

Participant information sheet

See additional file ISRCTN15915360_PIS_11Nov20 (added 16/11/2020)

Health condition(s) or problem(s) studied

Inappropriate diet and eating habits, excess energy intake, healthy eating policies

Interventions

Participants will be randomised (1:1:1:1:1) into 5 different groups using the QuestionPro randomisation feature. All participants will complete an online survey, in which they will be presented with different information depending upon their intervention group.

All five groups will receive the same background information about obesity in the UK and a brief description of two interventions. These interventions are availability (replacing some higher calorie food options with lower calorie food options in cafes and restaurants) and size (reducing the portion size of higher calorie food options in cafes and restaurants).

Four of the five groups will receive further information. Group 1 (the control group) will be provided with no information on intervention effectiveness. Group 2 (the 'assert and quantify' group) will be provided with an additional sentence that asserts and quantifies the effectiveness of the two interventions. Group 3 (the 'assert, quantify and visualise' group) will be provided with the same information as Group 2, however this information will be integrated into an infographic and presented visually. Group 4 (the 'assert, quantify and analogise' group) will be provided with the same information as Group 2, however a further sentence will be added that translates the number of calories information into the equivalent amount food (Mars bars). Group 5 (the 'assert, quantify, visualise and analogise' group) will be provided with the same visualised information as Group 3 with the addition of the analogy used in Group 4. The study will be conducted using an online survey platform, called QuestionPro.

Each group will have a single exposure to the intervention and will be able to view and read the information in the intervention for as long as they wish before moving on to the questions. The entire survey including the intervention exposure and questionnaire will last an estimated 5 minutes.

Intervention Type

Behavioural

Primary outcome measure

1. Perceived effectiveness of availability plus size interventions at reducing calorie intake measured as a composite variable using the mean of two items on a 7-point response scale at a single timepoint

Secondary outcome measures

- 1. Perceived effectiveness of the interventions individually measured as a composite variable using the mean of two items on a 7-point response scale for each intervention at a single timepoint
- 2. Acceptability of interventions measured using a single item on a 7-point response scale for each intervention individually, and both together, at a single timepoint
- 3. Subjective comprehension of the interventions measured as a composite variable using the mean of two self-rated items on a 7-point response scale at a single timepoint
- 4. Recall of the intervention content measured from three possible correct answers from two questions (scored from 0-3) at a single timepoint

Overall study start date

25/06/2020

Completion date

01/06/2021

Eligibility

Key inclusion criteria

- 1. Aged ≥16 years
- 2. Resident in England

Participant type(s)

All

Age group

Adult

Sex

Both

Target number of participants

Approximately 4500 participants will be recruited by a research agency.

Key exclusion criteria

Does not meet inclusion criteria.

Date of first enrolment 06/12/2020

Date of final enrolment 31/01/2021

Locations

Countries of recruitment

England

United Kingdom

Study participating centre University of Cambridge

Behaviour Change by Design East Forvie Building Robinson Way Cambridge United Kingdom CB2 0SR

Sponsor information

Organisation

University of Cambridge

Sponsor details

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Sponsor type

University/education

Website

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

ROR

Funder(s)

Funder type

Research organisation

Funder Name

Wellcome Trust

Alternative Name(s)

Wellcome, WT

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United Kingdom

Results and Publications

Publication and dissemination plan

The results of this research will be written up and submitted to a peer-reviewed, open access journal. The study protocol and statistical analysis plan will be uploaded to https://osf.io.

Intention to publish date

01/05/2021

Individual participant data (IPD) sharing plan

The anonymised datasets, data dictionary, analysis code, materials, and protocol will be stored on multiple online repositorities: The University of Cambridge's repository and https://osf.io. The data will be stored for at least 20 years. Consent from participants for data archiving on these repositories will be obtained in the consent form. There will be no idenfiying information (such as participant IDs, IP addresses, names, or addresses).

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet		11/11/2020	16/11/2020	No	Yes