ISRCTN15915360 https://doi.org/10.1186/ISRCTN15915360

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

Contact information

Type(s)
Scientific

Contact name
Dr James Reynolds

ORCID ID
https://orcid.org/0000-0003-1536-1557

Contact details
East Forvie Building
Robinson Way
Cambridge
United Kingdom
CB2 0SR
+44 (0)1223 762569
j.reynolds4@aston.ac.uk

Type(s)

Public

Contact name
Dr James Reynolds

Contact details
East Forvie Building
Robinson Way
Cambridge
United Kingdom
CB2 0SR
+44 (0)1223 762569
j.reynolds4@aston.ac.uk

Additional identifiers

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

Primary study design
Interventional

Study design
A between-participants randomized online survey experiment

Study type(s)
Other

Health condition(s) or problem(s) studied
Inappropriate diet and eating habits, excess energy intake, healthy eating policies

Interventions
Participants will be randomised (1:1:1:1:1:1) 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(s)
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

Key secondary outcome(s)
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

Completion date
01/06/2021

Eligibility

Key inclusion criteria
1. Aged ≥16 years
2. Resident in England

Participant type(s)
All

Healthy volunteers allowed
No

Age group
Adult

Sex
All

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
United Kingdom

England

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

ROR
https://ror.org/013meh722

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

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
Study website	Study website	11/11/2025	11/11/2025	No	Yes