



Department for
Business, Energy
& Industrial Strategy

PUBLIC ATTITUDES TO SCIENCE 2019

Technical Report



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Introduction

This report presents the technical details of a programme of quantitative and qualitative research carried out as part of Public Attitudes to Science (PAS) 2019, a study of attitudes among the UK public. The research was conducted by Kantar, on behalf of the Department for Business, Energy and Industrial Strategy (BEIS).

Background to the survey

One of the key activities of the Public Engagement (PE) with Science team in BEIS is to ensure the Government understands and responds to public aspirations and concerns relating to science, technology and engineering. This understanding of views is critical to the long-term policy goals of:

- Increasing the science capital of the UK public (that is, the science-related knowledge, attitudes, experiences and resources possessed by the individual)
- Understanding public acceptability of new technologies and the factors that can affect this

The Public Attitudes to Science (PAS) series is the main broad-based evidence of public attitudes to science across the UK. It looks at key attitudes to science and education; science careers; trust in science, scientists, regulation and policy making; and how the public engage with these and is a vehicle to measuring the success of the long-term science goals outlined above.

The PAS survey series has been running since 2000 and Public Attitudes to Science 2019 (PAS 2019) is the sixth survey in the series. The study was conducted by Kantar, on behalf of the Department for Business, Energy and Industrial Strategy (BEIS). Several strands of research were included:

- A literature review conducted by Dr Kevin Burchell which comprised an independent review and synthesis of existing literature in English from broadly 'equivalent' countries (defined in this case as OECD members), primarily since 2010 (Burchell, 2019).
- A face-to-face survey of 1,749 UK adults aged 16+ carried out in January-April 2019 using a random probability sampling approach. The survey comprised a core section of questions which have been tracked over time, and four topic-focussed modules: ageing society; AI, robots and data; genome editing; micro-pollution and plastics.
- Four waves of online qualitative research using a deliberative digital dialogue process, and 16 face-to-face qualitative group discussions with digitally excluded participants, focussed on four science-related topics (trust in science; AI and healthcare; robotics in the care sector; genomics in food production).
- Four waves of social listening, to track how four different science topics were discussed online over the last two years (veracity of online information; AI in healthcare; robots in the workplace; ocean plastic pollution).

This report provides an overview of the technical details of the survey. The full set of publications can be found at [Kantar.com/uk-public-attitudes-to-science](https://www.kantar.com/uk-public-attitudes-to-science).

Aims and Objectives

The research had several wide-ranging objectives, covering many aspects of people's attitudes to science, including:

- What people think about science, scientists and UK science policy, and why they think this
- People's confidence in science regulation and policymaking
- How people find out about science, and how the development of social media has impacted on this
- Views on public involvement in decision-making on science issues
- How science is pursued as a leisure or cultural activity
- How attitudes have changed over time

Beyond this, four emerging areas of science and technology – three of which relate to Grand Challenges set out by the Government as part of their Industrial Strategy¹ - were selected for a more detailed examination of public attitudes:

- Ageing society
- Artificial intelligence, robots and data
- Genome editing
- Micro-pollution and plastics

Structure

The technical report covers the quantitative strand of the research and is structured as follows

- Section 1 covers the sample design
- Section 2 outlines the questionnaire development process
- Section 3 summarises the fieldwork procedures and achieved response rates
- Section 4 provides an overview of the data processing procedures
- Section 5 summarises the weighting process

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- Section 6 provides details of how the science capital Index was constructed for PAS 2019. The science capital index is used throughout the main report to help explain patterns of attitudes towards science.

Section 1: Sample design

This section summarises our sample design.

A multi-stage sample design was employed for the 2019 survey of Public Attitudes to Science (PAS).

The target population was individuals aged 16+ who are permanently resident in a private UK household.

The sample frame was the UK Postcode Address File (PAF) produced by the Royal Mail, filtered to include only addresses classed as 'small users' (an average of <25 mailed items per day). However, the sample was clustered to make it more efficient for interviewing work. Lower level super output areas (LSOAs) - on average containing 7-800 addresses - were used to cluster the addresses in England and Wales; data zones (average = 373 addresses) were used in Scotland, and super output areas (average = 888 addresses) were used in Northern Ireland.

The address clusters were stratified before a systematic random sample was selected. Within each of the twelve regions (nine in England plus the three other UK countries), the address clusters were ranked according to the (Census 2011) population proportion with at least one level 3 educational qualification (an A level is an example of a level 3 qualification). From this ranking, three strata were formed in each region (two in Northern Ireland), each with an approximately equal number of addresses spread across its constituent clusters. This yielded 35 strata ($11 \times 3 + 1 \times 2$) defined by region/educational level. Within each stratum, the address clusters were sorted to maximise the geographic dispersion of any systematic sample (they were sorted by local authority and then by higher level output area (except in Northern Ireland)).

A total of 166 address clusters was sampled, each with a probability proportionate to the number of PAF 'small user' addresses contained within its borders. Within each of the sampled address clusters, a fixed total of 30 addresses was selected using a systematic random sampling method (after sorting addresses by postcode and then by alphanumeric first line of address). This combination of (i) cluster sampling probabilities that are a function of scale (number of addresses) and (ii) a fixed sample of 30 addresses per sampled cluster ensured that the final address sample of 4,980 (166×30) was an equal probability sample.

Before issuing the sampled addresses to the interviewers, 20 of the 166 address clusters were allocated to a reserve pool using a systematic random sampling method. In the event, these reserve clusters were not required so a total of 4,380 addresses were issued to interviewers, spread between 146 clusters.

At each sampled address, the interviewer enumerated the number of dwelling units, sampling one at random at the very few (c.1%) instances where more than one shared the same address. Within the sampled dwelling unit, the interviewer enumerated the number of households (99% of dwelling units had only one household), sampled one if necessary, and then enumerated the permanently resident individuals aged 16+, sampling one at random.

Section 2: Questionnaire

This section provides an overview of the questionnaire development and testing process.

Questionnaire development

The core questionnaire for the 2019 PAS survey was intended to provide comparable data to previous years. As a result, minimal changes were made. However, some new questions were included to reflect topical issues in science and to reflect current policy requirements.

In addition to the core questionnaire content, PAS typically includes several additional modules on specific new topics of interest to BEIS. In PAS 2019 these modules covered the following topic areas, asked of a randomly selected sub-sample, constituting around a third of the main sample:

- **Ageing society:** Public awareness of, and attitudes towards technologies aimed at supporting people in older life.
- **Artificial intelligence, robots and data:** Public familiarity with and attitudes to the use of Artificial Intelligence (AI), robots and data technology in society. Three main areas are covered: AI in healthcare; AI in the workplace; and the use of personal data to develop AI.
- **Genome editing:** Public familiarity with, and support for, genome editing and its application in different organisms (humans, animals and plants/crops).
- **Micro pollution and plastics:** Public familiarity with different causes of micro-pollution and support for a government ban on micro-pollution and common sources of plastic waste.

The main requirement of the development phase was to test questions included in the new modules, but new or amended core questions were also tested. A copy of the questionnaire can be found in appendix A.

Questionnaire testing

To ensure that all new questions were thoroughly tested before their inclusion in the survey, Kantar conducted cognitive testing over two phases.

The purpose of the cognitive testing was to assess survey questions to ensure they work as intended before being included in the questionnaire. Cognitive testing provides valuable insight into how consistently questions are being interpreted, how clear and unambiguous questions are, and how easily respondents are able to give an answer. Interviews were carried out by members of the research team who asked survey questions to respondents. The researcher would then probe the respondent to discuss their response and investigate the thought processes involved in giving an answer.

The purpose of the usability testing was to assess how easy it is for respondents to complete the survey online. Researchers closely observed respondents as they completed the survey discussing any areas of difficulty or ways in which the survey experience could be improved.

The two rounds of cognitive testing were conducted in November 2018. After the first round, findings were discussed, and changes were applied to be re-tested at the second round.

The samples for the cognitive testing were recruited by Kantar's qualitative recruitment team through a combination of face-to-face contacts and recruitment databases and quotas were set on age, gender and education level. Interviews were conducted face-to-face in Kantar offices and in an external central location in Birmingham.

A total of 30 interviews were conducted across the two phases (15 interviews at each). Interviews were conducted by members of the PAS survey research team following an agreed probe guide, although researchers also used spontaneous probes to follow-up on any areas of confusion or miscomprehension. All respondents were provided with an incentive to thank them for their participation.²

As a result of the detailed testing phases, a number of changes were made to the questionnaire which were implemented and re-scripted for inclusion at the pilot stage.

Pilot

Following the cognitive testing, the questionnaire was finalised, and Kantar undertook a field pilot of c.30 interviews to test the full survey instrument and assess interview length. A number of interviews were observed by researchers in the field.

Further minor changes were made to the questionnaire after analysis of the pilot results.

Pilot fieldwork

All interviewers were briefed via WebEx and were issued with an intervener pack containing a copy of the following materials: A letter and leaflet to hand out on the door step, written briefing instructions, showcards, thank you leaflets and a feedback form for interviewers to fill out after completing their assignment.

Due to timing restrictions and to minimise costs, the pilot used a random location design, rather than a random probability design which was used in the main stage. Quotas were set on age, gender and social grade for the pilot and an incentive (£10 gift card) was provided to participants who took part in the pilot interviews.

Pilot fieldwork took place between November 29th – December 5th 2018.

² Incentives were £30.

Section 3: Fieldwork procedures

Main survey fieldwork was conducted between January 17th and April 29th. All fieldwork was carried out by trained interviewers from Kantar's field-force and conducted using face-to-face computer assisted interviewing.

Advanced letter and leaflet

All addresses received a letter and leaflet in advance of the interviewer's first visit to the address. This letter explained the purpose of the survey, how their address was selected, and stated that an interviewer would be visiting the address in the next few days. The letter explained how the address was selected to be a part of the survey, our commitment to confidentiality and stressed the importance of taking part. It provided an email address and telephone number if the household wanted more information regarding the survey.

The leaflet provided further information about the survey and how their information will be used and aimed to address any common queries respondent's may have.

All mailings were branded as The Future of Society Survey and included the HM Government logo. The materials did not specifically mention science, as it was felt that this may be off putting to those who have little interest in the topic area.

Examples of the advance letter and leaflet can be found in appendix C and D.

Interviewer briefing

Interviewers received an hour long WebEx video briefing, together with detailed written instructions. The briefing covered: background to the survey and its purpose; an overview of the assignment, field materials, response rate targets and fieldwork procedures; guidance on the doorstep introduction tailored to the survey; an overview of the questionnaire content, highlighting key questions and explaining key terminology. Interviewers also completed at least two practice interviews before starting work to familiarise themselves with the questionnaire.

Respondent selection

At all selected addresses only one adult aged 16 and over could be interviewed. This required a process for randomly selecting one adult to complete the survey. Interviewers collected the names of all adults living at the address. These names were then entered into the laptop and one adult was randomly selected by the computer. The selected respondent was then the only adult within the household who could complete the survey.

Maximising response rates

A number of procedures were used to maximise response rates among households selected for the survey:

An advance letter (with an information leaflet) was sent to all selected addresses. This provided an opportunity to communicate the legitimacy, importance and social value of the survey; the sponsor and fieldwork organisation; and the confidential and anonymous nature of the study.

A fieldwork support team operated a **freephone/email helpline** for those who had queries about the survey or wished to opt out. The advance letter provided the freephone number and email address.

Interviewers will make a **minimum of five visits to each eligible address** before classifying it as a non-contact. Calls counted towards the minimum requirement will be made on different days; at different times of day, with at least two calls made on a weekday evening or at the weekend; and over a period of at least 3 weeks, to ensure that there is an opportunity to contact households that are away for a short period.

Interviewers used a **range of strategies to contact 'hard to reach' households** including: seeking information from neighbours; using calling cards; posting a second letter; and seeking the help of wardens, concierges, or other gatekeepers at addresses with barriers or entry restrictions.

All interviewers have been trained on how to approach potential respondents in a sensitive yet persuasive way, and how to reassure them and gain their co-operation. This **training in doorstep techniques** includes: establishing personal credentials and the bona fide nature of the survey; tailoring doorstep introductions to your personal style and the circumstances of the call; being equipped to answer questions/alleviate concerns; being flexible: knowing when to withdraw and offering to call back at another time; and making effective appointments.

Respondents were provided with a £10 gift card as a 'thank you' for completing the survey. Our own experimental work, and the wider literature, suggests that **paying modest incentives helps to increase response rates**, while reducing fieldwork costs such that the incentives are at worst 'cost neutral'.

Reissue of unproductive addresses - Addresses which resulted in a non-contact, situational refusal or broken appointment were reissued to an experienced interviewer or supervisor to attempt conversion to achieve the target number of interviews.

Fieldwork was monitored using our in-house electronic field and contact management systems that provide field managers with near real-time information, enabling very close control over fieldwork.

Interview length

The average interview length was 49 minutes.

Outcomes and Response Rate

The total achieved sample was 1,749. The response rate achieved was 44.7%.

Table 1 – Final fieldwork outcomes

	n	% of issued	% of eligible
Issued	4,379	100	
Ineligible	356	8.1	
Communal establishment / institution	14	0.3	
Derelict / demolished	19	0.4	
Inaccessible	17	0.4	
Non-residential address	57	1.3	
Not main residence	54	1.2	
Other ineligible	8	0.2	
Unable to locate address	21	0.5	
Vacant / empty housing unit	166	3.8	
Eligible	3,917	89.4	100
Non-Contact	441	10.1	11.3
No contact with anyone at address	359	8.2	9.2
No contact with selected respondent	56	1.3	1.4
Contact made but not with a responsible resident	26	0.6	0.7

Refusal	1,499	34.2	38.3
Refusal during interview	11	0.3	0.3
Refusal by selected person	569	13.0	14.5
Refusal by proxy	63	1.4	1.6
Contact made at address but information refused	669	15.3	17.1
Refusal by phoning office	106	2.4	2.7
Broken appointment, no recontact	79	1.8	2.0
Parental permission required - permission refused	2	0.0	0.1
Other non-productive	334	7.6	8.5
Away / in hospital throughout field period	29	0.7	0.7
Contact but no specific appointment	161	3.7	4.1
Ill at home during survey period	41	0.9	1.0
Interview achieved but file/questionnaire corrupted/lost/etc	1	0.0	0.0
Language difficulties	40	0.9	1.0
Physical or learning disability / difficulty	40	0.9	1.0
Unknown whether address is residential due to other reasons	6	0.1	0.2
Other unproductive	16	0.4	0.4
FULL INTERVIEW OBTAINED	1,749	39.9	44.7

Section 4: Data Processing

This section gives details on the data processing conducted after fieldwork was completed.

Data processing

The survey was conducted using UNICOM intelligence software which limits the potential for missing values or data errors. For each question in the survey respondents were obliged to give an answer in order to move on to the next one; 'Don't know' and 'Refused' options were available to respondents at most questions.

Coding

Coding was conducted using Ascribe software. A detailed coding plan was produced by the research team which briefed coders on what was required. A sample of coding from each question was checked by the research team to ensure that quality was maintained throughout. For trend data code frames were kept consistent with previous years.

The survey contained only one open-ended question which asked, "when I talk about "science", please tell me in your own words, what comes to mind?"

At questions where respondents were able to specify an 'other answer', these were reviewed and whenever possible back-coded to a pre-existing code. As a general rule, if a substantial number of respondents select a new code (five per cent of those eligible to answer) then a new code would be created.

Section 5: Weighting

This section summarises the weighing design.

The interview data has been weighted using a three step process.

The first step was to generate a design weight proportionate to one divided by the respondent sampling probability. Given the equal probability sample of addresses, the design weight is equal to the product of (i) the number of dwelling units at the sampled address, (ii) the number of households in the sampled dwelling unit, and (iii) the number of permanently resident individuals aged 16+ in the sampled household. This design weight was trimmed to a maximum of 6 to avoid outlier cases having an excessive influence on the survey estimates.

The second step was to estimate an address-level probability of obtaining an interview (conditional on the address being coded by the interviewer as at least probably residential). This response probability was computed as a function of a small number of auxiliary variables attached to each sampled address. These were (i) region, (ii) the population proportion with at least one level 3 qualification (used when stratifying the sample), and (iii) the natural log of (ii). Term (iii) was included to reflect the non-linear effect of level 3 qualification rate on the probability of response. A logistic regression model was used to generate the probabilities and a non-response weight for each interview case was computed as one divided by the modelled response probability.

The product of the design weight and the non-response weight was then used as the base weight (starting point) before calibrating the interview sample to external population totals produced by the Office of National Statistics. The classic marginal raking algorithm was used to calibrate the sample, and four sets of population totals were used:

Age group by sex (16-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, each crossed by sex (male/female) plus a combined 85+ category)

Age group by working status (16-19; 20-24 working; 25-49 working full time; 25-49 working part time; 20-49 not working; 50+ working full time, 50+ working part time; 50+ not working)

Age group by ethnic group (16-24 white; 25-49 white; 16-49 not white; 50+ white; 50+ not white)

Region (the twelve strata, nine in England plus Scotland, Wales and Northern Ireland)

Age crossed by educational level was also considered but a misalignment between the PAS interview data and the available population data meant that Kantar decided not to include it in the raking matrix. However, a sensitivity test demonstrated that its inclusion (in an edited form) or exclusion made little difference to the PAS educational level distribution.

The category combinations listed above were selected based on a sample size study, with a general rule of thumb that at least 30 interview cases should be in each marginal weighting category. Where data was missing for one or more variables in the raking matrix, synthetic data was probabilistically imputed, and used for weighting purposes only³.

³ To do this, the chained equation MULTIPLE IMPUTATION SPSS command was used but only one set of imputations was retained for each interview case.

The population totals were sourced from a combination of the 2017 mid-year population estimates (MYPEs) and the January-December 2018 Annual Population Survey (APS). The MYPEs were used for the base age/sex/region population totals. Weighted APS within-age group sample distributions with respect to (i) working status and (ii) ethnic group were separately derived and then applied to the MYPE population totals. All data was sourced from the ONS interactive website NOMIS⁴.

As well as a scaled-to-population weight, a scaled-to-sample size version of the weight was also computed to meet user expectations (`<rimweightPAS2018_mean1>`).

The overall weighting efficiency was 73%. This means that, ignoring other design effects, the effective sample size is 73% of the actual sample size (i.e. 1,281 rather than 1,749).

Most of the 'loss' in efficiency versus 100% was due to design weighting rather than to the non-response weighting or the calibration weighting. The efficiency of the design weights was 80% while the efficiency of the combined non-response/calibration weight was 90%. Reasonable trimming of the weights (e.g. to constrain them to be within the range 1/4 to 4 times the median value) would not have improved this significantly (so was not done). Within the categories used in the calibration weighting matrix, the lowest non-response/calibration weight efficiency was 88% and the highest was 98% (i.e. the efficiency effect of non-response/calibration weighting was nearly uniform across population categories).

⁴ <https://www.nomisweb.co.uk/>

Section 6: Science Capital Index

In recent years the concept of ‘science capital’⁵ has been developed to better understand how individuals engage with science and technology in their everyday lives and why some people feel that science either is or isn’t ‘for me’. Using PAS 2019 data, an index was created to measure the degree of science capital held by survey respondents.

The science capital index was developed by Kantar in partnership with Dr. Jen De Witt, building on the work of Archer et al⁶. The stages are set out below:

The index was built on 11 variables which were considered to comprise the key dimensions of science capital. These were:

QRELATEA: Which of these statements best describes your relationship with science? (*I feel connected with science – I actively seek out science news, events, activities or entertainment; I’m interested in science but I don’t make a special effort to keep informed; Science is not for me*).

QAGREE4_2 The science I learnt at school has been useful in my everyday life’ (*agree/disagree scale*)

QAGREE2_12 It is important to know about science in my daily life’ (*agree/disagree scale*)

QAGREE2_7 School put me off science’ (*agree/disagree scale*)

QAGREE6_1 I would feel comfortable in places where science is discussed and practised, such as in laboratories, in science centres, in industrial settings’ (*agree/disagree scale*)

QAGREE6_2 I have a good understanding of scientific terms, such as hypothesis, theory, experiments and research trials’ (*agree/disagree scale*)

QINFORMEDA How well informed do you feel, if at all, about science, and scientific research and developments?

QVISIT2_9 How often did you visit or attend a science talk/ lecture outside of school, college or work in the last 12 months?

SCIENCEJOB Do you work in a science related job or study a science subject?

HIGHESTSCIEDU Highest science qualification

QTALK How often do you talk about things to do with science with family, friends or colleagues?

⁵ <https://www.ucl.ac.uk/ioe/departments-and-centres/departments/education-practice-and-society/science-capital-research>

⁶ <https://www.ucl.ac.uk/ioe/departments-and-centres/departments/education-practice-and-society/science-capital-research/enterprising-science/publications-enterprising-science-project>

SCIENCEJOB2_1/ SCIENCEJOB2_2/ SCIENCEJOB2_3/ SCIENCEJOB2_4 Do you have any friends or family who work in a job using science, computer science, engineering, or medicine?

The first step in creating the index was to re-code a number of variables to ensure that they were coded consistently. A list of the variables that were re-coded can be found below:

i. Variables were re-coded to ensure that all variables were coded in a consistent order from low ('least sciency') to high (most 'sciency').

The following variables were reversed:

- qinformeda
- qrelatea
- Qagree4_2
- Qagree2_12
- Qagree6_1_
- Qagree6_2

ii. For Qvisit2_9, the 'not at all' was coded first

iii. For the family and friends working in STEM variable, the four constituent variables were combined to create a single ordinal variable derived from Sciencejob2_1, Sciencejob2_2, Sciencejob2_3, Sciencejob2_4

- 1 "No, none of these three options
- 2 "Yes, other family member/relative (not living with me) OR friends or colleagues"
- 3 "Yes, ONLY family member living with me"
- 4 "Yes, family member living with me AND either other family member/relative (not living with me) or friends or colleagues"
- 5 "Yes, family member living with me AND other family member/relative (not living with me) AND friends or colleagues"

iv. Highestsciedu (what is your highest qualification in science, technology, engineering or maths, if you have one?) was recoded to include respondents who were not asked the question (for example those who did not have any formal qualifications) to preserve the total sample size. This variable was recoded and included 4 categories:

- 1 "No formal qualifications" in Highestsciedu
- 2 "No formal science qualifications" in Highestsciedu
- 3 "Non-science undergraduate degree + A level or equivalent (=NVQ level 3) + GCSE/O-level/CSE (=NVQ level 2) + Science qualification below this (=NVQ level 1) + Other science qualification"
- 4 "Higher degree (e.g. Masters, PhD) and Undergraduate degree" in Highestsciedu

-
- Also, -9 for missing data in Highestsciedu or Highestedu

The next step was to specify user missing values for all 11 final variables. The number of missing cases was 127 which were not included in the final index.

Once the missing cases had been removed we first ran a Principal Components Analysis (PCA) to investigate the level of internal consistency between variables, even though they are all ordinal rather than continuous variables. We found that all 11 variables load onto two components, the first encompassing more tangible items that relate to behaviour or factual information, while the second encompassed more self-evaluation type items and questions related to what school has contributed in respondents' science profiles.

To keep the creation of the index consistent with previous work by Dr DeWitt, we ran the sum of all variables. Theoretically, this varies from 11 to 51 based on all the minimum and all the maximum codes in each variable, respectively. This sum function excludes the 127 listwise deleted cases and runs on the remainder 1,622 cases.

The distribution of the index computed as a sum score is approximately normally distributed. To make this index easier to understand and interpret, the index was rescaled on a 0 to 1 scale, with 0 marking respondents with the lowest science capital and score 1 marking respondents with the highest science capital.

This was then portioned into a categorical variable by partitioning the scale into 3 equal parts: 0-0.33, 0.34-0.66, 0.67-1 (low/medium/high).

Based on a correlation matrix, the majority of estimates were low to moderate, the highest value being 0.566 (or 0.572 weighted).

Appendix A - Questionnaire

Initial demographics

READ OUT

Firstly, can we ask a few questions about you? This is so we can make sure we only ask questions that are relevant to you.

ASK ALL - VARIABLE NAME: gender

QA. Gender

CODE WITHOUT ASKING

A. Male

B. Female

(SP)

ASK ALL - VARIABLE NAME: exactage

QB. Exact age

CODE EXACT AGE (RANGE 16-99)

(Allow REF)

ASK IF REF AT QB - VARIABLE NAME: agecomb

QB2. Which of these age bands do you belong to?

SHOWCARD 1

- A. 16-24
- B. 25-34
- C. 35-44
- D. 45-54
- E. 55-59
- F. 60-64
- G. 65-74
- H. 75+

(SP; allow REF)

ASK ALL - VARIABLE NAME: working

QC. What is your current working status?

IF 2+ JOBS, ASK ABOUT JOB WITH THE MOST HOURS

DO NOT PROMPT.

CODE ONE ONLY.

- A. Working full-time (30+ hours per week)
- B. Working part-time (< 30 hours per week)
- C. Unemployed or looking for work
- D. Retired
- E. Student/training Long-term sick/ disabled
- F. Looking after the home/family
- G. Other

(SP; allow REF)

Core questionnaire

READ OUT

Now I want to ask some questions about science.

ASK ALL - VARIABLE NAME: qmind

Q1. When I talk about “science”, please tell me in your own words, what comes to mind?

OPEN ENDED

PROBE FULLY

CODE NULL FOR NOTHING

ASK IF Q1 = dk or null - VARIABLE NAME: qmindb

Q1b. We are just interested in what comes to mind when you think about science, whatever this may be – it doesn’t matter how much you know about science. So can I ask you again what comes to mind when I talk about science?

INTERVIEWER: TRY TO ADDRESS ANY CONCERNS ABOUT ANSWERING THIS QUESTION

SCRIPTERS: PLEASE ROUTE BACK TO Q1 (this check should only appear once)

ASK ALL - VARIABLE NAME: qinformeda

Q2a. How well informed do you feel, if at all, about science, and scientific research and developments?

SHOWCARD 2

1. Very well informed
2. Fairly well informed
3. Not very well informed
4. Not at all informed
5. (SP; allow DK)

ASK ALL - VARIABLE NAME: qrelatea

Q2b. Which of these statements best describes your relationship with science?

SHOWCARD 3

- A. I feel connected with science – I actively seek out science news, events, activities or entertainment
- B. I'm interested in science but I don't make a special effort to keep informed
- C. Science is not for me

ASK ALL - VARIABLE NAME: qrelateb

Q2c. Which of these statements best describes your relationship with art and culture? By this we mean things like art galleries, films, theatre and so on.

SHOWCARD 4

- A. I feel connected with art and culture – I actively seek out news about art, or art events or activities
- B. I'm interested in art and culture but I don't make a special effort to keep informed
- C. Art and culture is not for me

ASK ALL - VARIABLE NAME: qrelatec

Q2d. Which of these statements best describes your relationship with sport?

SHOWCARD 5

- A. I feel connected with sport – I actively seek out news about sports, or sport events, activities or entertainment
- B. I'm interested in sport but I don't make a special effort to keep informed
- C. Sport is not for me

ASK ALL - VARIABLE NAME: qinfoquan

Q3. Which of the following statements on this card do you most agree with?

SHOWCARD 6 THAT INCLUDES INTRODUCTORY LINE

These days I hear and see ...

1. ... far too much information about science
2. ... too much information about science
3. ... the right amount of information about science
4. ... too little information about science
5. ... far too little information about science

(SP; allow DK)

ASK ALL - VARIABLE NAME: qsourcea

Q4. Outside of any formal science lessons or classes you may take, from which one or two of these, if any, do you hear or read about new scientific research findings most often?

SHOWCARD 7

CODE NULL FOR NONE OF THESE

- A. Books
- B. Friends and family
- C. Magazines
- D. Print newspapers
- E. Online newspapers or news websites
- F. Radio– news programmes
- G. Radio– other programmes
- H. Science blogs
- I. Scientific journals
- J. TV – news programmes
- K. TV – other programmes
- L. Podcasts
- M. Work colleagues
- N. Twitter
- O. Facebook
- P. Other social media websites (e.g. Snapchat, Instagram, Reddit) (please specify)
- Q. Other websites (not news or social media websites)
- R. Other – specify
- S. None of these

(MP UP TO TWO; allow DK and NULL)

ASK IF CODE E AT Q4 - VARIABLE NAME: qsourceb

Q5a. You said you get information about new scientific research findings from online newspapers or news websites. From this card, which of these, if any, do you use?

SHOWCARD 8

CODE NULL FOR NONE OF THESE

- A. BBC/BBC News – www.bbc.co.uk/news
- B. Sky/Sky News – <http://news.sky.com>
- C. ITN – www.itn.co.uk
- D. The Guardian – www.guardian.co.uk
- E. The Daily Mail – www.dailymail.co.uk
- F. The Daily Telegraph – www.telegraph.co.uk
- G. The Times – www.thetimes.co.uk
- H. The Sun – www.thesun.co.uk
- I. The Financial Times – www.ft.com
- J. The Independent – www.independent.co.uk
- K. Daily Mirror – www.mirror.co.uk
- L. Daily Express – www.dailyexpress.co.uk
- M. Daily Star – www.dailystar.co.uk
- N. The Economist- www.economist.com
- O. Yahoo – <http://uk.yahoo.com>
- P. MSN – <http://uk.msn.com>
- Q. An online-only magazine, e.g. The Huffington Post or The Daily Beast
- R. Other – specify

(MP; allow DK and NULL)

ASK ALL - VARIABLE NAME: qsourcec

Q5b. How much would you trust each of the following sources to provide accurate information about science?

SHOWCARD 9

RANDOMISE ORDER

A. Traditional media such as newspapers, magazines, TV or radio news, or websites associated with these

B. Online-only media such as online news sites and blogs which do not have an offline version, such as Huffington Post, BuzzFeed

1. A great deal
2. A fair amount
3. Not very much
4. Not at all
5. Don't know

ASK ALL - VARIABLE NAME: intusage

Q5c. How often, if at all, do you access the internet from any device?

(IF NECESSARY: Please include internet access from any device, including mobile/tablet only internet access. This can be for any purpose ranging from checking your emails to online shopping'.)

SHOWCARD 10

1. More than once a day
2. Once a day
3. 2-3 times per week
4. About once a week
5. About once a fortnight
6. About once a month
7. About once every 2-3 months
8. About once every six months
9. Less often
10. Never use the internet

ASK IF USE THE INTERNET (CODES 1 TO 9 AT Q5c) - VARIABLE NAME: intability

Q5d. How would you rate your ability to use the Internet?

SHOWCARD 10

1. Excellent
2. Good
3. Fair
4. Poor
5. Bad
6. Don't know

ASK IF USE THE INTERNET (CODES 1 TO 9 AT Q5c) - VARIABLE NAME: qtrustaccurate

Q5e. To what extent would you trust that online information about science is accurate when it is:

SHOWCARD 11

INTERVIEWER: IF RESPONDENT DOES NOT USE SOCIAL MEDIA PLEASE CODE AS NOT APPLICABLE

- A. Content you have searched for or found
 - B. Promoted Content
 - C. Content shared by friends on social media
 - D. Content created or shared by personalities that you follow on social media
1. A great deal
 2. A fair amount
 3. Not very much
 4. Not at all
 5. (Don't know)
 6. (Not applicable)

ASK ALL - VARIABLE NAME: qfund

Q6. As far as you know, who funds scientific research in the UK?

DO NOT PROMPT

PROBE FULLY

- A. The Government/taxpayer
- B. Private industry/business/companies
- C. Charities
- D. Universities
- E. Wealthy individuals
- F. Foreign countries/investors
- G. NHS/health service/medical bodies
- H. Scientists/scientific institutes
- I. Trusts/research trusts/foundations/grants
- J. Europe/EU
- K. Royal societies/Economic and Social Research Council
- L. Contributions/fundraisers/sponsors
- M. Other – specify

(MP; allow DK)

ASK ALL - VARIABLE NAME: qinformb

Q7. I'm going to read out a list of topics. Could you tell me, using this card, how well informed you feel, if at all, about each topic?

SHOWCARD 12

ROTATE ORDER

- A. Genetically modified plants (GM crops),
 - B. Genome editing
 - C. The use of animals in medical research
 - D. Nuclear power
 - E. Synthetic biology
 - F. Vaccination of people against diseases
 - G. Renewable energy
 - H. Nanotechnology
 - I. Driverless vehicles
 - J. Robotics and Artificial Intelligence (AI)
1. Very well informed
 2. Fairly well informed
 3. Not very well informed
 4. Not at all informed
 5. Have never heard of it

(SP; allow DK)

ASK IF CODES 1-3 AT Q7 - VARIABLE NAME: qbenefit

Q8. From what you know or have heard about [INSERT ISSUE FROM LIST BELOW], which of these statements, if any, most closely reflects your own opinion?

SHOWCARD 13

ROTATE ORDER

CODE NULL FOR NONE OF THESE

- A. Genetically modified plants (GM crops),
 - B. Genome editing
 - C. The use of animals in medical research
 - D. Nuclear power
 - E. Synthetic biology
 - F. Vaccination of people against diseases
 - G. Renewable energy
 - H. Nanotechnology
 - I. Driverless vehicles
 - J. Robotics and Artificial Intelligence (AI)
1. Benefits far outweigh the risks
 2. Benefits slightly outweigh the risks
 3. The risks and benefits are about the same
 4. Risks slightly outweigh the benefits
 5. Risks far outweigh the benefits

(SP; allow DK and NULL)

ASK ALL - VARIABLE NAME: qconrisks

Q9. How confident, if at all, are you that scientists in the UK have thoroughly considered the risks of new technologies before they are used?

SHOWCARD 14 EXCLUDING CODE 5

1. Very confident
2. Fairly confident
3. Not very confident
4. Not at all confident

DO NOT READ OUT: It depends on the area they work in

(SP; allow DK)

ASK ALL - VARIABLE NAME: qrulesa

Q10. As far as you know, who, if anyone, sets the rules and regulations for scientists in the UK to follow when they are doing their job?

DO NOT PROMPT

PROBE FULLY

CODE NULL FOR NO ONE

- A. Scientists themselves
- B. The Government/government agency/department/quango
- C. Parliament/Westminster/Scottish Parliament/Welsh Assembly/Northern Ireland Assembly
- D. The general public
- E. Business/industry/companies/the companies the scientists work for
- F. Campaign groups/the campaign groups the scientists work for
- G. Charities/the charities the scientists work for
- H. Environmental groups/the environmental groups the scientists work for
- I. Ethics Committees
- J. Global body (unspecified)
- K. Health and Safety Executive (HSE)
- L. The European Union (EU)/Brussels
- M. Local council
- N. The NHS
- O. National Academies (e.g. The Royal Society/ Royal Academy of Engineering/ Academy of Medical Sciences)
- P. Research Councils / UK Research & Innovation (UKRI)
- Q. Scientific professional bodies
- R. The United Nations (UN)
- S. Universities/the universities the scientists work for
- T. Other

(MP; allow DK and NULL)

ASK ALL - VARIABLE NAME: qrulesb

Q11. Who, if anyone, do you think should set the rules and regulations for scientists in the UK to follow when they are doing their job?

DO NOT PROMPT

PROBE FULLY

CODE NULL FOR NO ONE

- A. Scientists themselves
- B. The Government/government agency/department/quango
- C. Parliament/Westminster/Scottish Parliament/Welsh Assembly/Northern Ireland Assembly
- D. The general public
- E. Business/industry/companies/the companies the scientists work for
- F. Campaign groups/the campaign groups the scientists work for
- G. Charities/the charities the scientists work for
- H. Environmental groups/the environmental groups the scientists work for
- I. Ethics Committees
- J. Global body (unspecified)
- K. Health and Safety Executive (HSE)
- L. The European Union (EU)/Brussels
- M. Local council
- N. The NHS
- O. National Academies (e.g. The Royal Society/ Royal Academy of Engineering/ Academy of Medical Sciences)
- P. Research Councils/ UK Research & Innovation (UKRI)
- Q. Scientific professional bodies
- R. The United Nations (UN)
- S. Universities/the universities the scientists work for
- T. Other

(MP; allow DK and NULL)

ASK ALL - VARIABLE NAME: qagree

Q12. I am now going to read out some statements. For each, please could you tell me the extent to which you agree or disagree?

SHOWCARD 15

ROTATE ORDER

- A. Human activity does not have a significant effect on the climate
 - B. People shouldn't tamper with nature
 - C. Driverless car technology will be safer than human drivers
 - D. If robots begin to replace jobs currently done by humans, people in low skilled jobs will find it harder than people in high skilled jobs to find alternative employment
 - E. If new medical treatments were available to slow the ageing process and allow people to live decades longer, only wealthy people are likely to have access to these treatments
1. Strongly agree
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Strongly disagree

(SP; allow DK)

ASK ALL – VARIABLE NAME: qvisit

Q13a. Which, if any, of the things on this list have you visited or attended in the last 12 months?

SHOWCARD 16

- A. A science museum
- B. An art gallery
- C. Another type of museum (not science or art)
- D. A science and discovery centre
- E. A planetarium
- F. A Zoo or aquarium
- G. A working laboratory or similar scientific site
- H. A Science festival
- I. A science-related talk or lecture outside of school, college or work
- J. A Literature festival
- K. A nature reserve
- L. Another science-related attraction –

(allow DK)

ASK ALL - VARIABLE NAME: qvisit2

Q13b. How often, if at all, have you visited or attended each of the following in the last 12 months?

SHOWCARD 16

CODE NULL FOR NONE OF THESE

- A. A science museum
- B. An art gallery
- C. Another type of museum (not science or art)
- D. A science and discovery centre
- E. A planetarium
- F. A Zoo or aquarium
- G. A working laboratory or similar scientific site
- H. A Science festival
- I. A science-related talk or lecture outside of school, college or work
- J. A Literature festival
- K. A nature reserve
- L. Another science-related attraction –

(allow DK)

- 1. Once
- 2. Twice
- 3. 3-4 times
- 4. 5 or more times
- 5. Or, not at all?

ASK FOR EACH ANSWER AT Q13a - VARIABLE NAME: qvisita

Q14. And on your last visit, who, if anyone, did you go to the [INSERT ANSWER FROM Q13a] with?

(FOR B,C,J ASK A COMBINED QUESTION: You mentioned that you attended an [art gallery], [other type of museum], [literature festival]. Thinking about your last visit to one of these, who if anyone did you go with?)

DO NOT PROMPT

- A. Went alone
- B. Son(s) (including step or foster)
- C. Daughter(s) (including step or foster)
- D. Mother (including step or foster)
- E. Father (including step or foster)
- F. Sister(s) (including step)
- G. Brothers (including step)
- H. Partner
- I. Friends
- J. With school, college or university
- K. Other relative (including in-laws)
- L. Other (non-relative)

(SP code 1; MP code 2-12; allow DK)

ASK ALL (RESPONDENTS ASKED EITHER STATEMENTS B OR C AND Q OR R) -
VARIABLE NAME: qagree2

Q15. Here are some statements about science. For each, please could you tell me the extent to which you agree or disagree?

SHOWCARD 18

ROTATE ORDER

- A. I don't understand the point of all the science being done today
- B. ASK HALF THE SAMPLE: I don't think I'm clever enough to understand science and technology
- C. ASK HALF THE SAMPLE: I don't think I'm clever enough to understand engineering
- D. Science is such a big part of our lives that we should all take an interest
- E. Even if it brings no immediate benefits, scientific research which advances knowledge should be funded by the Government
- F. I see engineering as different to science
- G. School put me off science
- H. The benefits of science are greater than any harmful effects
- I. I cannot follow developments in science and technology because the speed of development is too fast
- J. Government funding for science should be cut because the money can be better spent elsewhere
- K. Science and technology are too specialised for most people to understand them
- L. It is important to know about science in my daily life
- M. The speed of development in science and technology means that they cannot be properly controlled by government
- N. On the whole, science will make our lives easier
- O. The more I know about science the more worried I am
- P. Scientific advances tend to benefit the rich more than they benefit the poor
- Q. ASK HALF THE SAMPLE: I don't really know what a scientist does
- R. ASK HALF THE SAMPLE: I don't really know what an engineer does
- S. Science should be seen in isolation from other aspects of human knowledge
- T. Science makes our way of life change too fast

U. Too much money is spent on the arts compared to science

1. Strongly agree

2. Tend to agree

3. Neither agree nor disagree

4. Tend to disagree

5. Strongly disagree

(SP; allow DK)

RESPONDENTS ASKED EITHER Q16 AND Q17 OR Q18 AND Q19

SHOWCARDS 19-25 WITH ONE PAIR PER CARD

ASK HALF THE SAMPLE - VARIABLE NAME: qpairs1

Q16. Looking at these pairs of words or phrases, which one of each of these pairs comes closest to your current view of scientists?

ASK HALF THE SAMPLE - VARIABLE NAME: qpairs2

Q17. Looking at these pairs of words or phrases, which one of each of these pairs comes closest to your current view of engineers?

CODE NULL FOR NONE OF THESE/IT DEPENDS/BOTH

A. Interesting Boring

B. Narrow-minded Open-minded

C. Good at communicating Poor at communicating

D. Secretive Open

E. Creative Uncreative

F. Honest Dishonest

G. Unethical Ethical

(SP for each row; allow DK and NULL)

ASK HALF THE SAMPLE - VARIABLE NAME: qimpsci

Q18. And looking at these words or phrases, which one or two, if any, do you think it is most important for scientists to be? Please just pick one or two options.

ASK HALF THE SAMPLE - VARIABLE NAME: qimpengi

Q19. And looking at these words or phrases, which one or two, if any, do you think it is most important for engineers to be? Please just pick one or two options.

SHOWCARD 26

CODE NULL FOR NONE OF THESE

- A. Interesting
- B. Open-minded
- C. Good at communicating
- D. Open
- E. Creative
- F. Honest
- G. Ethical

(MP up to two; allow DK and NULL)

ASK ALL - VARIABLE NAME: qtrue

Q20. I am going to read out a number of statements. For each one, I would like you to tell me whether you think it is true or false.

INTERVIEWER NOTE: IF NECESSARY, ALLOW RESPONDENTS A FEW SECONDS TO THINK BEFORE ANSWERING

ROTATE ORDER

- A. UK law states that all medicines must be tested on animals before being made available to people
- B. Any scientist in the UK can carry out research with animals
- C. You need a licence before you can plant genetically modified (GM) crops in the UK
- D. Before a medicine can be given to patients in the UK, the company that make it must demonstrate to regulators that it has been tested
- E. Any food that contains genetically modified (GM) ingredients must be labelled as such in the UK
- F. Scientists need a licence before they can modify the DNA in humans, animals or their embryos
- G. If a business or researcher wishes to test a driverless vehicle on public roads they should follow a Government code of practice

- 1. True
- 2. False

(SP; allow DK)

RESPONDENTS ASKED EITHER Q21 OR Q22

ASK HALF THE SAMPLE - VARIABLE NAME: qtrustsci

Q21. How much, if at all, do you trust each of these groups to follow any rules and regulations which apply to their profession?

SHOWCARD 27 CONTAINING INTRODUCTORY LINE

ROTATE ORDER

- A. Scientists working for government
- B. Scientists working for private companies
- C. Scientists working for universities
- D. Scientists working for charities
- E. Scientists working for environmental groups

I trust them to follow any rules and regulations which apply to their profession ...

- 1. ... a great deal
- 2. ... a fair amount
- 3. ... not very much
- 4. ... not at all

(SP; allow DK

ASK HALF THE SAMPLE - VARIABLE NAME: qtrusteng

Q22. How much, if at all, do you trust each of these groups to follow any rules and regulations which apply to their profession?

SHOWCARD 27 CONTAINING INTRODUCTORY LINE

ROTATE ORDER

- A. Engineers working for private companies
- B. Engineers working for universities
- C. Researchers working for government
- D. Researchers working for universities
- E. Researchers working for charities/trusts/foundations

I trust them to follow any rules and regulations which apply to their profession ...

- 1. ... a great deal
- 2. ... a fair amount
- 3. ... not very much
- 4. ... not at all

(SP; allow DK)

ASK ALL (RESPONDENTS ASKED EITHER STATEMENT A OR B) - VARIABLE NAME:
qagree3

Q23. Here are some statements about working in science. For each, please could you tell me the extent to which you agree or disagree?

SHOWCARD 28

ROTATE ORDER

- A. ASK HALF THE SAMPLE: Scientists make a valuable contribution to society
 - B. ASK HALF THE SAMPLE: Engineers make a valuable contribution to society It's normal for scientists to disagree with each other
 - C. Scientists adjust their findings to get the answers they want
 - D. In general, scientists want to make life better for the average person
 - E. Rules will not stop scientists doing what they want behind closed doors
 - F. It is important to have some scientists who are not linked to businesses
 - G. The independence of scientists is often put at risk by the interests of their funders
 - H. Government should delay the introduction of new medicines or technologies until scientists are completely certain there are no bad side effects
 - I. Scientists should listen more to what ordinary people think
 - J. Scientists should be allowed to carry out research with animals, if this can lead to improvements in human health
 - K. Scientists are too dependent on business and industry for funding
 - L. Scientists are always learning
1. Strongly agree
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Strongly disagree

(SP; allow DK)

ASK ALL - VARIABLE NAME: qtrustdata

Q24. How much do you trust current UK data protection regulations to ensure that your personal data is not shared without your permission?

SHOWCARD 29

1. A lot
2. A little
3. Not very much
4. Not at all
5. (Don't know)

ASK ALL - VARIABLE NAME: qchoose

Q25. In your opinion, what do you feel attracts people to jobs in science, engineering or technology?

DO NOT PROMPT

- A. They are good at these subjects/skills
- B. They enjoy these subjects/skills
- C. Jobs are well-paid
- D. Jobs are prestigious/well-respected
- E. They like to discover new things
- F. Growing number of jobs in these sectors
- G. Interesting/stimulating
- H. Jobs are beneficial to society
- I. Jobs are practical/relevant to everyday life
- J. Influence from the media or TV shows
- K. They have been encouraged by their family
- L. They have been encouraged by their school/university
- M. Wide range of career options
- N. Other (specify)
- O. Don't know

ASK ALL (RESPONDENTS ASKED EITHER STATEMENTS C OR D, E OR F, I OR J, K OR L AND N OR O) - VARIABLE NAME: qagree4

Q26a. Here are some statements about studying and working in science. For each, please could you tell me the extent to which you agree or disagree?

SHOWCARD 30

ROTATE ORDER

- A. Because of science and technology there will be more work opportunities for the next generation
 - B. The science I learnt at school has been useful in my everyday life
 - C. ASK HALF THE SAMPLE: Science is not a suitable career for a woman
 - D. ASK HALF THE SAMPLE: Engineering is not a suitable career for a woman
 - E. ASK HALF THE SAMPLE: Science is a dying industry in the UK
 - F. ASK HALF THE SAMPLE: Engineering is a dying industry in the UK
 - G. The maths I learnt at school has been useful in my everyday life
 - H. Young people's interest in science is essential for our future prosperity
 - I. ASK HALF THE SAMPLE: Compared to other professions, science offers a well-paid career
 - J. ASK HALF THE SAMPLE: Compared to other professions, engineering offers a well-paid career
 - K. ASK HALF THE SAMPLE: Studying science won't necessarily get you a good job
 - L. ASK HALF THE SAMPLE: Studying engineering won't necessarily get you a good job
 - M. The UK needs to develop its science and technology sector in order to enhance its international competitiveness
 - N. ASK HALF THE SAMPLE: Jobs in science are very interesting
 - O. ASK HALF THE SAMPLE: Jobs in engineering are very interesting
 - P. Scientific research makes a direct contribution to economic growth in the UK
1. Strongly agree
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Strongly disagree

(SP; allow DK)

ASK ALL - VARIABLE NAME: qimportant

Q26b. How important do you think each of the following subjects are in terms of helping young people obtain skills for the future?

SHOWCARD 31

- A. Science, for example Physics, Chemistry, Biology
 - B. Humanities, for example History, Geography
 - C. Computing or Computer science
 - D. Creative subjects, for example Art, Drama, Music
1. Essential
 2. Very important but not essential
 3. Fairly important
 4. Not very important
 5. Not at all important
 6. Don't know

ASK ALL - VARIABLE NAME: qeffortcons

Q27. How much effort do you think the Government is making to consult the public on science?

SHOWCARD 32

1. A great deal of effort
2. A fair amount of effort
3. Not very much effort
4. No effort at all

(SP; allow DK)

ASK ALL - VARIABLE NAME: qdecision

Q28a. Which of these statements, if any, comes closest to your own attitude to decision-making about science issues?

SHOWCARD 33

- A. I'm not interested in being involved in decision-making about science issues, as long as scientists are doing their jobs
- B. I would like to know that the public are involved in decision-making about science issues, but I don't want to be involved personally
- C. I would like to have more of a say in science issues
- D. I would like to become actively involved in decision-making about science issues
- E. I am already actively involved in decision-making about science issues

(SP; allow DK)

IF ANSWER E AT Q28a - VARIABLE NAME: qinvdec_current

Q28b. Are you involved in decision-making about science issues in any of these ways?

READ OUT

- A. Giving my opinion via a poll or survey
- B. Taking part in a public consultation
- C. Giving my opinion via a focus group
- D. Taking part in a public dialogue event about science
- E. Participating in crowdsourcing activities (e.g. counting wildlife, observing stars)
- F. None of the above

(Don't know)

IF ANSWER C-E AT Q28a - VARIABLE NAME: qinvdec

Q28c. Would you like to be involved in decision-making about science issues that matter to you in any of these ways?

READ OUT

- A. Giving my opinion via a poll or survey
- B. Taking part in a public consultation
- C. Giving my opinion via a focus group
- D. Taking part in a public dialogue event about science
- E. Participating in crowdsourcing activities (e.g. counting wildlife, observing stars)
- F. None of the above

(Don't know)

ASK ALL - VARIABLE NAME: qinfsci

Q28c. Which, if any, of these sources do you think are the best for informing people about science issues? Please pick one, two, or three sources

SHOWCARD 34

- A. Books
- B. Friends and family
- C. Magazines
- D. Print newspapers
- E. Online newspapers or news websites
- F. Radio
- G. Science blogs
- H. Scientific journals
- I. TV
- J. Work colleagues
- K. Social media
- L. Podcasts
- M. Through education
- N. Internet
- O. Google

Other – specify

None of the above

ASK ALL - VARIABLE NAME: qagree5

Q29. Here are some statements about how science is communicated and discussed. For each, please could you tell me the extent to which you agree or disagree?

SHOWCARD 35

ROTATE ORDER

- A. Public consultation events are just public relations activities and don't make any difference to policy
 - B. The Government should act in accordance with public concerns about science and technology
 - C. Those who regulate science need to communicate with the public
 - D. We have no option but to trust those governing science
 - E. The public is sufficiently involved in decisions about science and technology
 - F. Experts and not the public should advise the Government about the implications of scientific developments
 - G. There is so much conflicting information about science it is difficult to know what to believe
 - H. Politicians are too easily swayed by the media's reaction to scientific issues
 - I. Scientists put too little effort into informing the public about their work
 - J. The information I hear about science is generally true
 - K. Scientists should be rewarded for communicating their research to the public
 - L. The media sensationalises science
 - M. I would like more scientists to spend more time than they do discussing the social and ethical implications of their research with the general public
 - N. We ought to hear about potential new areas of science and technology before they happen, not afterwards
 - O. I feel I could influence Government policy on science if I wanted to
1. Strongly agree
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Strongly disagree

(SP; allow DK)

ASK IF CODES 1-2 AT Q29J - VARIABLE NAME: qwhytrue

Q30. You said that you agree that the information you hear about science is generally true. Why do you say that?

DO NOT PROMPT

PROBE FULLY

- A. It's checked by journalists
- B. It's checked by other scientists
- C. It's checked by someone (unspecified)
- D. It comes directly from scientists
- E. Regulation/science is regulated
- F. Have no reason to doubt it
- G. From what I've seen in magazines/newspapers/on TV – trust the media
- H. I check the information myself/read up/my own sources/ I am knowledgeable
- I. I/partner/family member work/worked in the industry
- J. Scientists' careers/reputation depend on them being correct/unbiased
- K. Experience/things come true
- L. Evidence is backed up/ with research/facts/results
- M. Different people say the same things/different sources give impression of it
- N. Lies will be found out/untrue things are not kept under wraps
- O. I get my information from only reputable/unbiased sources
- P. No particular reason/that's my view
- Q. Other – specify

(MP; allow DK)

ASK IF CODES 4-5 AT Q29J - VARIABLE NAME: qwhyfals

Q31. You said that you disagree that the information you hear about science is generally true. Why do you say that?

DO NOT PROMPT

PROBE FULLY

- A. It's not checked by journalists
- B. It's not checked by other scientists
- C. It's not checked by anyone (unspecified)
- D. It does not come directly from scientists
- E. No proof/evidence/believe it if I can see it
- F. Weak regulation/science is not regulated
- G. Have no reason to trust it
- H. Media sensationalism/bias/don't trust the media
- I. Conflicting opinions among scientists
- J. Fabricated/con/government cover-ups
- K. They only tell you what they want you to know
- L. Companies influence them/vested interests sway people's views
- M. We don't hear what's going on until it's happened/information not divulged on
- N. No particular reason/that's my view
- O. Other – specify

(MP; allow DK)

ASK ALL - VARIABLE NAME: qwrite

Q32. Thinking of the information you hear about science, how true, if at all, do you think each of the following statements are?

SHOWCARD 36

ROTATE ORDER

- A. Journalists who write stories about science have a science degree or similar qualification
 - B. People who write science blogs have a science degree or similar qualification
 - C. Journalists check the reliability of scientific research findings before they write about them
 - D. Before scientific research is published, it is checked by other qualified scientists
1. Always true
 2. Mostly true
 3. Occasionally true
 4. Never true

(SP; allow DK)

ASK ALL - VARIABLE NAME: qquiz

Q33. Now for a quick quiz. For each of the following statements, please say whether you think it is definitely true, probably true, probably false or definitely false. If you're not sure, just say so and we'll go on to the next one.

SHOWCARD 37 EXCLUDING CODE 5

- A. Electrons are smaller than atoms
 - B. All radioactivity is man made
 - C. All plants and animals have DNA
 - D. More than half of human genes are identical to those of mice
 - E. The cloning of living things produces genetically identical copies
 - F. Lasers work by focusing sound waves
 - G. By eating a genetically modified fruit, a person's genes could also become modified
 - H. The oxygen we breathe comes from plants
 - I. It is the mother's genes that determine the sex of the child
 - J. One kilogram of lead has the same mass on Earth as it does on the moon
1. Definitely true
 2. Probably true
 3. Probably false
 4. Definitely false
 5. Not sure

(SP)

ASK ALL - VARIABLE NAME: qtalk

Q34. How often do you talk about things to do with science with family, friends or colleagues?

SHOWCARD 38

1. Never
2. Rarely (once a year or less)
3. A few times a year
4. Once or twice a month
5. At least once a week
6. Every day or nearly every day

ASK ALL - VARIABLE NAME: qagree6

Q35. For each of the following, please could you tell me the extent to which you agree or disagree?

SHOWCARD 39

ROTATE ORDER

- A. I would feel comfortable in places where science is discussed and practised, such as in laboratories, in science centres, in industrial settings.
 - B. I have a good understanding of scientific terms, such as hypothesis, theory, experiments and research trials.
 - C. The arts play an important role in helping me understand the world
 - D. Science plays an important role in helping me understand the world
1. Strongly agree
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Strongly disagree

(SP; allow DK)

Final demographics

READ OUT

We're almost finished but I've got a few more questions just about you. All the answers you give will be kept completely confidential and will be used for research purposes only, to help us categorise the answers you have already given me. We appreciate that some of these questions may be sensitive to you and therefore you will have the option to move on if you prefer not to answer.

ASK ALL - VARIABLE NAME: highestedu

QD. Please indicate the highest educational or professional qualification that you have obtained to date, if any?

SHOWCARD 73

IF STILL STUDYING, CHECK FOR HIGHEST ACHIEVED SO FAR

- A. Higher degree (e.g. Masters, PhD)
- B. Undergraduate degree
- C. A levels or equivalent (=NVQ level 3)
- D. 5+ GCSEs/O-levels/CSEs (=NVQ level 2)
- E. Qualification below this (=NVQ level 1)
- F. Other qualifications
- G. No formal qualifications

(SP; allow DK and REF)

ASK IF CODES A-B AT QD - VARIABLE NAME: degree

QE. What was the main subject of your [IF CODE A AT QD: undergraduate] degree?

DO NOT PROMPT

INTERVIEWER: IF STUDIED A COMBINED DEGREE ASK WHICH THEY CONSIDER TO BE THEIR MAIN SUBJECT

- A. Arts/humanities subject (literature, classics, geography, history, religion etc)
- B. Business/management
- C. Computer science
- D. Education (e.g. teaching degree excluding PGCE)
- E. Engineering subject
- F. Language subject (French etc)
- G. Law
- H. Medicine/dentistry/pharmacy etc
- I. Core science/maths subject (chemistry, physics, biology, maths etc.)
- J. Other health subject (e.g. nursing, healthcare, physiotherapy etc.)
- K. Social science subject (economics, psychology, sociology etc)
- L. Visual or performing arts/Art & design
- M. Other (SP; allow DK and REF)

IF QD=A,C,D,E,F OR [QD=B AND QE <> C,E,H,I] - VARIABLE NAME: highestsciedu

QD2. And what is your highest qualification in science, technology, engineering or maths, if you have one?

SHOWCARD 74

IF STILL STUDYING, CHECK FOR HIGHEST ACHIEVED SO FAR

- A. Higher degree (e.g. Masters, PhD)
- B. Undergraduate degree
- C. A level or equivalent (=NVQ level 3)
- D. GCSE/O-level/CSE (=NVQ level 2)
- E. Science qualification below this (=NVQ level 1)
- F. Other science qualification
- G. No formal science qualifications

ASK ALL – VARIABLE NAME: Qri

QRi1. Which member of your household is the Chief Income Earner, that is the person with the largest income, whether from employment, pensions, state benefits, investments or any other sources?

- A. Respondent
- B. Respondents spouse/partner
- C. Other adult
- D. Don't know

ASK ALL - VARIABLE NAME: Qri2

QRi2. Working status of Chief Income Earner (CIE)

- A. Employed
- B. Self-Employed
- C. Not working, dependent on state benefit
- D. Not working, other income
- E. Don't know

ASK ALL - VARIABLE NAME: Qri3

IF QRi2=C or D

QRi3.

SHOW SCREEN

- A. Retired gets pension from previous job
- B. Unemployed 6 months or less
- C. Sick - still receiving pay or statutory pay from job
- D. Widow/widower receiving pension from partner's previous job
- E. Divorced/separated receiving maintenance from ex-partner
- F. Full time student
- G. Not working - with private means
- H. Unemployed more than 6 months
- I. Only receive income support
- J. Receiving state pension only
- K. Receiving Disability Living Allowance
- L. Don't know

IF QRi2=A or B or QRi3=A or QRi3=B - VARIABLE NAME: Qri4

QRi4. What is the type of firm where the CIE works/worked?

COLLECT OCCUPATION OR PREVIOUS OCCUPATION DETAILS OF CIE.

IF QRi2=A or B or QRi3=A or QRi3=B - VARIABLE NAME: Qri5

QRi5. What is/was the job actually done by the CIE?

IF QRi2=A or B or QRi3=A or QRi3=B - VARIABLE NAME: Qri6

QRi6. What is/was the title, rank, grade, etc of the CIE?

IF QRi2=A or B or QRi3=A or QRi3=B - VARIABLE NAME: Qri7

QRi7. How many people work/worked there altogether?

IF QRi2=A or B or QRi3=A or QRi3=B - VARIABLE NAME: Qri8

QRi8. How many is/was the CIE responsible for?

ASK ALL - VARIABLE NAME: Qri9

QRi9. Does the CIE have any qualifications?

DOES THE CIE HAVE ANY QUALIFICATIONS (SUCH AS APPRENTICESHIPS,
PROFESSIONAL QUALIFICATIONS, UNIVERSITY DEGREES, DIPLOMAS ETC.)

- A. Yes
- B. No
- C. Don't know

IF QRi2=A or B - VARIABLE NAME: Qri10

QRi10.

Enter qualifications

IF QRi2=A or B - VARIABLE NAME: Qri11

QRi11. ENTER ANY OTHER RELEVANT DETAILS TO ASSIST CLASSIFICATION OF
OCCUPATION AND INDUSTRY.

IF NO FURTHER DETAILS PRESS "OK"

ASK ALL - Sgrade

QRi12. Social grade

- A. A
- B. B
- C. C1
- D. C2
- E. D
- F. E

(SP; allow REF)

ASK ALL - VARIABLE NAME: childrenhh

QH. Number of children aged 15 and under in household

- A. None
- B. 1
- C. 2
- D. 3
- E. 4 or more

(SP; allow DK and REF)

ASK IF CODES B-E AT QH (1 OR MORE CHILDREN IN HOUSEHOLD) - VARIABLE NAME:
childage

QI. What ages are the children, aged 15 and under, in your household?

- 1. 0-4
- 2. 5-7
- 3. 8-10
- 4. 11-15

(MP; allow DK and REF)

ASK ALL - VARIABLE NAME: health

QI2 How is your health in general? Is it...

SHOWCARD 75

1. Very Good
2. Good
3. Fair
4. Bad
5. Very Bad

ASK ALL - VARIABLE NAME: health2

QI3. This question asks you about any health conditions, illnesses or impairments you may have. Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?

- A. Yes
- B. No

ASK ALL - VARIABLE NAME: religion

QJ. What is your religion?

SHOWCARD 76

CODE ONE ONLY

- A. No religion
- B. Christian (including Church of England, Church of Scotland, Church of Ireland, Catholic, Protestant, and all other Christian denominations)
- C. Buddhist
- D. Hindu
- E. Jewish
- F. Muslim
- G. Sikh
- H. Any other religion (SPECIFY)

ASK ALL EXCEPT CODE A OR REF AT QJ - VARIABLE NAME: relattend

QK. Apart from such special occasions as weddings, funerals and baptisms, how often nowadays do you attend services or meetings connected with your religion?

PROBE AS NECESSARY

SINGLE CODE ONLY

- A. Once a week or more
- B. Less often but at least once in two weeks
- C. Less often but at least once a month
- D. Less often but at least twice a year
- E. Less often but at least once a year
- F. Less often than once a year
- G. Never or practically never
- H. Varies too much to say

(SP; allow REF)

ASK ALL - VARIABLE NAME: originlife

QL. People have different views about the origin of life on earth. Which of the following comes closest to your view about the origin and development of life on earth?

SHOWCARD 77

- A. Humans and other living things were created by God and have always existed in their current form
- B. Humans and other living things evolved over time, in a process guided by God
- C. Humans and other living things evolved over time by natural selection, in which God played no part
- D. I have another view on the origins of species and development of life on earth, which is not D. included in this list

(SP; allow DK and REF)

ASK ALL - VARIABLE NAME: sciencejob

QM. Do you work in a science related job or study a science subject?

SHOWCARD 78

- A. Science related job
- B. Study science subject
- C. Both study science and work in a science job
- D. Neither

ASK ALL - VARIABLE NAME: sciencejob2

QN. Do you have any friends or family who work in a job using science, computer science, engineering, or medicine?

SHOWCARD 79

MULTICODE

- A. Yes, family member living with me
- B. Yes, other family member/relative (not living with me)
- C. Yes, friends or colleagues
- D. None of the above

ASK ALL - VARIABLE NAME: ethnicity

QO. What is your ethnic group?

SHOWCARD 80

White:

- A. English / Welsh / Scottish / Northern Irish / British
- B. Irish
- C. Gypsy or Irish Traveller
- D. Any other White background, please describe

Mixed / Multiple ethnic groups:

- E. White and Black Caribbean
- F. White and Black African
- G. White and Asian
- H. Any other Mixed / Multiple ethnic background, please describe

Asian / Asian British:

- I. Indian
- J. Pakistani
- K. Bangladeshi
- L. Chinese
- M. Any other Asian background, please describe

Black / African / Caribbean / Black British:

- N. African
- O. Caribbean
- P. Any other Black / African / Caribbean background, please describe

Other ethnic group

- Q. Arab
- R. Any other ethnic group, please describe

ASK ALL - VARIABLE NAME: Q65

QP. This survey is being carried out by Kantar Public, an independent social research company. Occasionally we need to speak to people more than once. If we need to come back to you with any questions relating to this survey, would you be willing to be re-contacted within the next year?

Your contact details will be deleted after one year.

IF NECESSARY, ADD: You can be assured that your name will never be passed to anyone outside our organisation without your permission.

- A. Yes – willing to be re-contacted
- B. No – not willing to be re-contacted

Module A: Ageing Society

A.i Life Extension

READ OUT Now I'd like to ask you some questions about your views on ageing and quality of life in your later years.

ASK ALL - VARIABLE NAME: AQ1

QA1. If you had a choice, which of the following would you prefer for yourself.

SHOWCARD 40

- A. To live only as long as I have good quality of life
- B. To live for as long as possible, even if this means more limited quality of life
- C. (Don't know)

ASK ALL - VARIABLE NAME: AQ2

QA2. Currently, the average life expectancy in the UK is about 80 years old. In the future, new medical treatments and drugs may slow the ageing process and allow people to live decades longer, to at least 120. Before today, how much, if anything, have you read or heard about this?

SHOWCARD 41

- 1. Hadn't heard about this before now
- 2. Hardly anything but I've heard of this
- 3. A little
- 4. A fair amount
- 5. A lot
- 6. Don't know

ASK ALL - VARIABLE NAME: AQ3

QA3. If new medical treatments and drugs slow the ageing process and allow the average person to live decades longer, do you think that would be a good thing or a bad thing for UK society?

SHOWCARD 42

1. Definitely a good thing
2. Probably a good thing
3. Probably a bad thing
4. Definitely a bad thing
5. (Don't know)

ASK ALL - VARIABLE NAME: AQ4

QA4. If this were possible in your lifetime, which of the following would you choose for yourself?

SHOWCARD 43

- A. To take advantage of these new medical technologies and drugs, and prolong your life for as long as possible
- B. To live to a natural age
- C. (Don't know)

ASK ALL - VARIABLE NAME: AQ5

QA5. Thinking again about new medical treatments and drugs that slow the ageing process and allow the average person to live decades longer. How much do you agree or disagree with each of the following:

SHOWCARD 44

- A. These treatments would be fundamentally unnatural
 - B. Older people will have a more stimulating life if they continue to work for longer
 - C. Only wealthy people are likely to have access to these treatments
 - D. Longer life expectancies would put a strain on the NHS
 - E. There will be less age discrimination in society
 - F. Everyone should be able to get these treatments for free on the NHS, if they want them
 - G. Working people would have to pay more taxes to support an increasingly older population
1. Strongly agree
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Strongly disagree
 6. (Don't know)

A.ii Human Enhancement & Ageing

ASK ALL - VARIABLE NAME: AQ6

QA6. If the following were available to you, how likely is it that you would want this when you are older?

SHOWCARD 45

- A. To take drugs which help improve memory and concentration
 - B. To have a brain chip implant to improve intelligence and memory
 - C. To wear clothing which contains artificial muscles, which could help older people to stand for longer, walk faster, or lift objects
-
- 1. Definitely
 - 2. Probably
 - 3. Probably not
 - 4. Definitely not
 - 5. (Don't know)

A.iii Robots used in social care

READ OUT

In the future, older people could be provided with a robot caregiver to allow them to continue living in their own home as they age. This robot would be available 24 hours a day to help with household chores, test vital signs, or dispense medication. It would also have conversational skills and could serve as a companion for people who live alone.

ASK ALL - VARIABLE NAME: AQ7a

QA7a. Before today, how much had you heard or read about the idea of robots helping to care for older people?

SHOWCARD 46

1. Hadn't heard about this before now
2. Hardly anything but I've heard of this
3. A little
4. A fair amount
5. A lot
6. Don't know

ASK ALL - VARIABLE NAME: AQ7b

QA7b. Would you, personally, be interested in this type of robot caregiver for yourself or a member of your family?

SHOWCARD 47

1. Definitely
2. Probably
3. Probably not
4. Definitely not
5. (Don't know)

ASK ALL - VARIABLE NAME: AQ8

QA8. For each of the following, how comfortable you would feel about using this yourself in your old age?

SHOWCARD 48

- A. A robot to carry out household tasks for you, such as cooking and cleaning
 - B. A robot to act as a companion for you
 - C. A robot to test vital signs such as blood pressure and dispense medication
1. Very comfortable
 2. Fairly comfortable
 3. Not very comfortable
 4. Not at all comfortable
 5. (Don't know)

ASK ALL - VARIABLE NAME: AQ9

QA9. Please think about a situation in the future where robot carers are being used in society. How much do you agree or disagree with the following?

SHOWCARD 49

- A. People would feel less worried about caring for their ageing relatives
 - B. I would be concerned about privacy and data security
 - C. Many older adults would treat their robot caregiver like a human friend
 - D. These robots would only be used by people who could not afford a human caregiver for their loved one
 - E. Robot caregivers would reduce the amount of human contact older people have
1. Agree strongly
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Disagree strongly
 6. (Don't know)

ASK ALL - VARIABLE NAME: AQ10

QA10. Scientists are developing new artificial intelligence tools to help diagnose long-term conditions earlier and more accurately, and to offer better treatment options. This will involve using individuals' health data. How willing or unwilling would you be to share your health data with the following organisations for this purpose?

SHOWCARD 50

- A. The government
 - B. The NHS
 - C. A private company
 - D. A research organisation such as a university or medical research charity
1. Very willing
 2. Fairly willing
 3. Fairly unwilling
 4. Very unwilling
 5. (Don't know)

Module B: Robotics, AI and data

B.i Awareness

READ OUT I now want to ask you some questions about artificial intelligence & robots. By this we mean robots or computer programs that can perform intelligent tasks normally requiring human input.

ASK ALL - VARIABLE NAME: BQ1

QB1. Before today, how much, if anything, have you heard or read about the following areas?

SHOWCARD 51

- A. Computers that can recognise speech and answer questions
 - B. Driverless vehicles which can adapt to road and traffic conditions
 - C. Facial recognition computers which can learn identities
 - D. Computer programmes that target advertising based on web browsing
 - E. Computers which analyse medical symptoms and records to help diagnose patients
 - F. Robots which can make their own decisions and can be used by the armed forces
 - G. Computer programmes that review job applications and help employers decide who to interview
1. Hadn't heard about this before now
 2. Hardly anything but I've heard of this
 3. A little
 4. A fair amount
 5. A lot
 6. Don't know

B.ii Willingness, risks & benefits to AI adoption: Health

ASK ALL - VARIABLE NAME: BQ2

QB2. Now a few questions on the use of artificial intelligence and robots in healthcare.

Thinking first about a situation where a computer or robot is used to answer your health questions, diagnose your condition and recommend treatment.

How comfortable would you in each of the following situations?

SHOWCARD 52

RANDOMISE STATEMENTS

A. If this technology was used to help a human doctor, but the doctor makes the final decision

B. If this technology was used instead of a human doctor

1. Very comfortable
2. Fairly comfortable
3. Not very comfortable
4. Not at all comfortable
5. (Don't know)

ASK ALL - VARIABLE NAME: BQ3

QB3. Now thinking about a situation where a robot is used to perform surgery on you.

How comfortable would you in each of the following situations?

SHOWCARD 52

RANDOMISE STATEMENTS

A. If this technology was used under the supervision of a human surgeon

B. If this technology was used instead of a human surgeon

1. Very comfortable
2. Fairly comfortable
3. Not very comfortable
4. Not at all comfortable
5. (Don't know)

ASK ALL - VARIABLE NAME: BQ4

QB4. If artificial intelligence, also known as AI, or robots becomes widespread, which of the following do you think are likely to happen as a result?

SHOWCARD 53

- A. This technology would allow conditions to be diagnosed and treated faster
 - B. Using AI and robots in healthcare would be cheaper and save the NHS money
 - C. Doctors would start to lose their medical skills as they would rely more and more on technology
 - D. AI would become more accurate than human doctors in diagnosing and treating conditions
 - E. Increased use of AI would mean that patients will start to lose the human touch in healthcare
 - F. More widespread use of AI in healthcare would speed up the advancement of medicine
1. Yes, likely
 2. No, not likely
 3. SPONTANEOUS: Can't Decide
 4. Don't know

B.iii Impact of AI on jobs

ASK ALL - VARIABLE NAME: BQ5

QB5. Now thinking about the use of Artificial Intelligence and robots more generally.

New developments in AI & robots are changing the nature of many jobs. Today, these technologies are mostly being used to perform routine tasks. But in the future, artificial intelligence and robots may be able to do many of the jobs that are currently done by humans today.

Before today how much have you heard or read about this idea?

SHOWCARD 54

1. Hadn't heard about this before now
2. Hardly anything but I've heard of this
3. A little
4. A fair amount
5. A lot
6. Don't know

ASK ALL - VARIABLE NAME: BQ6

QB6. Overall, do you think it would be a good thing or a bad thing for society if artificial intelligence and robots began to perform some of the work humans currently do?

SHOWCARD 55

1. Definitely a good thing
2. Probably a good thing
3. Probably a bad thing
4. Definitely a bad thing
5. Don't know

Ask if QC=A or B (THOSE IN WORK) - VARIABLE NAME: BQ7

QB7.

A. Thinking ahead, to what extent do you think your current job could be done by AI and robots in 5 years' time?

B. And to what extent do you think your current job could be done by AI and robots in 20 years' time?

SHOWCARD 56

1. Entirely
2. Mostly
3. Partially
4. Not at all
5. (Don't know/Depends)

ASK ALL - VARIABLE NAME: BQ8

QB8. In the future Artificial intelligence & robots may be able to perform most of the jobs currently being done by humans. To what extent do you agree or disagree with the following statements if this were the case.

SHOWCARD 57

RANDOMISE

- A. The economy would create many new, better paid jobs for humans
 - B. Without jobs people would be able to focus more on the things that really matter to them.
 - C. People would find their jobs more fulfilling as many routine tasks would be done by computers
 - D. If everyday interactions in shops, banks and restaurants are carried out by AI, people will have less contact with each other
1. Strongly agree
 2. Tend to agree
 3. Neither agree nor disagree
 4. Tend to disagree
 5. Strongly disagree
 6. (Don't know)

B. iv Data ownership

ASK if Q5c=1-9 (THOSE WHO USE THE INTERNET) - VARIABLE NAME: BQ9

QB9. The next question is about the use of your personal data. By this we mean things like your browsing history, social media use and online purchases. How much do you support or oppose the following uses of your personal data by companies?

SHOWCARD 58

A. (INTERVIEWER REPEAT IF NECESSARY: How much do you support or oppose...)

To create personalised adverts

B. (INTERVIEWER REPEAT IF NECESSARY: How much do you support or oppose...)

To develop new products or services

C. (INTERVIEWER REPEAT IF NECESSARY: How much do you support or oppose...)

To select news articles of most interest to you

D. (INTERVIEWER REPEAT IF NECESSARY: How much do you support or oppose...)

To select political messages for you during election campaigns

1. Strongly support
2. Tend to support
3. Neither support nor oppose
4. Tend to oppose
5. Strongly oppose
6. (Don't know)

B.v Regulation of AI

ASK ALL - VARIABLE NAME: BQ11

QB10. Who do you think should be most responsible for ensuring the safe use of robots and artificial intelligence?

SHOWCARD 59

CODE ONE ONLY

- A. Companies which make and sell the technology
- B. Individuals or companies that use the technology
- C. Scientists
- D. Government
- E. Independent body/regulator
- F. Other (specify)
- G. No-one
- H. (Don't know)

Module C: Genomes & micro-pollution

C.i Genome Editing

ASK ALL - VARIABLE NAME: CQ1

QC1. Scientists are currently looking into how we can change someone's DNA to treat or eliminate certain diseases. This is known as gene-editing. Before today, how much had you heard or read about this?

SHOWCARD 60

1. Hadn't heard about this before now
2. Hardly anything but I've heard of this
3. A little
4. A fair amount
5. A lot
6. Don't know

ASK ALL - VARIABLE NAME: CQ2

QC2. Developments in medical science are also making it possible to modify people's genes to treat genetic conditions such as Cystic Fibrosis.

To what extent do you support or oppose the following?

SHOWCARD 61 & 62 (2 SHOWCARDS, INCLUDE STATEMENT ON EACH)

A. Using gene editing to correct a genetic condition so that the correction passes on to a person's children

B. Using gene editing to correct a genetic condition in a way that the correction does not pass on to a person's children

1. Strongly support
2. Tend to support
3. Neither support nor oppose
4. Tend to oppose
5. Strongly oppose
6. Don't know

READ OUT

The next few questions are about your views on using gene-editing techniques in animals as a way to prevent human disease.

For example, scientists have worked out how to change the genetic code of a mosquito that, if introduced into the wild, could wipe out malaria-carrying mosquitos in some areas.

ASK ALL - VARIABLE NAME: CQ3

QC3. Before today, how much had you heard or read about the use of gene-editing in mosquitos?

SHOWCARD 63

1. Hadn't heard about this before now
2. Hardly anything but I've heard of this
3. A little
4. A fair amount
5. A lot
6. Don't know

ASK ALL - VARIABLE NAME: CQ4

QC4. To what extent do you support or oppose the introduction of mosquitos with an edited gene into the wild, even if this results in changes to the local ecosystem?

SHOWCARD 64

1. Strongly support
2. Tend to support
3. Neither support nor oppose
4. Tend to oppose
5. Strongly oppose
6. Don't know

READ OUT

The next few questions are about your views on using gene-editing in animals for food production. For example, editing the genes in cattle so that they grow larger to produce more meat or editing the genes in pigs to make them resistant to diseases.

ASK ALL - VARIABLE NAME: CQ6

QC5. Before today, how much have you heard or read about using gene-editing in animals for food production?

SHOWCARD 65

1. Hadn't heard about this before now
2. Hardly anything but I've heard of this
3. A little
4. A fair amount
5. A lot
6. Don't know

ASK ALL - VARIABLE NAME: CQ7

QC.6 To what extent do support or oppose using gene-editing in animals for food production in each of the following cases.

SHOWCARD 66

- A. To increase the efficiency of food production, for example so cattle or salmon grow larger or reach their target weight quicker
 - B. To ensure that animals such as pigs become resistant to disease
 - C. To modify animal products, for example editing the genes in cows to reduce allergic reactions to cow's milk
1. Strongly support
 2. Tend to support
 3. Neither support nor oppose
 4. Tend to oppose
 5. Strongly oppose
 6. Don't know

READ OUT

The next few questions are about your views on genetically modifying crops to increase food production. Genetically modified crops refer to plants such as vegetables in which the genetic make-up has been altered.

ASK ALL - VARIABLE NAME: CQ8

QC7. Before today, how much have you heard or read about genetically modified plants or crops?

SHOWCARD 67

1. Hadn't heard about this before now
2. Hardly anything but I've heard of this
3. A little
4. A fair amount
5. A lot
6. Don't know

ASK ALL - VARIABLE NAME: CQ9

QC8. To what extent do support or oppose genetically modifying vegetables in each of these ways?

SHOWCARD 68

- A. To increase the health benefits, for example broccoli with higher anti-oxidant levels
- B. To increase levels of vegetable production
- C. To make vegetables more attractive to the consumer
- D. To make vegetables taste better
- E. To make vegetables more disease resistant

1. Strongly support
2. Tend to support
3. Neither support nor oppose
4. Tend to oppose
5. Strongly oppose
6. Don't know

C.ii Micro-pollution in the environment

ASK ALL - VARIABLE NAME: CQ10

QC9. Micro-pollution refers to plastics and other materials that can break down into tiny pieces and enter the food chain or harm marine life

Before today, how much have you heard or read about the following as a cause of micro-pollution in the environment?

SHOWCARD 69

- A. Silver particles in sports clothing and socks
- B. Microbeads in products such as soap, facial scrub, and toothpaste
- C. Micro-plastic in clothes

- 1. Hadn't heard about this before now
- 2. Hardly anything but I've heard of this
- 3. A little
- 4. A fair amount
- 5. A lot
- 6. Don't know

ASK ALL - VARIABLE NAME: CQ12

QC10. In fact, all of the materials I just mentioned are causes of micro-pollution. To what extent would you support or oppose the following:

SHOWCARD 70

- A. A Government ban on the use of silver particles in sports clothing and socks
 - B. A Government ban on the use of micro-plastic in clothes
 - C. A Government ban on cosmetic and cleansing products that contain plastic micro-beads
-
- 1. Strongly support
 - 2. Tend to support
 - 3. Neither support nor oppose
 - 4. Tend to oppose
 - 5. Strongly oppose
 - 6. Don't know

ASK ALL - VARIABLE NAME: CQ11

QC11. Looking at this card, please rank the following in order of who you think should have the most responsibility for making sure that micro-pollution is reduced?

SHOWCARD 71

- A. Government by creating regulation to control micro-pollution;
- B. Industry and businesses to ensure that their products are not polluting;
- C. The public by choosing to buy non-polluting products

ENTER RANK 1:

RANK 2:

RANK 3:

ASK ALL - VARIABLE NAME: CQ13

C12. And to what extent would you support or oppose the following:

- A. A Government ban on plastic straws
- B. A Government ban on plastic cotton buds
- C. A Government ban on unrecyclable plastic packaging used in supermarkets

Appendix B - Showcards

SHOWCARD 1

- A. 16-24
- B. 25-34
- C. 35-44
- D. 45-54
- E. 55-59
- F. 60-64
- G. 65-74
- H. 75+

SHOWCARD 2

- a. Very well informed
- b. Fairly well informed
- c. Not very well informed
- d. Not at all informed

SHOWCARD 3

- a) I feel connected with science – I actively seek out science news, events, activities or entertainment
- b) I'm interested in science but I don't make a special effort to keep informed
- c) Science is not for me

SHOWCARD 4

- a) I feel connected with art and culture – I actively seek out news about art, or art events or activities
- b) I'm interested in art and culture but I don't make a special effort to keep informed
- c) Art and culture is not for me

SHOWCARD 5

- a) I feel connected with sport– I actively seek out news about sport, or sport events, activities or entertainment
- b) I'm interested in sport but I don't make a special effort to keep informed
- c) Sport is not for me

SHOWCARD 6

These days I hear and see ...

- A. ... far too much information about science
- B. ... too much information about science
- C. ... the right amount of information about science
- D. ... too little information about science
- E. ... far too little information about science

SHOWCARD 7

- A. Books
- B. Friends and family
- C. Magazines
- D. Print newspapers
- E. Online newspapers or news websites
- F. Radio – news programmes
- G. Radio – other programmes
- H. Science blogs
- I. Scientific journals
- J. TV – news programmes
- K. TV – other programmes
- L. Podcasts
- M. Work colleagues
- N. Twitter
- O. Facebook
- P. Other social media websites (e.g. Snapchat, Instagram, Reddit) (please specify)
- Q. Other websites (not news or social media websites)
- R. Other

SHOWCARD 8

- A. BBC/BBC News – www.bbc.co.uk/news
- B. Sky/Sky News – <http://news.sky.com>
- C. ITN – www.itn.co.uk
- D. The Guardian – www.guardian.co.uk
- E. The Daily Mail – www.dailymail.co.uk
- F. The Daily Telegraph – www.telegraph.co.uk
- G. The Times – www.thetimes.co.uk
- H. The Sun – www.thesun.co.uk
- I. The Financial Times – www.ft.com
- J. The Independent – www.independent.co.uk
- K. Daily Mirror – www.mirror.co.uk
- L. Daily Express – www.dailyexpress.co.uk
- M. Daily Star – www.dailystar.co.uk
- N. The Economist – www.economist.com
- O. Yahoo – <http://uk.yahoo.com>
- P. MSN – <http://uk.msn.com>
- Q. An online-only magazine, e.g. The Huffington Post or The Daily Beast
- R. Other – specify

SHOWCARD 9

- a) A great deal
- b) A fair amount
- c) Not very much
- d) Not at all

SHOWCARD 10

- a) More than once a day
- b) Once a day
- c) 2-3 times per week
- d) About once a week
- e) About once a fortnight
- f) About once a month
- g) About once every 2-3 months
- h) About once every six months
- i) Less often
- j) Never use the internet

SHOWCARD 11

- a) A great deal
- b) A fair amount
- c) Not very much
- d) Not at all

SHOWCARD 12

- a) Very well informed
- b) Fairly well informed
- c) Not very well informed
- d) Not at all informed
- e) Have never heard of it

SHOWCARD 13

- A. Benefits far outweigh the risks
- B. Benefits slightly outweigh the risks
- C. The risks and benefits are about the same
- D. Risks slightly outweigh the benefits
- E. Risks far outweigh the benefits

SHOWCARD 14

- a) Very confident
- b) Fairly confident
- c) Not very confident
- d) Not at all confident

SHOWCARD 15

- a) Strongly agree
- b) Tend to agree
- c) Neither agree nor disagree
- d) Tend to disagree
- e) Strongly disagree

SHOWCARD 16

- A. Once
- B. Twice
- C. 3-4 times
- D. 5 or more times
- E. Or, not at all?

SHOWCARD 18

- A. Strongly agree
- B. Tend to agree
- C. Neither agree nor disagree
- D. Tend to disagree
- E. Strongly disagree

SHOWCARD 19

- A. Interesting
- B. Boring

SHOWCARD 20

- A. Narrow-minded
- B. Open-minded

SHOWCARD 21

- A. Good at communicating
- B. Poor at communicating

SHOWCARD 22

- A. Secretive
- B. Open

SHOWCARD 23

- A. Creative
- B. Uncreative

SHOWCARD 24

- A. Honest
- B. Dishonest

SHOWCARD 25

- A. Unethical
- B. Ethical

SHOWCARD 26

- A. Interesting
- B. Open-minded
- C. Good at communicating
- D. Open
- E. Creative
- F. Honest
- G. Ethical

SHOWCARD 27

I trust them to follow any rules and regulations which apply to their profession ...

- A. ... a great deal
- B. ... a fair amount
- C. ... not very much
- D. ... not at all

SHOWCARD 28

- A. Strongly agree
- B. Tend to agree
- C. Neither agree nor disagree
- D. Tend to disagree
- E. Strongly disagree

SHOWCARD 29

- a) A lot
- b) A little
- c) Not very much
- d) Not at all

SHOWCARD 30

- A. Strongly agree
- B. Tend to agree
- C. Neither agree nor disagree
- D. Tend to disagree
- E. Strongly disagree

SHOWCARD 31

- a) Essential
- b) Very important but not essential
- c) Fairly important
- d) Not very important
- e) Not at all important

SHOWCARD 32

- A. A great deal of effort
- B. A fair amount of effort
- C. Not very much effort
- D. No effort at all

SHOWCARD 33

- A. I'm not interested in being involved in decision-making about science issues, as long as scientists are doing their jobs
- B. I would like to know that the public are involved in decision-making about science issues, but I don't want to be involved personally
- C. I would like to have more of a say in science issues
- D. I would like to become actively involved in decision-making about science issues
- E. I am already actively involved in decision-making about science issues

SHOWCARD 34

- a) Books
- b) Friends and family
- c) Magazines
- d) Print newspapers
- e) Online newspapers or news websites
- f) Radio
- g) Science blogs
- h) Scientific journals
- i) TV
- j) Work colleagues
- k) Social media
- l) Podcasts
- m) Other – specify
- n) None of the above

SHOWCARD 35

- A. Strongly agree
- B. Tend to agree
- C. Neither agree nor disagree
- D. Tend to disagree
- E. Strongly disagree

SHOWCARD 36

- A. Always true
- B. Mostly true
- C. Occasionally true
- D. Never true

SHOWCARD 37

- A. Definitely true
- B. Probably true
- C. Probably false
- D. Definitely false

SHOWCARD 38

- a) Never
- b) Rarely (once a year or less)
- c) A few times a year
- d) Once or twice a month
- e) At least once a week
- f) Every day or nearly every day

SHOWCARD 39

- A. Strongly agree
- B. Tend to agree
- C. Neither agree nor disagree
- D. Tend to disagree
- E. Strongly disagree

SHOWCARD 40

- a) To live only as long as I have good quality of life
- b) To live for as long as possible, even if this means more limited quality of life

SHOWCARD 41

- a. Hadn't heard about this before now
- b. Hardly anything but I've heard of this
- c. A little
- d. A fair amount
- e. A lot

SHOWCARD 42

- a) Definitely a good thing
- b) Probably a good thing
- c) Probably a bad thing
- d) Definitely a bad thing

SHOWCARD 43

- a) To take advantage of these new medical technologies and prolong your life for as long as possible
- b) To live to a natural age without any further medical intervention

SHOWCARD 44

- a) Strongly agree
- b) Tend to agree
- c) Neither agree nor disagree
- d) Tend to disagree
- e) Strongly disagree

SHOWCARD 45

- a) Definitely
- b) Probably
- c) Probably not
- d) Definitely not

SHOWCARD 46

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 47

- a) Definitely
- b) Probably
- c) Probably not
- d) Definitely not

SHOWCARD 48

- a) Very comfortable
- b) Fairly comfortable
- c) Not very comfortable
- d) Not at all comfortable

SHOWCARD 49

- a) Agree strongly
- b) Tend to agree
- c) Neither agree nor disagree
- d) Tend to disagree
- e) Disagree strongly

SHOWCARD 50

- a) Very willing
- b) Fairly willing
- c) Fairly unwilling
- d) Very unwilling

SHOWCARD 51

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 52

- a) Very comfortable
- b) Fairly comfortable
- c) Not very comfortable
- d) Not at all comfortable

SHOWCARD 53

- a) Yes, likely
- b) No, not likely

SHOWCARD 54

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 55

- a) Definitely a good thing
- b) Probably a good thing
- c) Probably a bad thing
- d) Definitely a bad thing

SHOWCARD 56

- a) Entirely
- b) Mostly
- c) Partially
- d) Not at all

SHOWCARD 57

- a) Strongly agree
- b) Tend to agree
- c) Neither agree nor disagree
- d) Tend to disagree
- e) Strongly disagree

SHOWCARD 58

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 59

- a) Companies which make and sell the technology
- b) Individuals or companies that use the technology
- c) Scientists
- d) Government
- e) Independent body/regulator
- f) Other (specify)
- g) No-one

SHOWCARD 60

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 61

Using gene editing to correct a genetic condition so that the correction passes on to person's children

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 62

Using gene editing to correct a genetic condition in a way that does not pass on to a person's children

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 63

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 64

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 65

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 66

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 67

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 68

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 69

- a) Hadn't heard about this before now
- b) Hardly anything but I've heard of this
- c) A little
- d) A fair amount
- e) A lot

SHOWCARD 70

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 71

- a) Government by creating regulation to control micro-pollution
- b) Industry and businesses to ensure that their products are not polluting
- c) The public by choosing to buy non-polluting products

SHOWCARD 72

- a) Strongly support
- b) Tend to support
- c) Neither support nor oppose
- d) Tend to oppose
- e) Strongly oppose

SHOWCARD 73

- a) Higher degree (e.g. Masters, PhD)
- b) Undergraduate degree
- c) A level or equivalent (=NVQ level 3)
- d) 5+ GCSEs/O-levels/CSEs (=NVQ level 2)
- e) Qualification below this (=NVQ level 1)
- f) Other qualifications
- g) No formal qualifications

SHOWCARD 74

- A. Higher degree (e.g. Masters, PhD)
- B. Undergraduate degree
- C. A levels or equivalent (=NVQ level 3)
- D. GCSEs/O-levels/CSEs (=NVQ level 2)
- E. Science qualification below this (=NVQ level 1)
- F. Other science qualifications
- G. No formal science qualifications

SHOWCARD 75

- a) Very Good
- b) Good
- c) Fair
- d) Bad
- e) Very Bad

SHOWCARD 76

- a) No religion
- b) Christian (including Church of England, Church of Scotland, Church of Ireland, Catholic, Protestant, and all other Christian denominations)
- c) Buddhist
- d) Hindu
- e) Jewish
- f) Muslim
- g) Sikh
- h) Any other religion (please specify)

SHOWCARD 77

- A. Humans and other living things were created by God and have always existed in their current form
- B. Humans and other living things evolved over time, in a process guided by God
- C. Humans and other living things evolved over time by natural selection, in which God played no part
- D. I have another view on the origins of species and development of life on earth, which is not included in this list

SHOWCARD 78

- A. Science related job
- B. Study science subject
- C. Both study science and work in a science job
- D. Neither

SHOWCARD 79

- a) Yes, family member living with me
- b) Yes, other family member/relative (not living with me)
- c) Yes, friends or colleagues
- d) None of the above

SHOWCARD 80

White

A - English / Welsh / Scottish / Northern Irish / British

B - Irish

C - Gypsy or Irish Traveller

D - Any other White background, please describe

Mixed / Multiple ethnic groups

E - White and Black Caribbean

F - White and Black African

G - White and Asian

H - Any other Mixed / Multiple ethnic background, please describe

Asian / Asian British

I - Indian

J - Pakistani

K - Bangladeshi

L - Chinese

M - Any other Asian background, please describe

Black / African / Caribbean / Black British

N – African

O – Caribbean

P - Any other Black / African / Caribbean background, please describe

Other ethnic group

Q - Arab

R - Any other ethnic group, please describe

Appendix D – Leaflet

How will my information be used?

The information collected in the study will only be used for research purposes.

Your name and address details are kept separate from your answers and will not be passed on to any other organisation without your specific permission.

All information is collected and stored in line with the Data Protection Act (2018)

When can I view the results of the study?

The results will be available from August 2019. You will be able to find the results by visiting the government's website – gov.uk.

Public involvement

NEW TECHNOLOGY



We ought to hear about potential new areas of science and technology before they happen, not afterwards (agree)

DECISION MAKING



I would like to know that the public are involved in decision-making about science issues, but I don't want to be involved personally

Source: *Public Attitudes to Science (2014)*



I have further questions about this study, who can I contact?

If you have any questions or concerns, please contact us at Freephone 0800 051 0887 Monday to Friday 9-5, or email Jack Cole at pas-survey@kantarpublish.com

You can also write to us at:

Public Surveys Team
Kantar Public
4 Millbank
Westminster
SW 1P 3JA

Thank you for your help.



Why your help is important

About the study

Your household has been selected to take part in an official Government study - *The Future of Society*. The study collects the Public's view on a range of important topics affecting people across the UK. This includes the development of new medical treatments, the impact of climate change and use of new technologies, such as driverless cars.

This important study has been running for over 19 years and is an important source of information for the Government, academics, museums, and institutions such as the Royal Society.

Findings from the previous study can be found here: www.gov.uk/government/publications/public-attitudes-to-science-2014

About The Department for Business, Energy and Industrial Strategy

Kantar Public, the independent research organisation, are carrying out this study on behalf of the government department responsible for business. The Department for Business, Energy and Industrial Strategy are the government department responsible for many of the most pressing issues facing the UK. This includes addressing climate change through the development of new energy sources, protecting the rights of consumers, and promoting UK innovation and science. They are interested in hearing your opinions on some of these areas.

"Your answers and opinions are very important to us. We do not expect you to have any prior knowledge to take part."



Why did we choose you?

As it is not possible to ask everyone to take part in the survey, we select a sample of addresses to represent the entire country. Your address is one of these and was selected at random from a list of private addresses held by the Royal Mail.

We need people from all age groups and backgrounds to take part. Your views are important to us as without them we may not have a representative picture of the country.

One adult (aged 16 or over) from each address will be selected to participate. We will always ask for permission from a parent or guardian before interviewing anyone under the age of 18.



What will I be asked about?

We will ask for your opinion on a wide range of interesting topics relating to science and technology. All questions will be based on your opinion: there are no right or wrong answers. You can also skip any questions which you do not want to answer.

Why should I take part in this study?

This is your chance to give your views on new developments in science and technology and help to inform future government policies on these issues. We are interested in everyone's views, no specialist knowledge is needed to take part.

As a thank you for taking part, the interviewer will give you a £10 high street voucher.

How can I collect my voucher?

Once you have completed your interview with an interviewer they will hand you a £10 Love2shop voucher. You will be able to use this voucher in over 90 high street shops and restaurants, such as Argos, Boots, TK Maxx, Pizza Express and many more. For more information regarding the voucher please visit Love2shop's website: www.love2shop.co.uk.

What do you need to do now?

You do not need to do anything now. An interviewer will be in contact to speak to you in person and to ask you to take part in the study.

If you need a version of this document in a more accessible format, please email enquiries@beis.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.