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A survey of the UK population on public policy

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Abstract: An online survey of over 12,000 UK residents was conducted with the aim of understanding: elements of public policy, preferences and knowledge of public expenditure, the provision of public goods, and the intergenerational allocation of resources. Questions were asked about demographics, wealth and income attitudes, time preferences, risk preferences, social value orientation, subjective personal assessments of life expectancy, perceptions of government spending, and public policies on health, education, pensions and climate change. This paper presents a simple description of the summary statistics from the survey. It does not, as yet, provides substantive analysis of the data.

Key words: Survey, United Kingdom, discount rate, risk aversion, social value orientation, health, education, pensions, climate change, public policy

JEL classification: D10, D64, D70, D80, I18, I28, J32, H51, H52, H55, Q54

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1. Introduction

An individual's preferences for time, risk and equity are all very different parameters. Economists have found it hard to estimate these parameters and distinguish between them using survey data or natural experiments. Yet these parameters are crucially important in making policy decisions about the allocation of financial resources to different publically provided goods such as education, health care, retirement provision and environmental protection. These are areas which require both public and private resources to be spent, and involve inter-temporal choices under uncertainty with a strong component of redistribution. However, an observed willingness to pay for any of these (at least partly) public goods is consistent with a continuum of preferences. Experimental methods can focus on individual aspects of the utility function but suffer from unrealistic settings, small samples, and unrepresentative subjects.

In this project, we seek to overcome some of these issues. We survey a large sample in an experimental interactive and dynamic way - rather than experiment with a small group. Most experiments involve subjects responding to events on a screen, a set-up that can easily be replicated in an online survey. The survey is of over 12,000 residents of the UK. Experiments will cover preferences on time, including hyperbolic discounting and present bias, risk, and equity, including altruism.

This project is methodologically innovative in that we include important current experimental methods into a live sample survey. Typically, experiments are conducted with a very limited sample of non-representative people often students which leads to results with low external validity and generalizability. In contrast, this survey collects data on a sample of over 12,000 respondents with a population based sample frame. This overcomes representativeness and small sample problems.

The survey also includes questions on issues in which time, risk and equity play key roles: health, education, pensions, and climate change. Questions describe current UK policy and ask respondents which of a number of alternatives (including the option of no change) they would prefer.

We collect standard demographic information, including: age, sex, race and ethnicity, religion, education, sector and occupation. We also collect information on date of birth, siblings, and ethnicity as that may affect attitudes towards time, risk and equity.

The questionnaire asks summary questions about assets, debts and family income. We also ask simple questions to estimate financial literacy and numeracy.

Wherever possible we have used the most recent methods of survey design to attempt to illicit information or measure attitudes. In the interests of brevity we do not, here cite all the sources and influences on our survey design and methodology. We will, in due course, when we address particular substantive issues, describe more fully what sources we used in the design of our survey.

2. Survey and sample

The survey consists of three parts. In part 1, we ask for demographic information, from age and sex to income and wealth, and from family to handedness. These questions were asked first, except for income and wealth which were asked at the end to minimize fall-off. In part 2, we ask about attitudes and preferences, particularly with regard to time, risk, and others. The risk questions were asked after the income ones because we conditioned the pay-offs on the stated income. We also asked questions with regard to numeracy and financial literacy. All interviewees were asked all of parts 1 and 2, except for three questions that were used to prime half of the respondents.

In part 3, we ask about public policy. There are four domains: Health, education, pensions, and climate. Interviewees were asked about two of four, so that we have some 6,000 observations in each domain – and about 2,000 for each domain combined with one of the other domains. In each domain, half of respondents were primed with a negative image, and half with a positive image. At the end of part 3, all respondents were asked to prioritise government spending across ten domains, including the four above.

The survey is reproduced in the appendix. It can be taken [here](#).

The questionnaire was programmed in SurveyGizmo. The initial survey design was pre-tested on faculty and PhD candidates, giving them the opportunity to add questions for their own research purposes. A second pre-test was conducted online, using social media to attract respondents. The final survey was administered by the survey company GlobalTestMarket. This company has extensive experience of running such surveys. Participants were rewarded by some £1.50 for completing a 30 minute survey. The survey ran from 9 September to 14 October 2015. Interviewees are normally resident in the United Kingdom.

The response to the survey was reasonably representative geographically with respect to population density. Figure 1 locates all of the respondents on a map of the UK. Obviously the sparsely populated areas are those with the least response – we have not yet examined rigorously the geographical representativeness.

Figure 2 shows response by operating system. Windows is the dominant operating system, followed by versions of Mac.

17,053 respondents filled out part of the questionnaire. 12,028 completed it. Figure 3 shows the fraction of people who dropped out of the survey – i.e. ‘defections’ by the page, and hence the stage they quit the survey. We designed the survey so that not all the technically difficult and demanding questions which required mental processing and came in one block. Specifically we spaced out the more ‘difficult’ questions to different pages in the survey to try and overcome this kind of fatigue effect on response. The sharpest drop in participants was on the page where people were asked for their time preferences. The second-largest drop was on the pages where people were asked about how the government does and should spend our money. The third-largest was for the page on financial literacy. The final sample thus suffers from a selection bias towards those who are not afraid of hard questions.



Figure 1 Location of Respondents (N=16899)

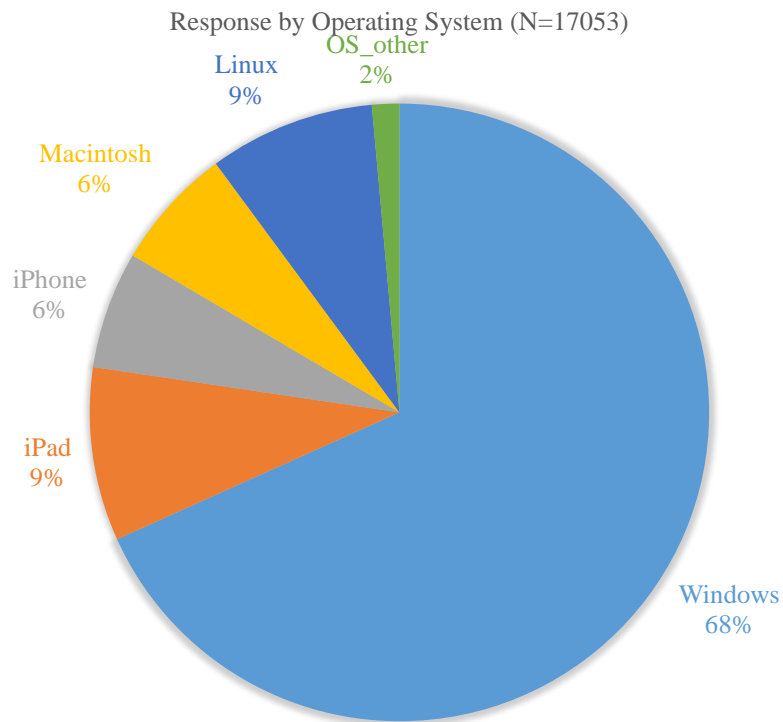


Figure 2 Response by Operating System

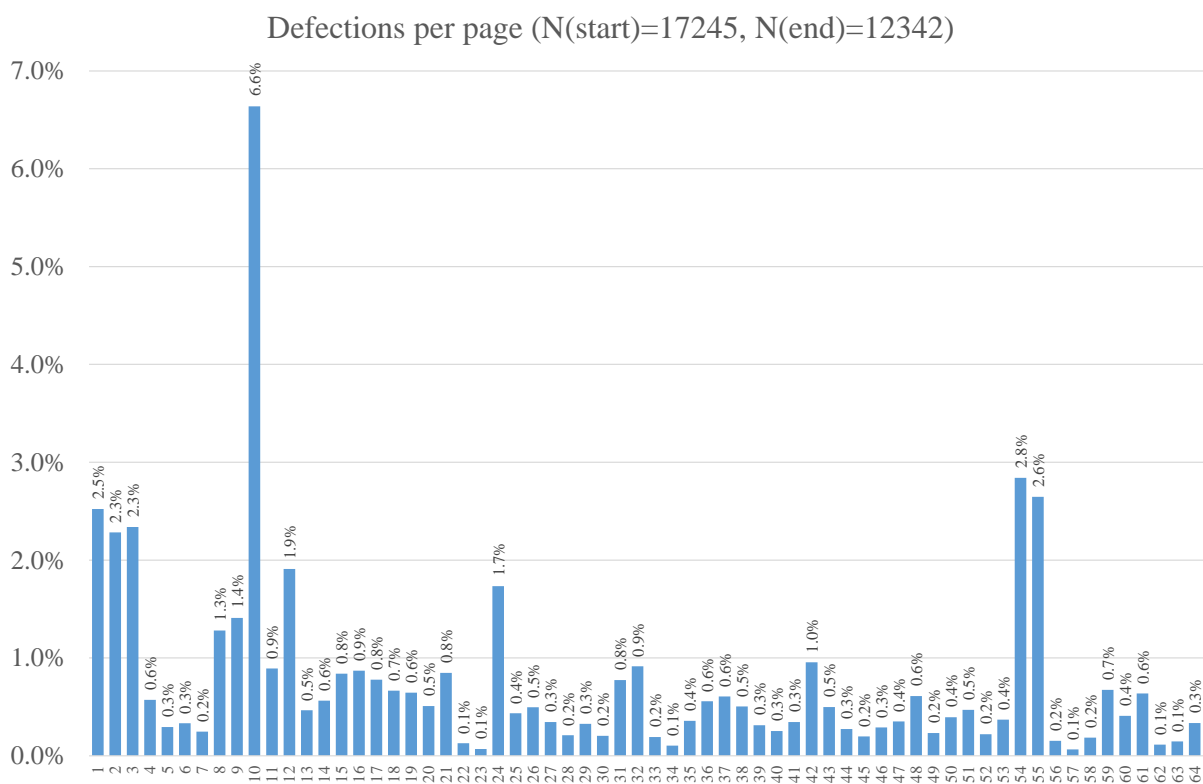


Figure 3 Percentage of Quits from the Survey by Survey Page

Figure 4 shows the frequency over the day of the week response. Responses were provided throughout the week, but Saturdays were most active.

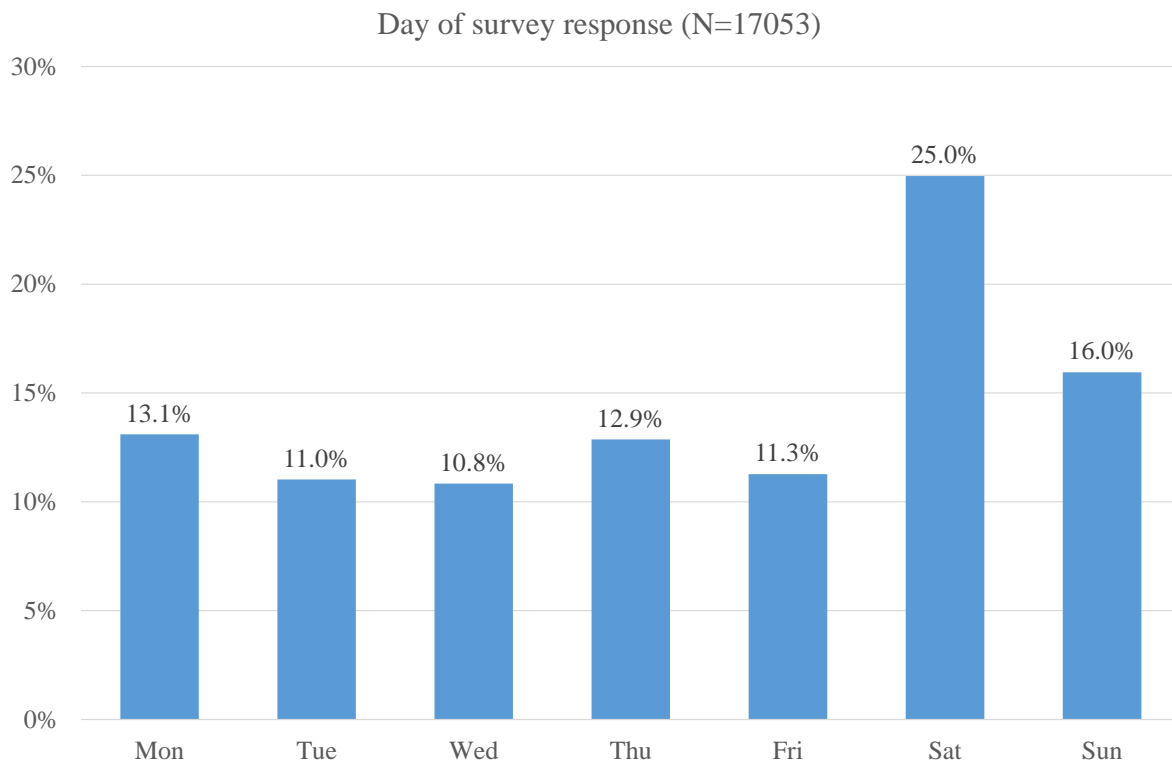


Figure 4 Response by Day of the Week

Figure 5 shows the frequency of response by the time of day. Not surprisingly response builds up during the day to a peak in the late afternoon at 15:00 hours and then declines sharply with the lowest response during the hours of 20:00-02:00. A surprising 18% of surveys were taken between midnight and six in the morning.

Figure 6 shows the response by the age of the respondent and the time of day of the response. We see that those over 50 are more likely to respond in the early hours of the morning (or very late at night) between 0100-0500, whilst those aged 20 to 30 are more likely to respond in the late afternoon and early evening – between 1500-2100. This may be a reflection of family commitments and/or sleep patterns. Figure 7 shows the pattern of response by the occupation of the respondent. This shows that retired respondents are more likely to respond in the early hours of the morning (which confirms Figure 6) and those in more demanding skilled jobs like Administration, Technical, and Professional are less likely to respond between 1900-2100.

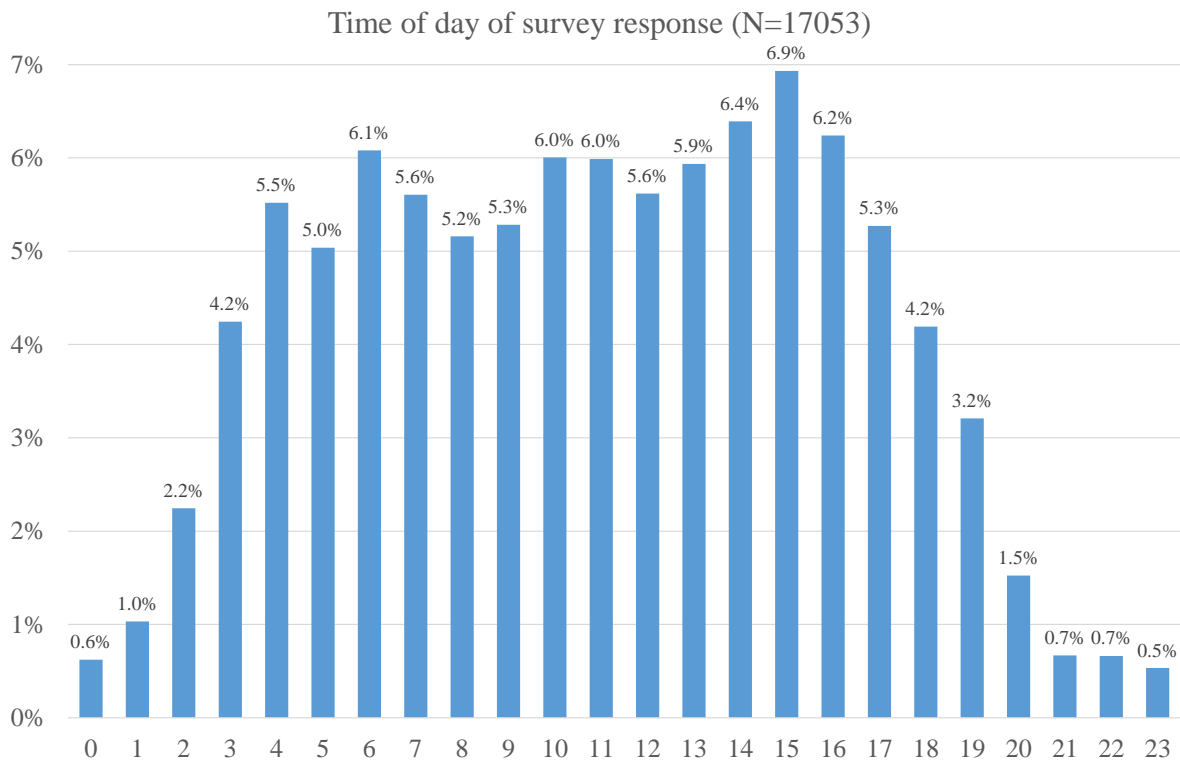


Figure 5 Response by the Time of Day

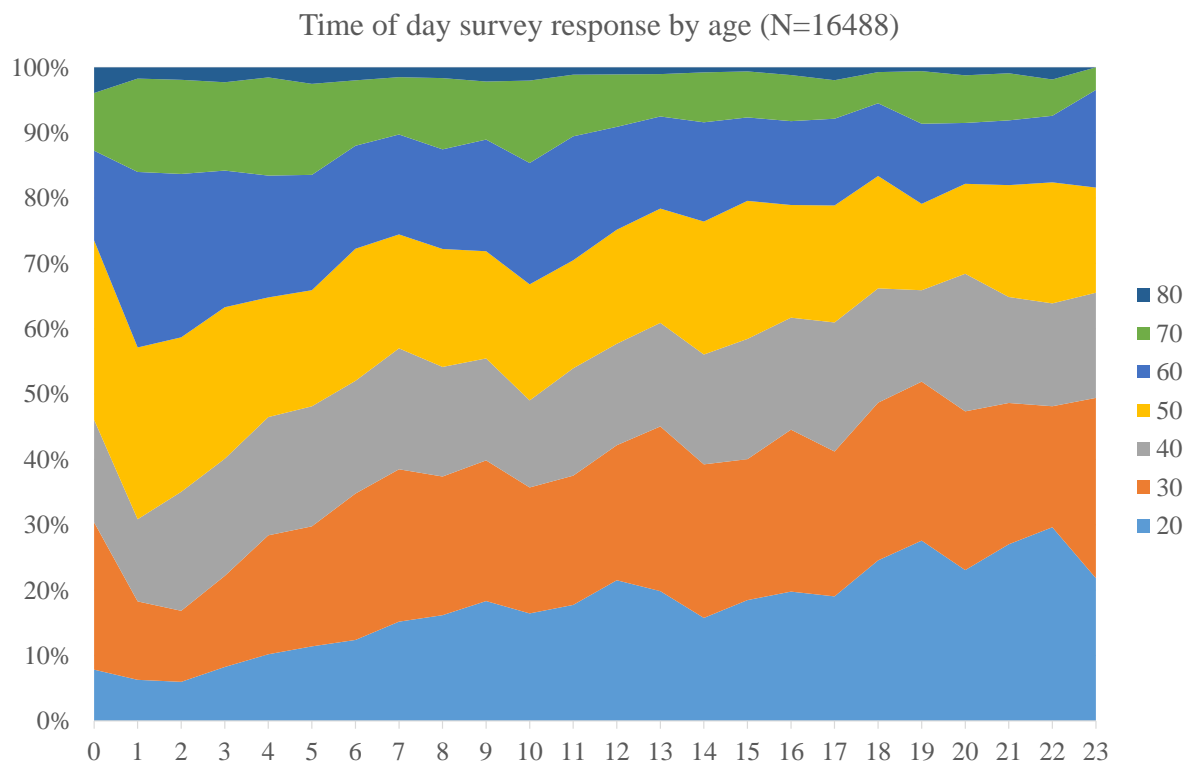


Figure 6 Survey Response by Age and Time of the Day

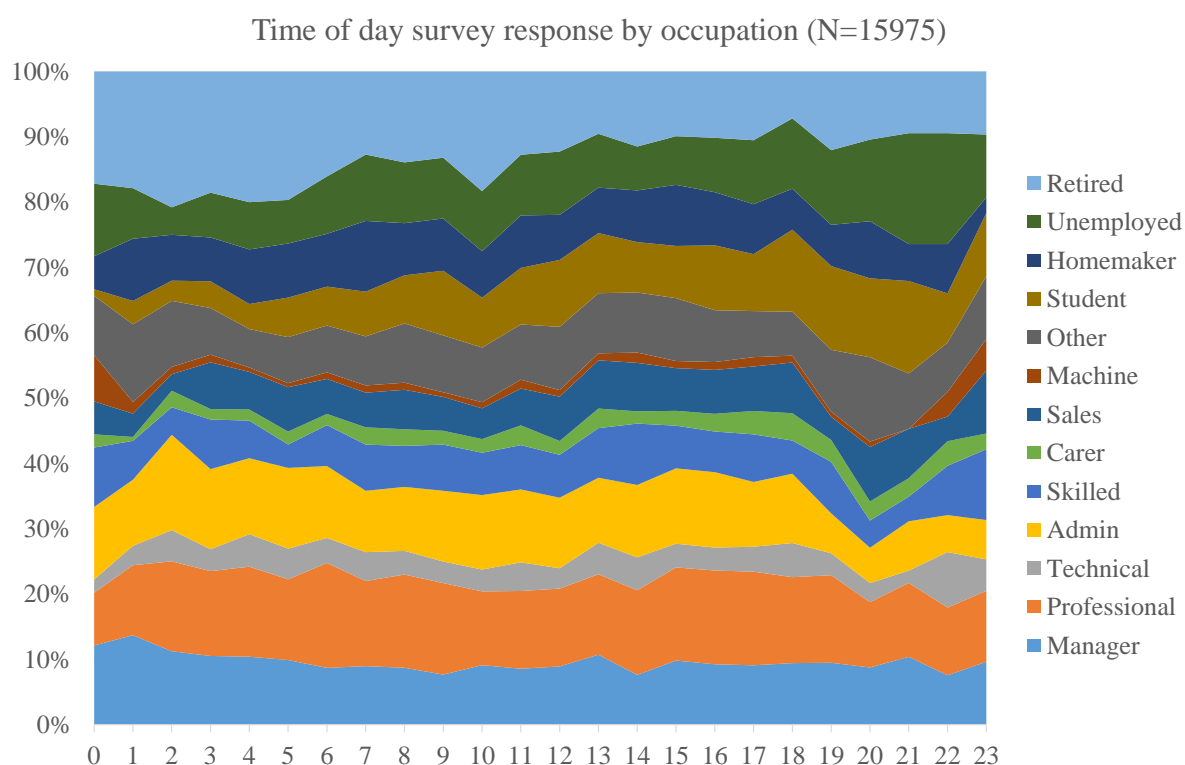


Figure 7 Survey Response by Occupation and Time of the Day

Figure 8 reports the length of time taken to complete the survey. The median duration of the survey was 21 minutes, with a wide spread. Response times were recorded for small groups of questions, and occasionally for individual questions. Note that the truncation at both ends of this graph shows that less than 10% of respondents took less than 10 minutes to respond and around 12% of respondents took 40 minutes or more to complete the questionnaire.

Table 1 shows the age and sex distribution of completed questionnaires, completed and partial questionnaires and the UK population. We can see that our sampling procedure – slightly over samples the young between 18-34 and under-samples the old above age 65. However – given the nature of the use of an online survey we are encouraged by the modest nature of our sample bias – which we can correct for in subsequent research with the appropriate weighting.

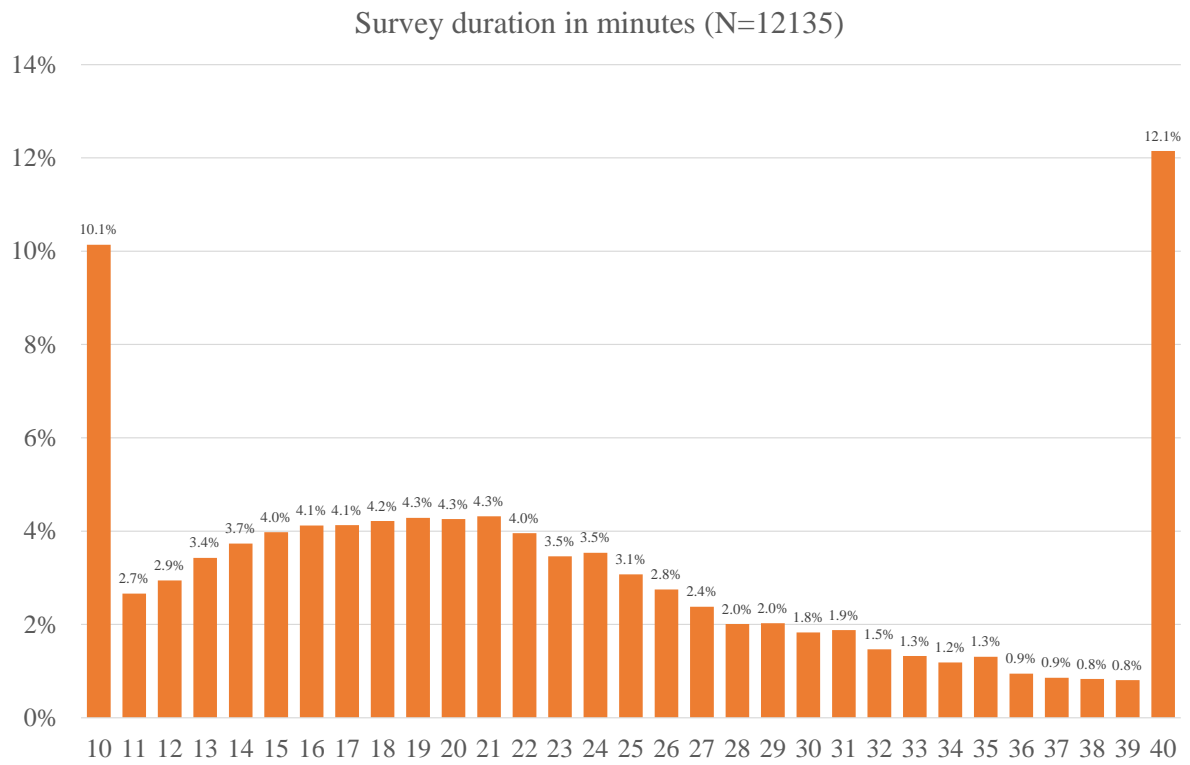


Figure 8 Length of Time Taken to Complete the Survey

3. Results: Demographics

3.1. Sex (Q1; N=17053, Sample Reporting Information=16482)

Figure 9 shows the gender composition of the sample which is reasonably balanced with around 1% of the sample not willing to reveal this information.

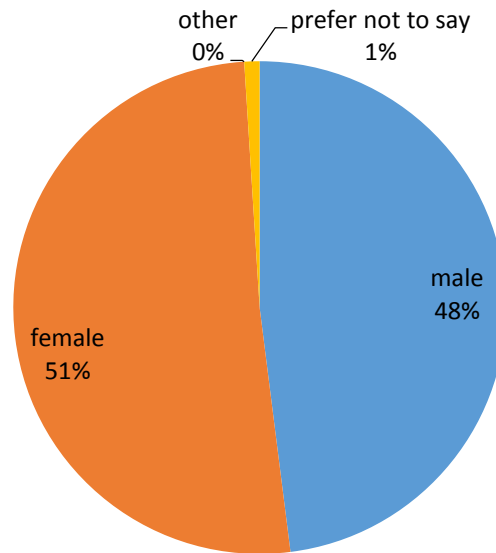


Figure 9 Gender Composition of the Sample.

3.2. Age (Q2; N=16488)

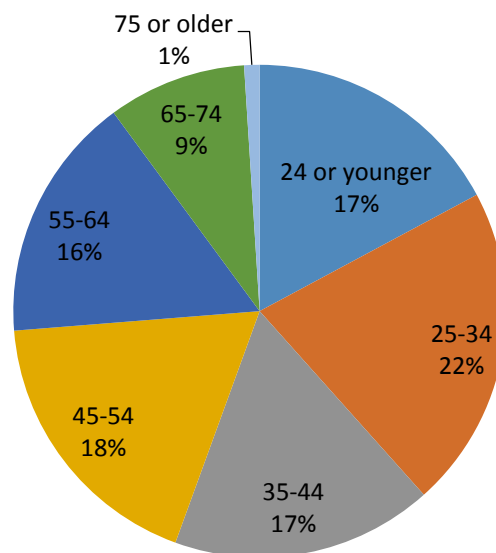


Figure 10 Age Composition of the Sample.

More detail of the gender and age composition of the sample relative to the UK population are shown in Table 1.

Table 1 Sex and Age Distribution of the Sample and the Population.

Age Range	Complete		Complete and Partial		UK Population ¹	
	Male	Female	Male	Female	Male	Female
18-24	8.3%	8.2%	8.7%	8.7%	6.2%	6.0%
25-34	11.4%	11.6%	10.7%	10.7%	9.0%	9.1%
35-44	8.7%	8.9%	8.5%	8.5%	8.6%	8.8%
45-54	9.2%	9.7%	9.0%	9.0%	9.3%	9.6%
55-64	7.6%	7.4%	7.9%	7.9%	7.5%	7.8%
65-74	3.8%	4.3%	4.4%	4.4%	6.2%	6.7%
75-80	0.5%	0.5%	0.7%	0.7%	2.4%	2.8%
N	12,028		15,886		48,189,434	

3.3. Handedness (Q3; N=16489)

Figure 11 shows the fraction of the sample who are left handed and right handed. Our fraction is slightly higher than some evidence would suggest – but not remarkably different (Hardyck and Petrinovich 1977).

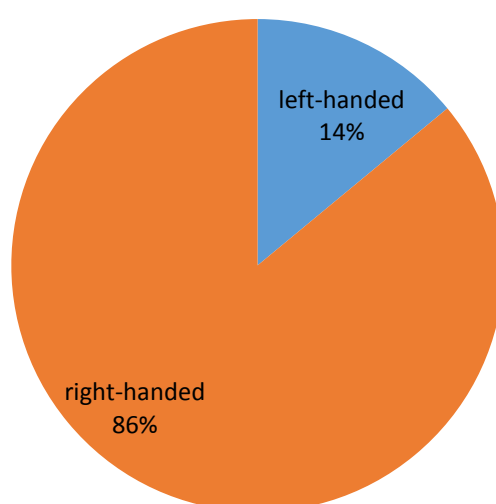


Figure 11 Fraction of the Sample by Handedness.

3.4. First letter of last name (Q4; N=16477)

Figure 12 shows the fraction of the sample by first letter of surname. This distribution will be a function of the ethnic mix of our sample and we of no evidence on this. We are interested in this information as it may be a proxy for the way in which formal administrative procedures treat the ordering of people for appointments, job interviews, position of desk in the classroom at school, co-authorship partnerships and many other processes. In this sense the first letter of your surname it may be a proxy for learnt behaviour associated with patience and having to wait for administrative processes.

¹ Population data were taken from the Office of National Statistics, Population Estimates of UK, England and Wales, Scotland and Northern Ireland Mid 2014, Table MYE2.

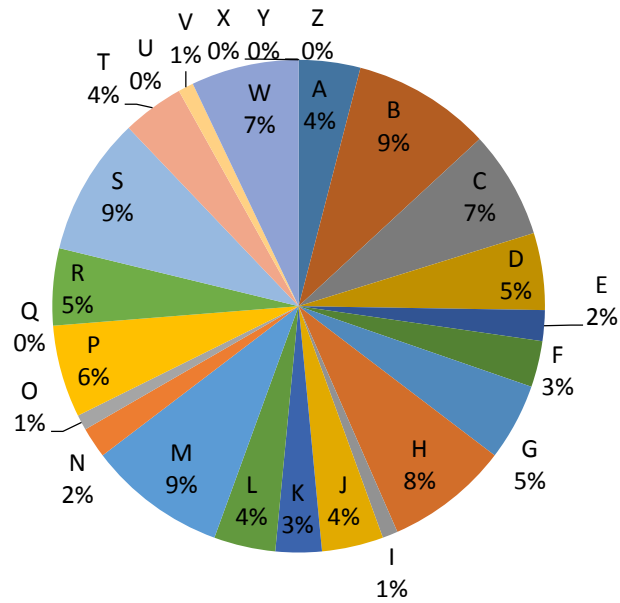


Figure 12 Fraction of the Sample by First Letter of Surname.

3.5. Birth (Q5, Q6)

Figure 13 shows the birthday date timing within the calendar year. We can see that our sample is fairly evenly distributed throughout the year – with the occasional spike corresponding to the most populated days on the calendar being within standard sampling variation. We also include some summary information on the length of time from a person’s birthday until Christmas. We are interested in this as it may be a proxy for the learnt behaviour of patience associated with the timing of receipt of presents when one is a child.

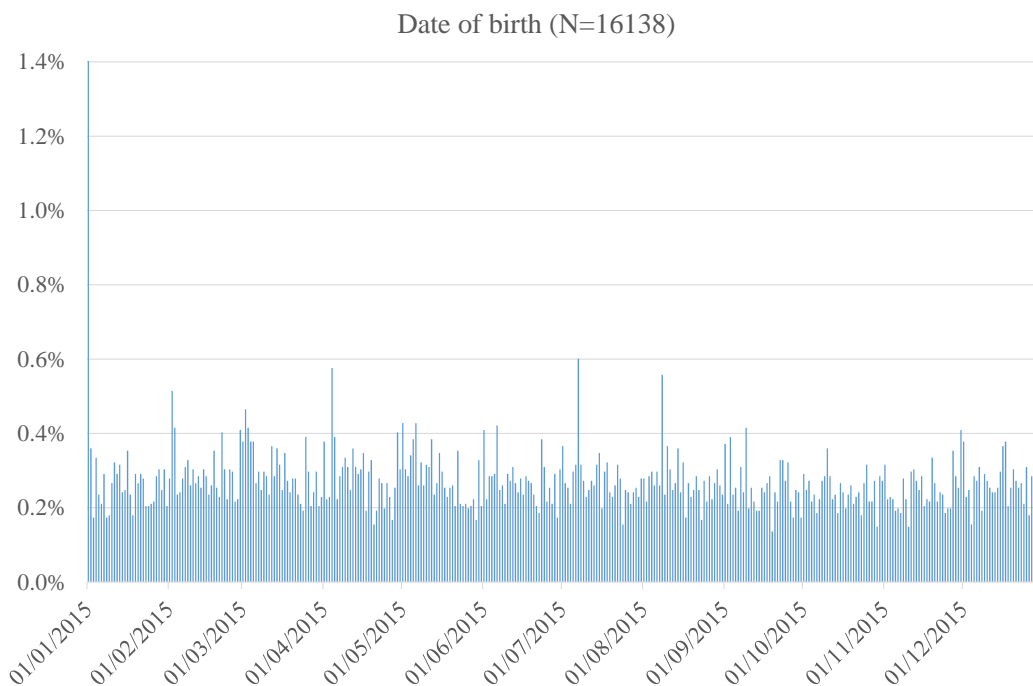


Figure 13 Birthday date within the Calendar Year.

3.6. Siblings (Q7)

Figure 14, Figure 15 and Figure 16, respectively, show the number of older siblings, younger siblings and other siblings that were present in the house of the respondent when that respondent was growing up. They show the pattern we would expect.

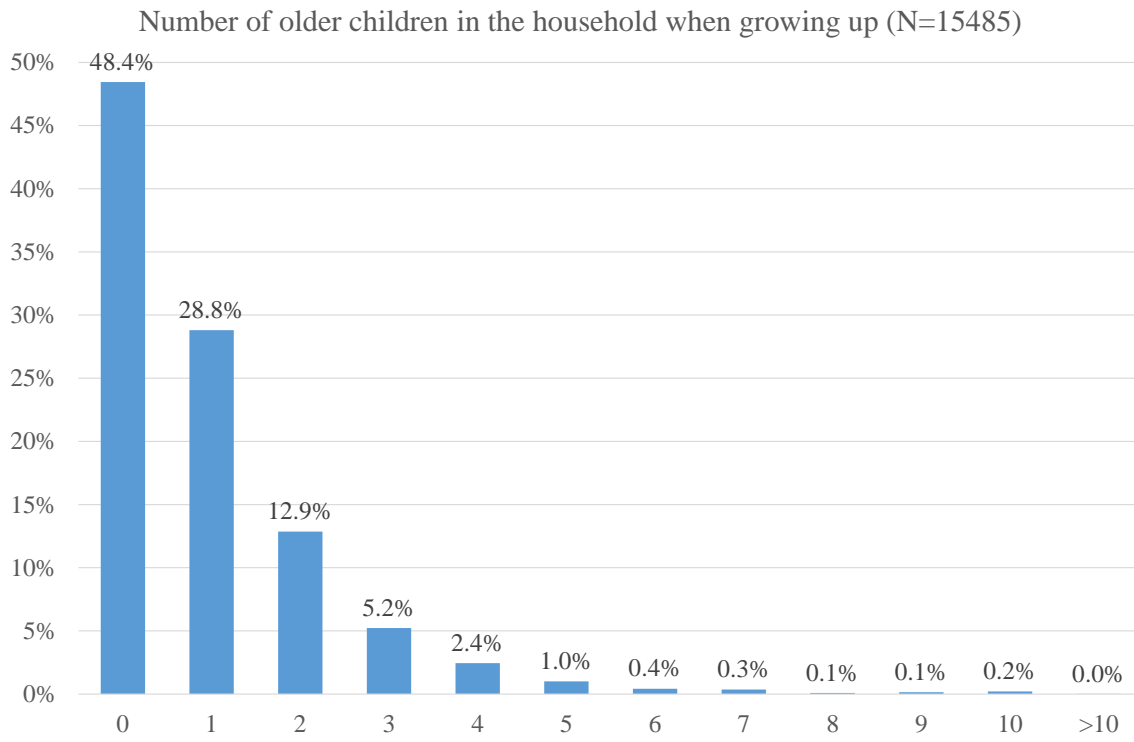


Figure 14 Number of Older Siblings in the Household when Growing Up.

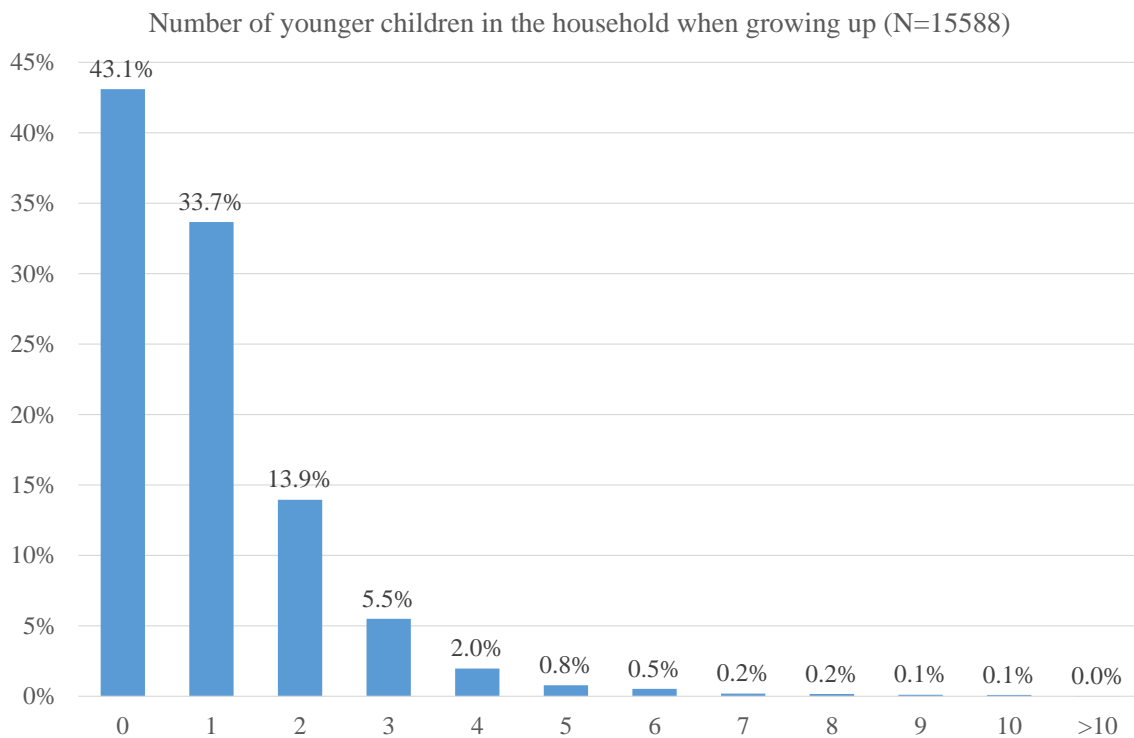


Figure 15 Number of Younger Siblings in the Household when Growing Up.

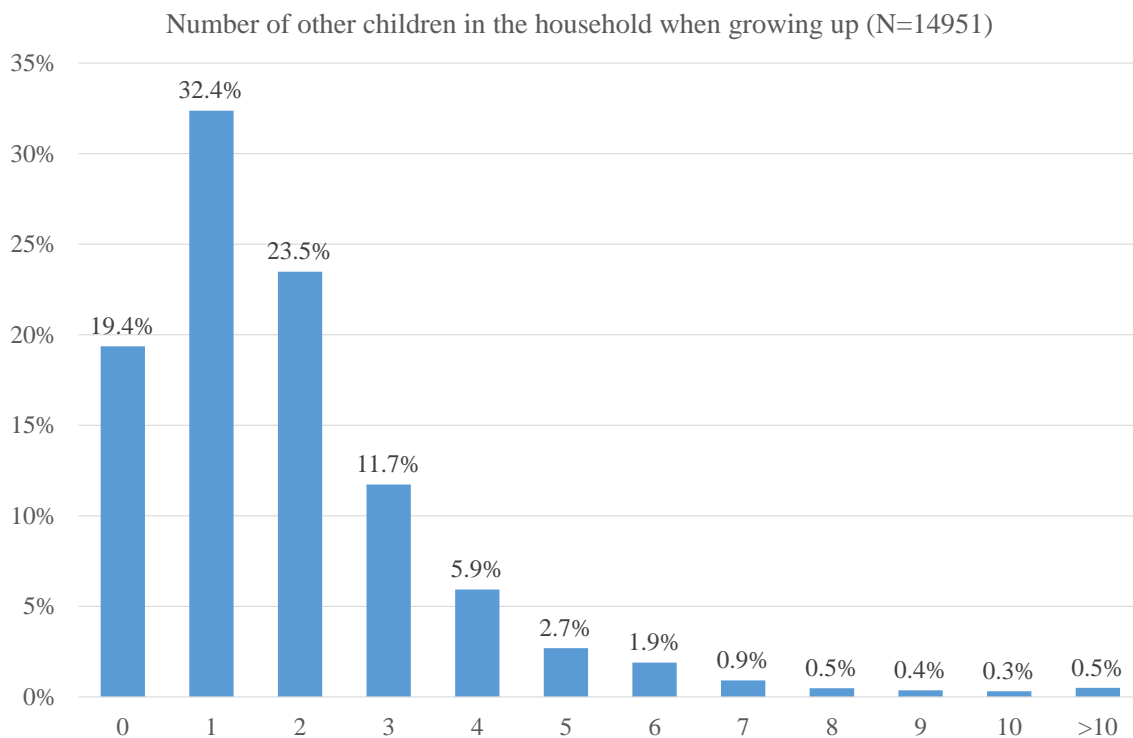


Figure 16 Number of Other Siblings in the Household when Growing Up.

3.7. Race and ethnicity (Q8)

Figure 17 shows the ethnic background of the sample. Table 2 shows that our sample is broadly in line with the UK Census from 2001— although we oversample groups other than white British and Irish. This may in part be due to the population changes since the 2001 Census which is the latest data readily available. The other consideration is that we have seen a rise in the fraction of the population who now report themselves as ‘white other’. It is reassuring that if we combine White with ‘white other’ then we get the same fraction as the 2001 Census – around 90%. It is also a desirable feature of our data that we have a possible oversample of black and black British and Asian and Asian British. One in 500 respondents self-identify as Na’vi, fictional aliens from the movie Avatar.

Table 2 National Statistics on Ethnicity.

	UK National ²	Our Sample
White British/Irish	88.3%	84.0%
White other	2.7%	5.7%
Asian or Asian British	4.6%	4.3%
Black or Black British	2.1%	2.0%
Na’vi		0.2%
Mixed	1.8%	1.6%
Other		0.9%
Prefer Not to Answer		1.4%

² 2001 Census Tables KS06, C0533

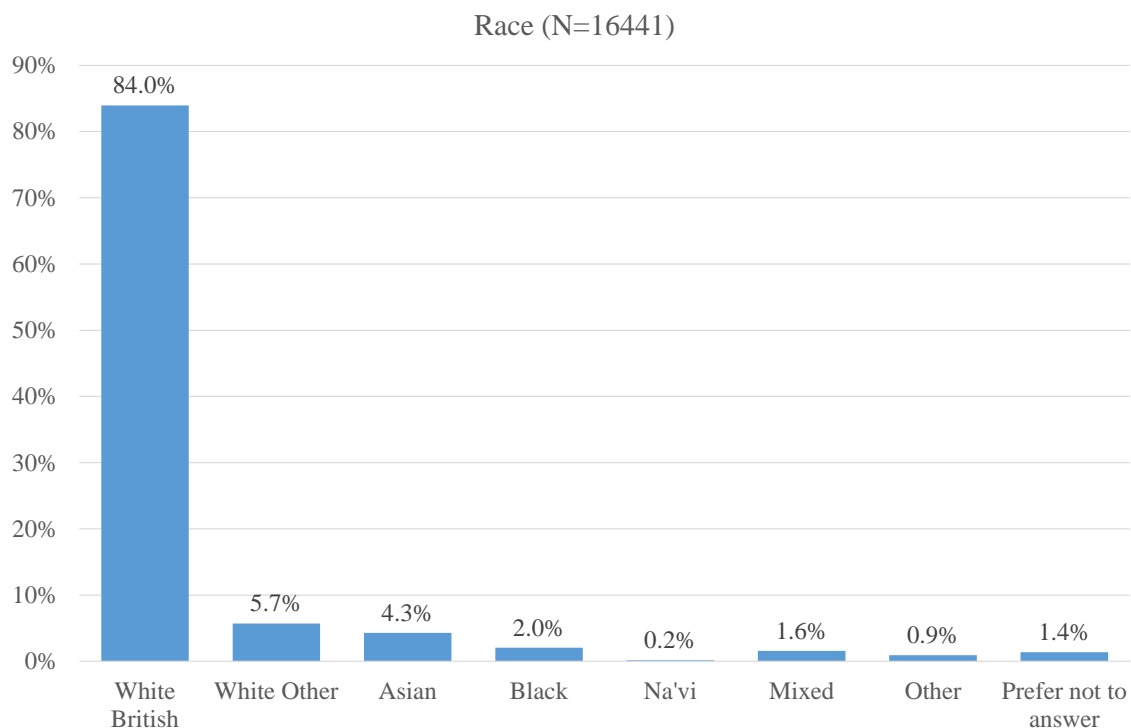


Figure 17 Ethnic Background of the Sample.

3.8. Length of stay in the UK, non-white British only (Q9; N=2269)

Figure 18 shows the length of stay in the UK for non-white British.

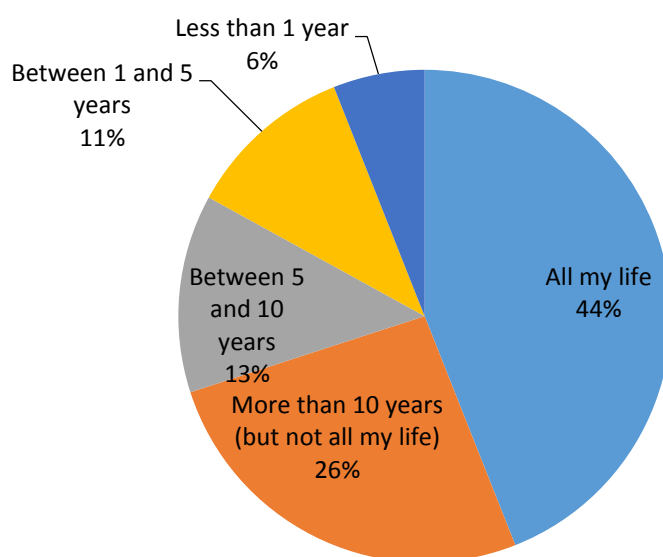


Figure 18 Length of Stay in the UK for Non-White British.

3.9. Religion (Q10)

Figure 19 shows the religious affiliation of our sample. Table 3 compares it to the Census. The main difference is the large number of agnostics and atheists in our sample.

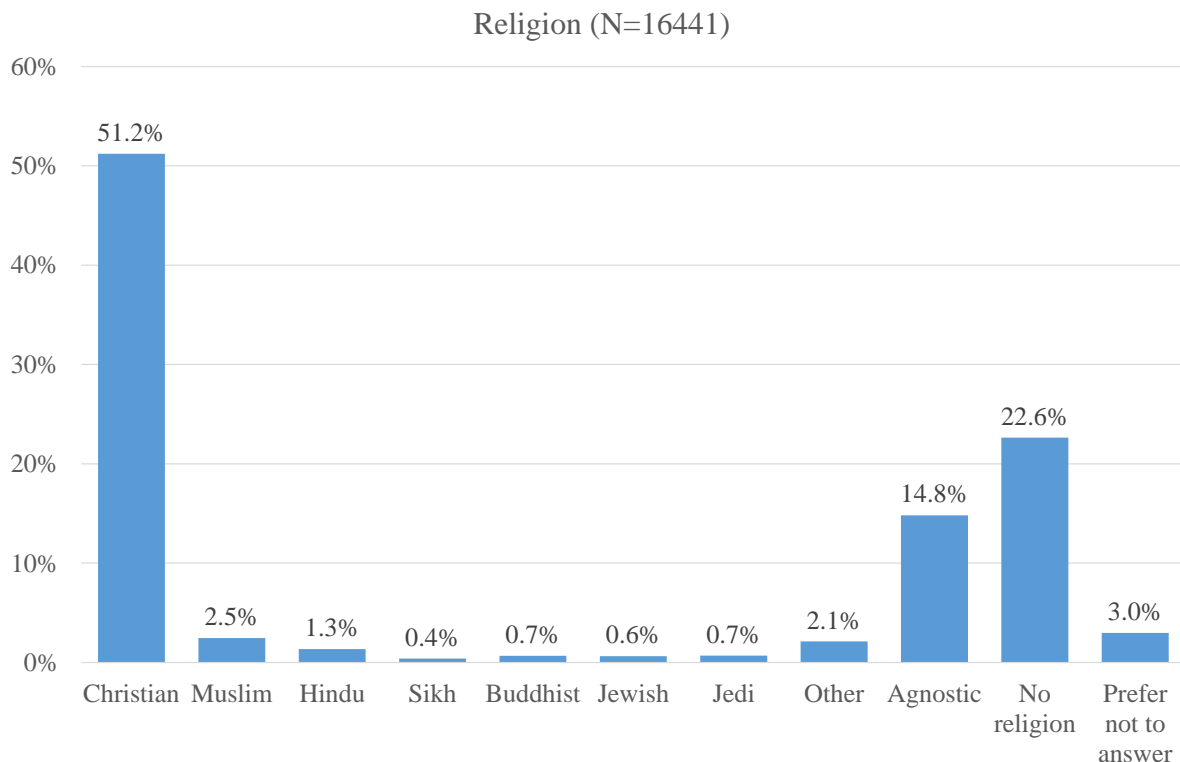


Figure 19 Religious Affiliation of the Sample.

Table 3 Religious Affiliation.

Religion	Population	Our Sample
Christianity	59.3%	51.2%
Islam	4.8%	2.5%
Hinduism	1.5%	1.3%
Sikhism	0.8%	0.4%
Judaism	0.5%	0.6%
Buddhism	0.4%	0.7%
Jedism	0.3%	0.7%
Other religion	0.1%	2.1%
Agnostic/Atheist	0.2%	14.8%
No religion	24.7%	22.6%
Prefer Not to Say/Not Stated	7.2%	3.0%

Source: 2011 Census, England and Wales only.

3.10. Children and grandchildren (Q11, Q12, Q13)

In Figure 20 to Figure 30, Figure 32 and Table 4, we report distribution and summary information on the presence of children and grandchildren in our sample and their ages. We see that the median number of children in our families is one, and that the mode is zero. The median number of grandchildren is zero. The children in our sample are relatively old, older

than we anticipated. When we asked respondent to report children's ages, we grouped those over 26 into one category. This is why the histograms show a large spike in the 26 and over category. We investigated this by graphing Figure 31, which looks at the ages of these people. Nearly all are of an age that is consistent with older children. Figure 33 shows the age of the people who claim to have grandchildren. Again, the answers are largely consistent.

Table 4 Summary Statistics Relating to Children and Children's Ages

	Mean	Std Dev	Median	Mode	Obs
Number of Children	1.158	1.33	1	0	16025
Age of Oldest Child	17.09	8.87	19		8657
Age of Youngest Child	14.61	9.51	15		8655
Age of Only Child	12.24	9.17	11		2671
Oldest Child in Kids=2	17.98	8.21	20		3535
Age of Youngest Child in Kids=2	15.40	9.53	16		3535
Age of Oldest Child in Kids=3	20.87	6.64	26		1432
Age of Middle Child in Kids=3	19.02	8.02	23		1432
Age of Youngest Child in Kids=3	16.29	9.33	18		1432
Age of Oldest Child in Kids=4	21.41	6.97	26		1019
Age of Youngest Child in Kids=4	15.71	9.43	18		1017
Number of Grandchildren	0.67	2.65	0	0	16015

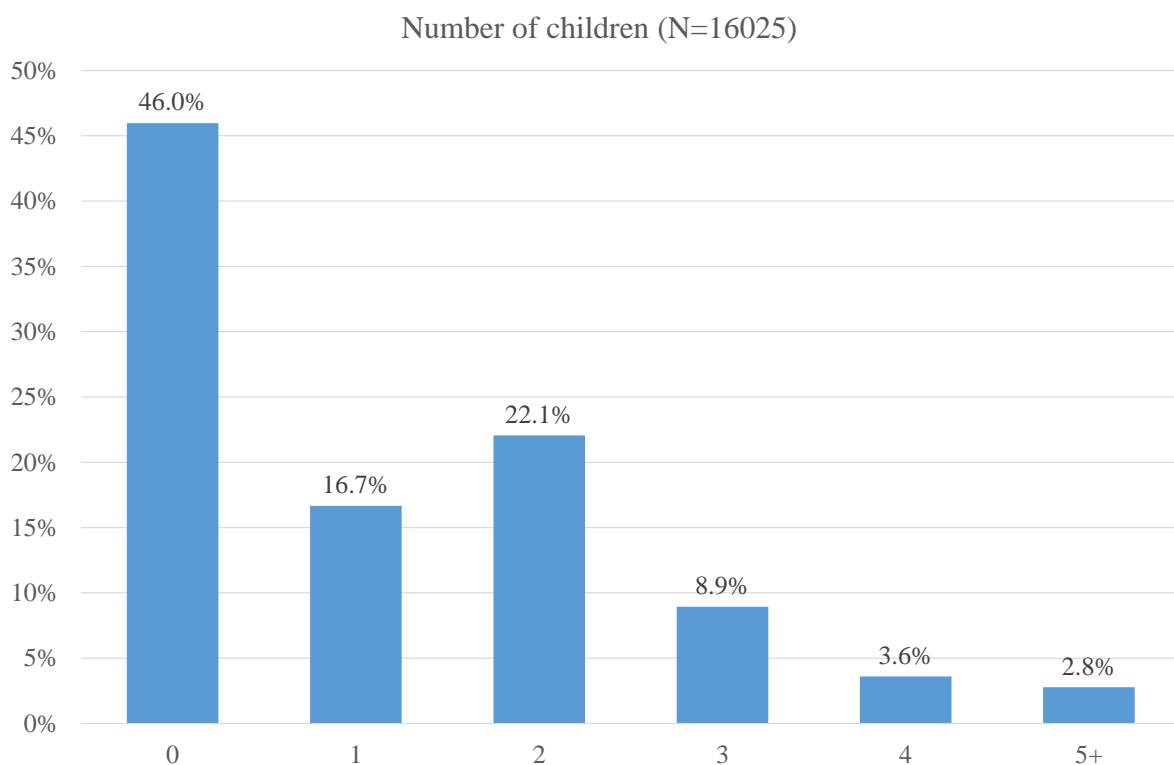


Figure 20 Number of Children.

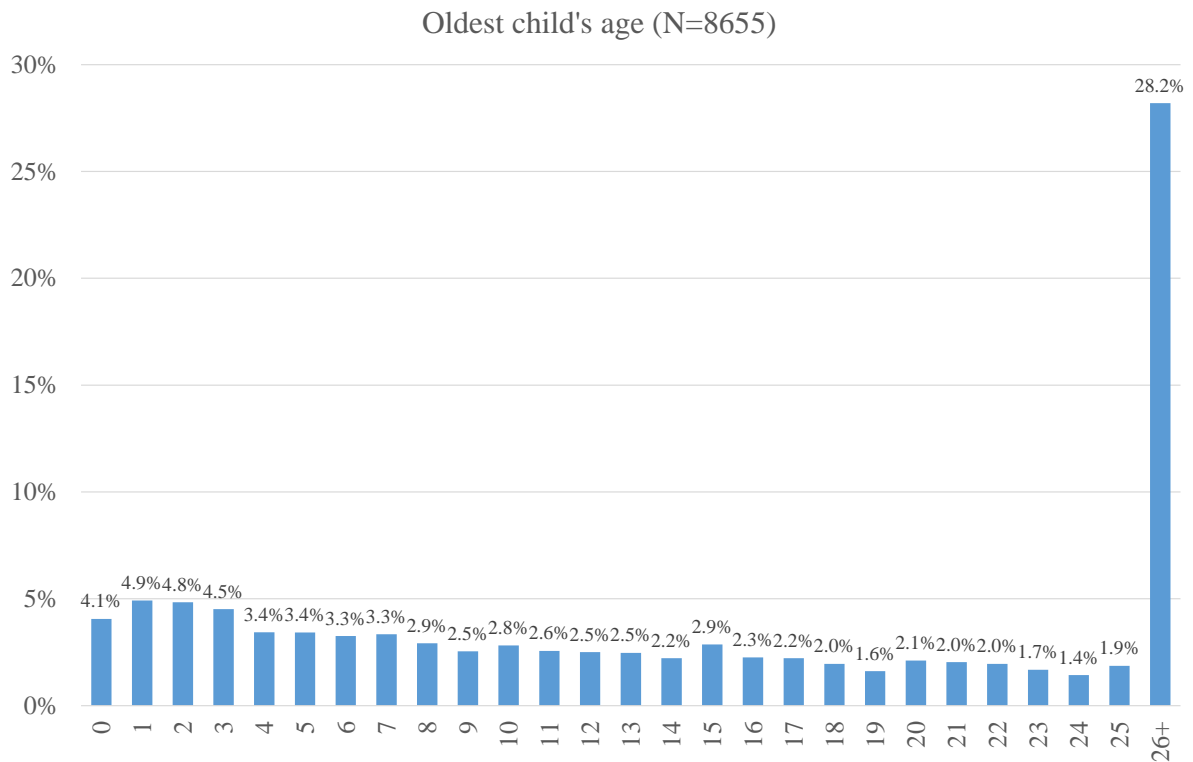


Figure 21 Age of the Oldest Child.

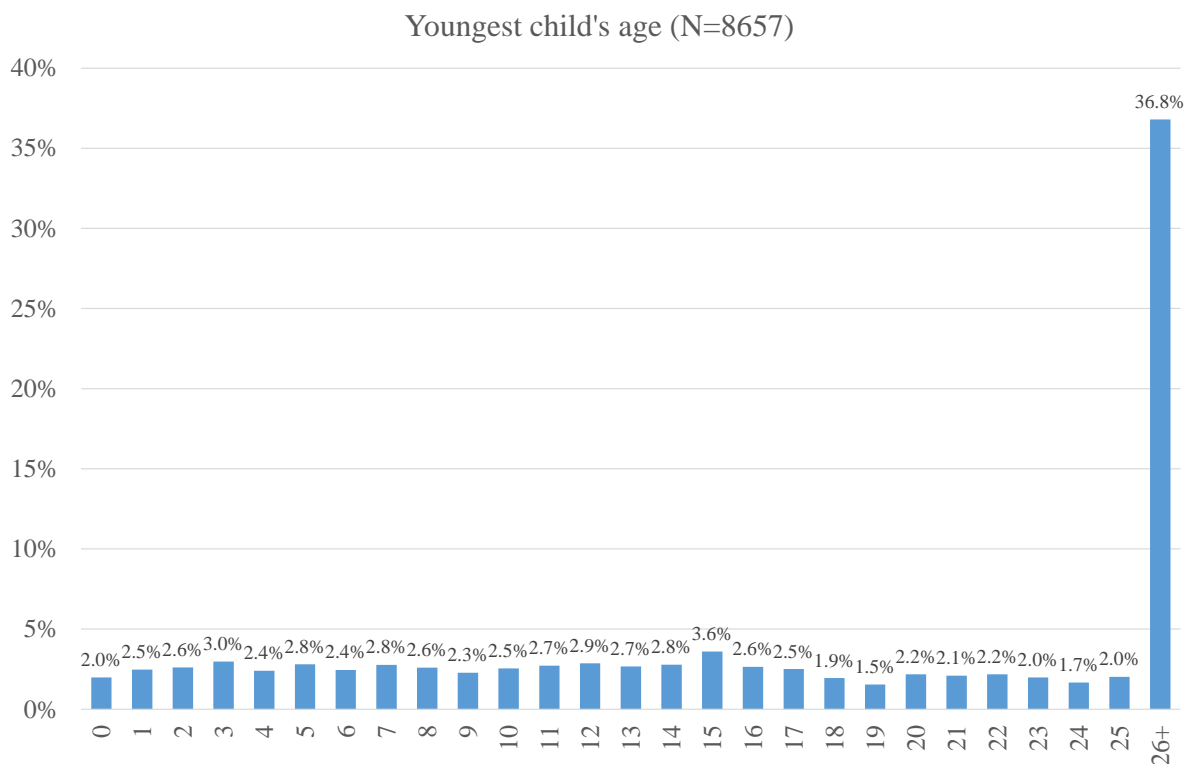


Figure 22 Age of the Youngest Child.

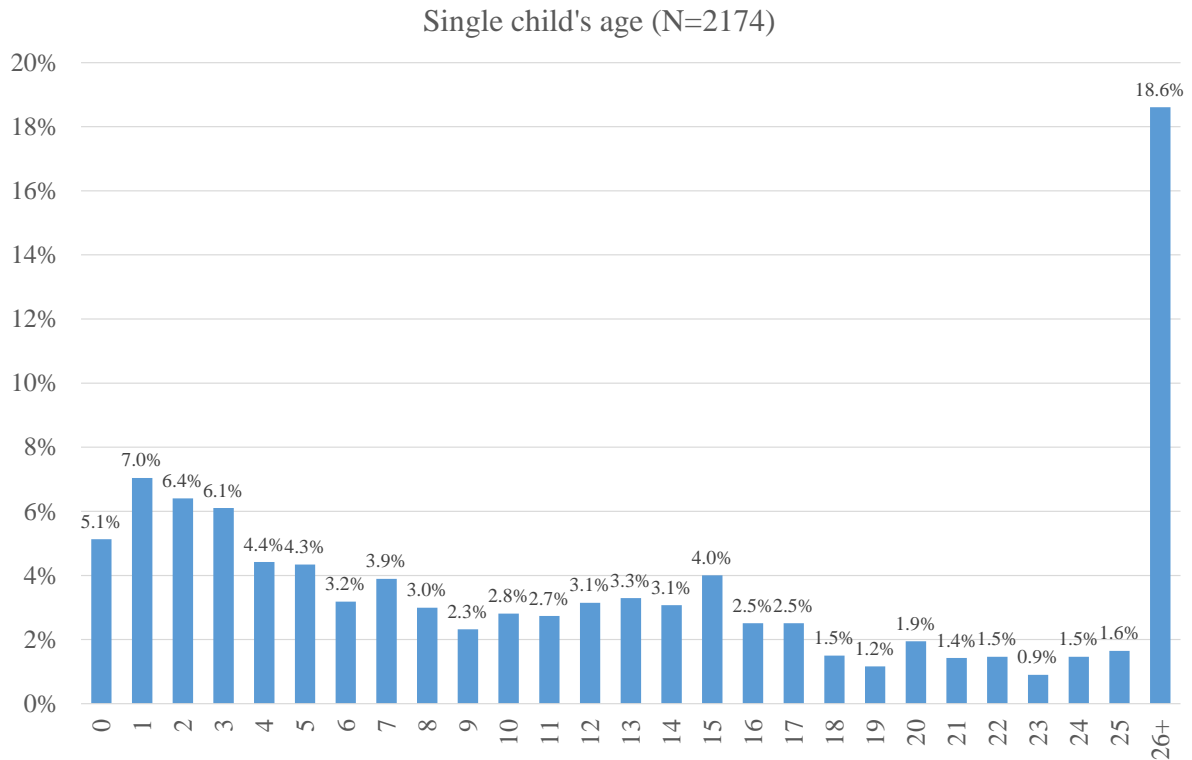


Figure 23 Age of the Single Child in the Family.

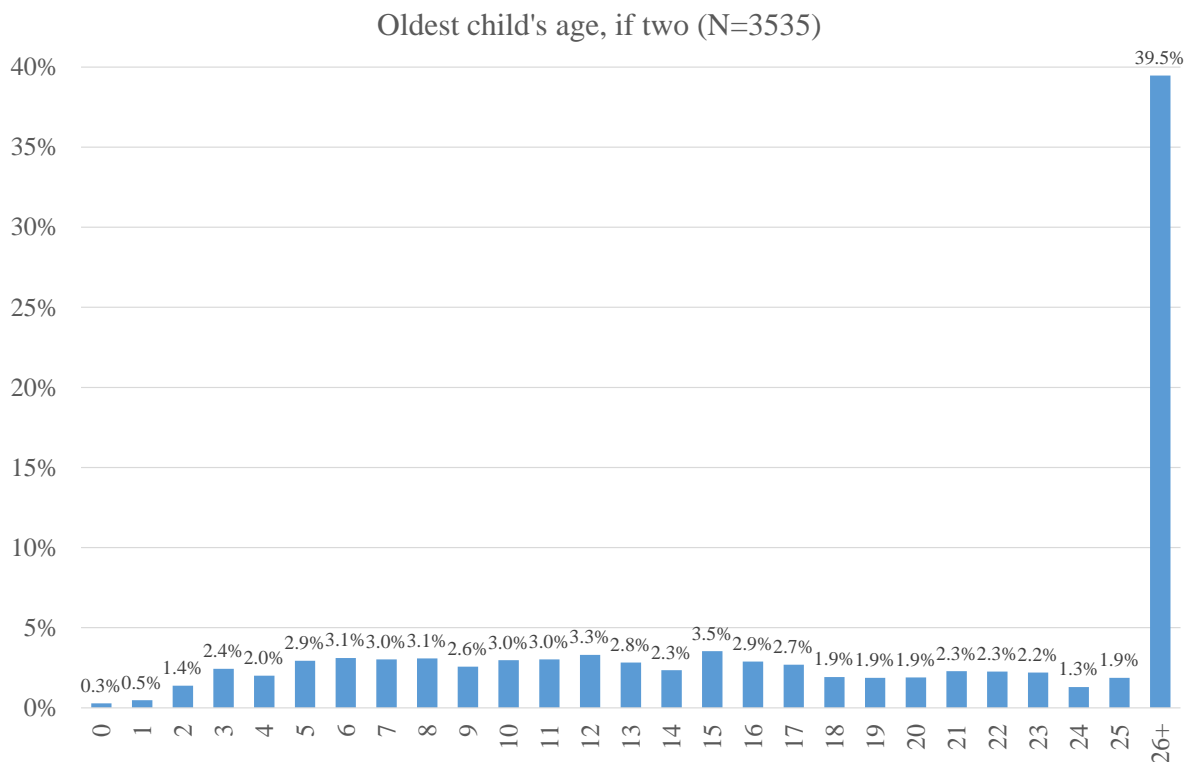


Figure 24 Age of the Oldest Child if Two Children the Family.

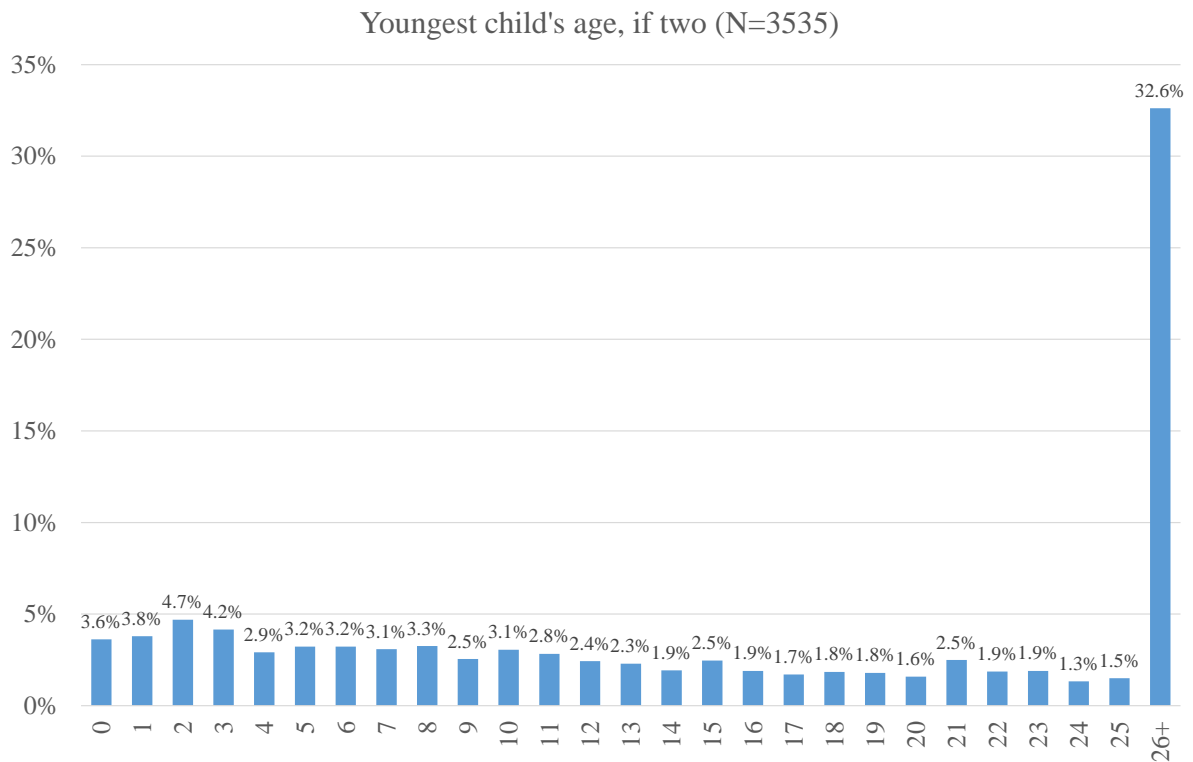


Figure 25 Age of the Youngest Child if Two Children the Family.

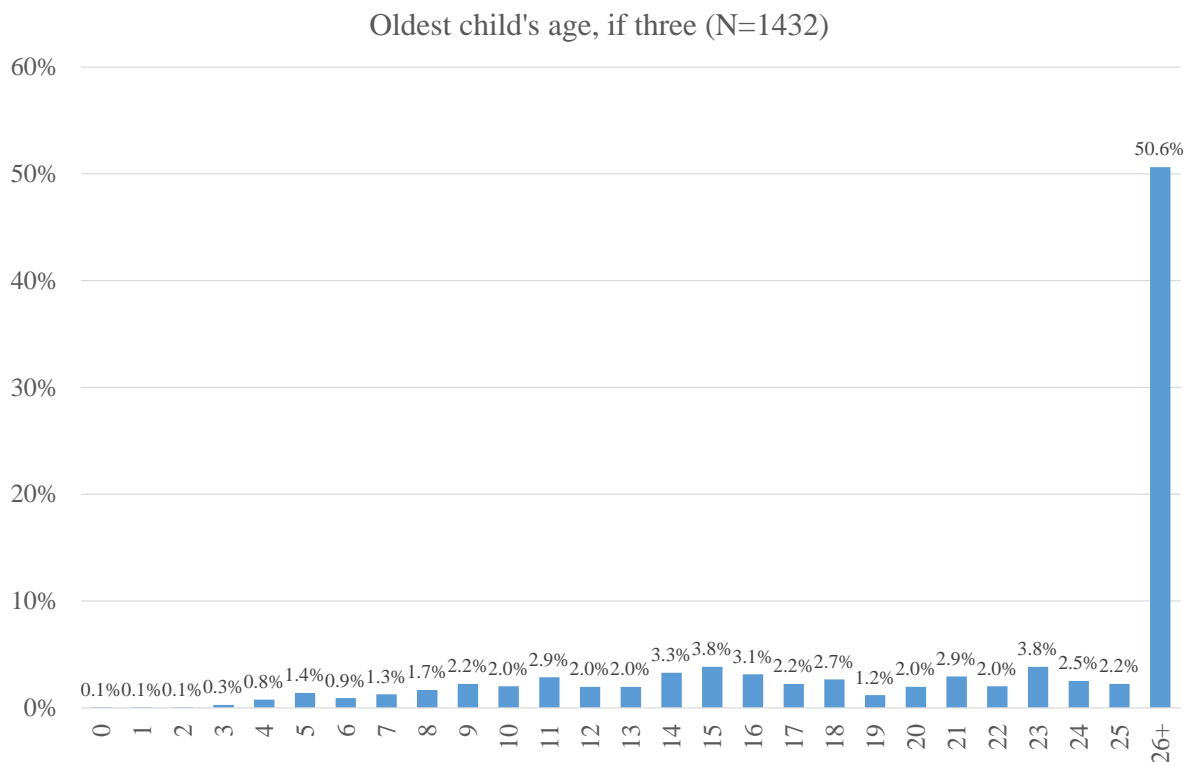


Figure 26 Age of the Oldest Child if Three Children the Family.

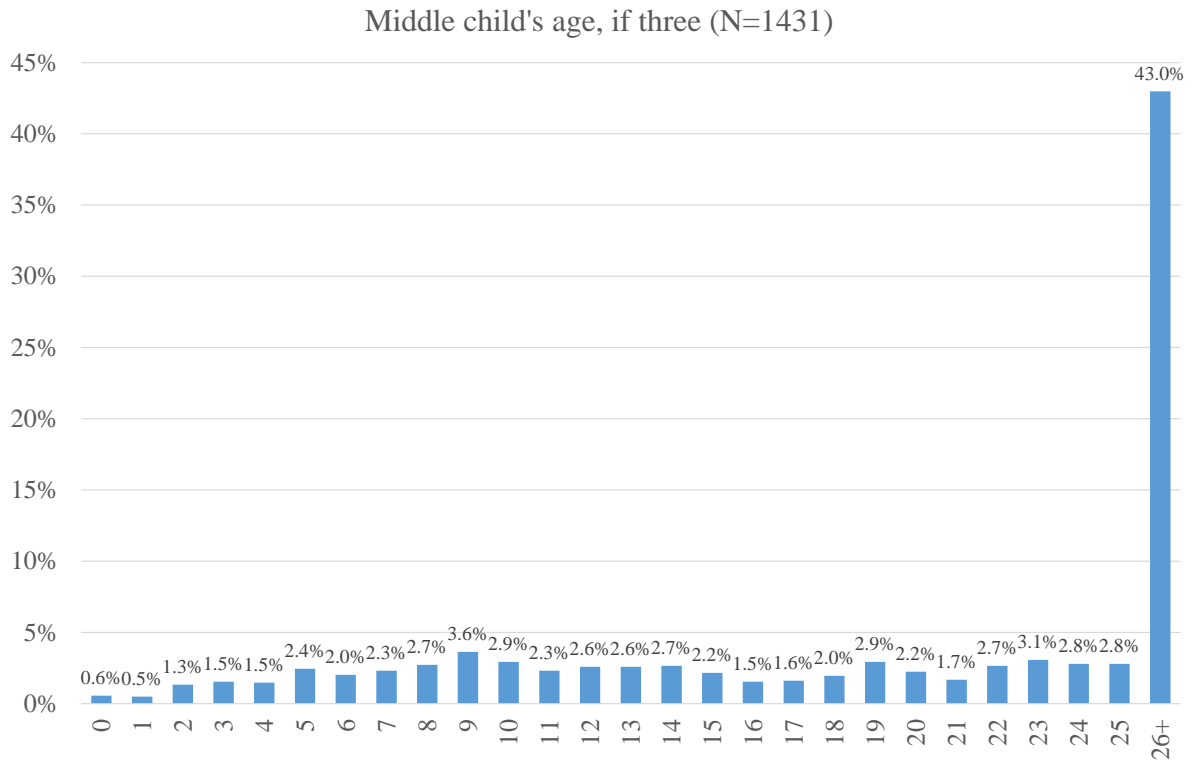


Figure 27 Age of the Middle Child if Three Children the Family.

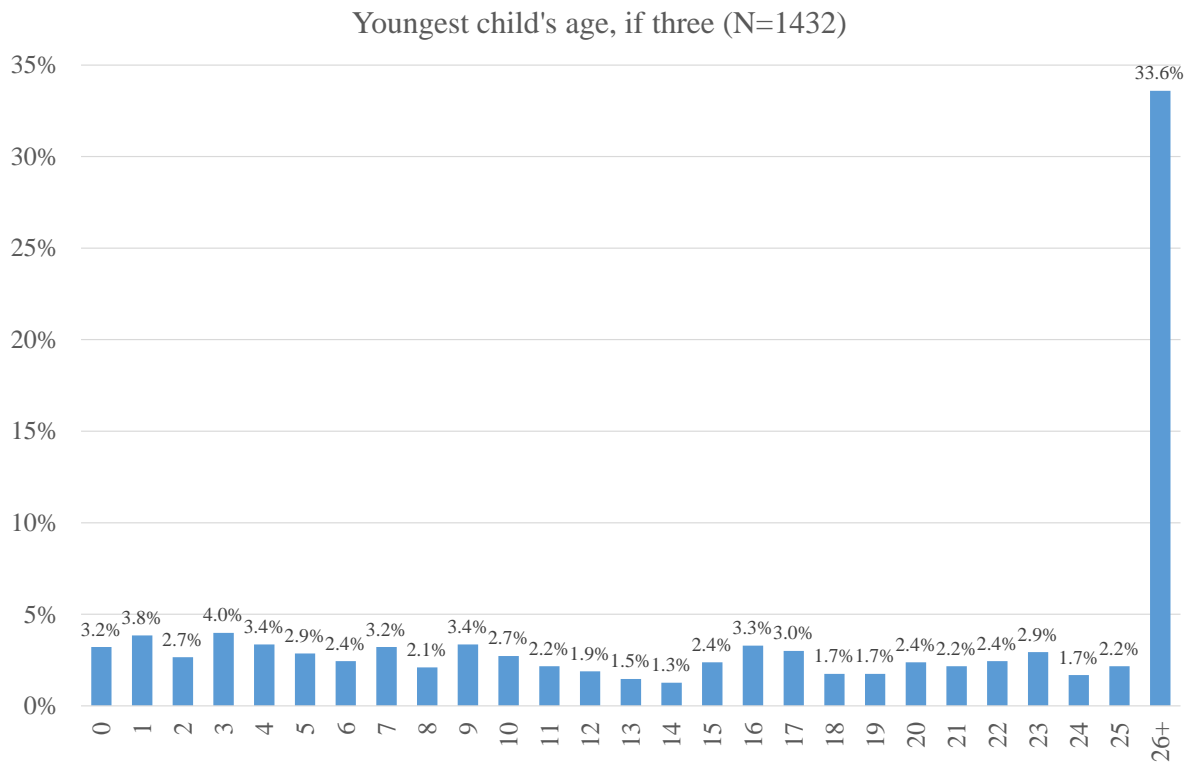


Figure 28 Age of the Youngest Child if Three Children the Family.

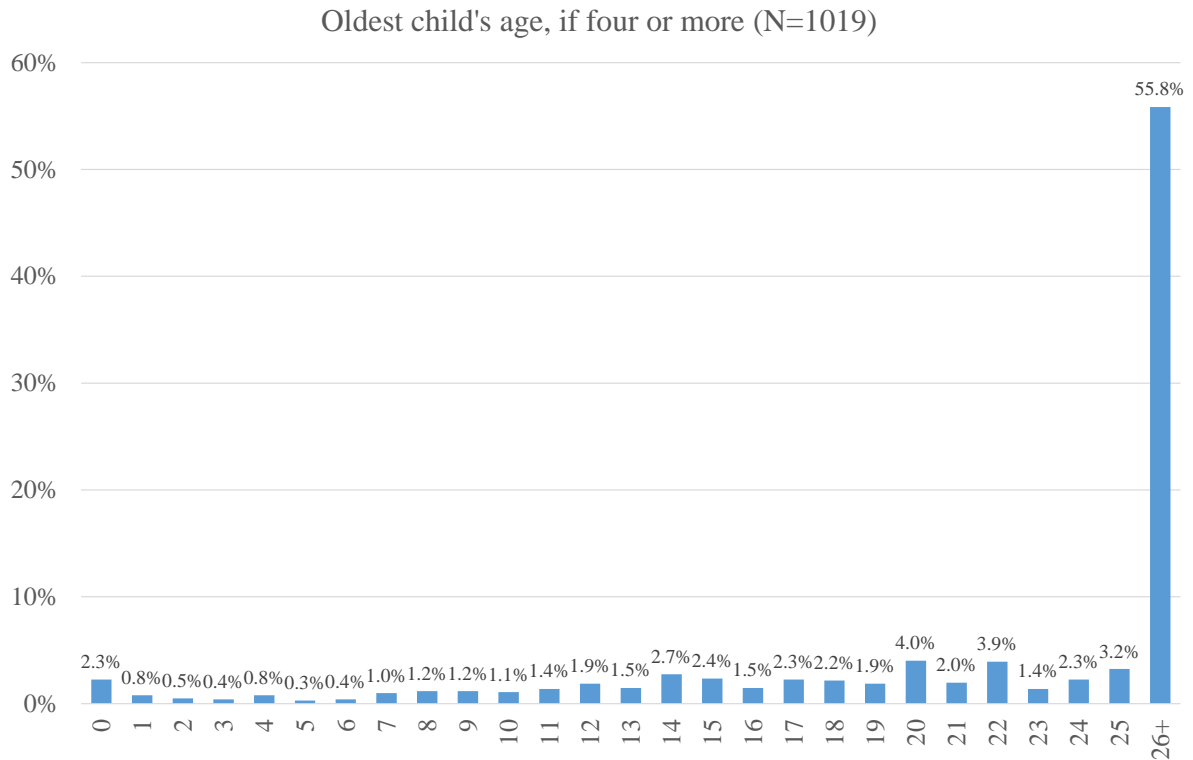


Figure 29 Age of the Oldest Child if Four or More Children the Family.

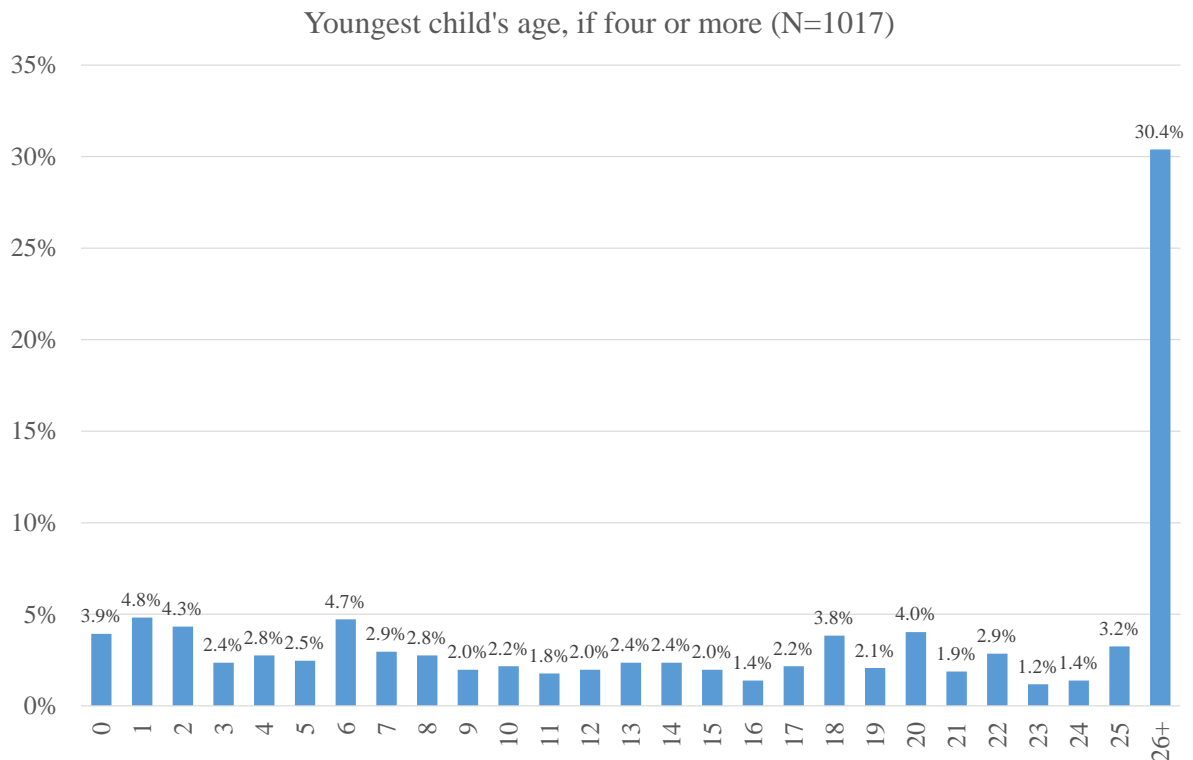


Figure 30 Age of the Youngest Child if Four or More Children the Family.

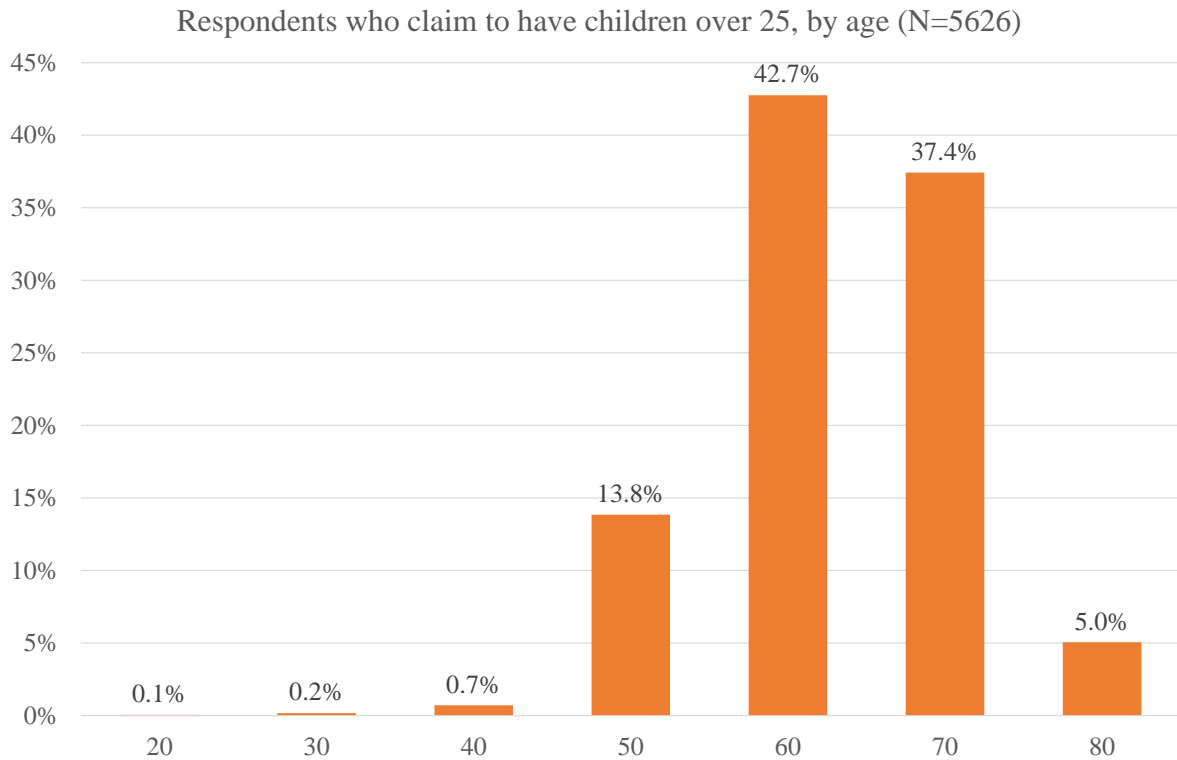


Figure 31 Distribution of Age of Respondents Who Have children over 25.

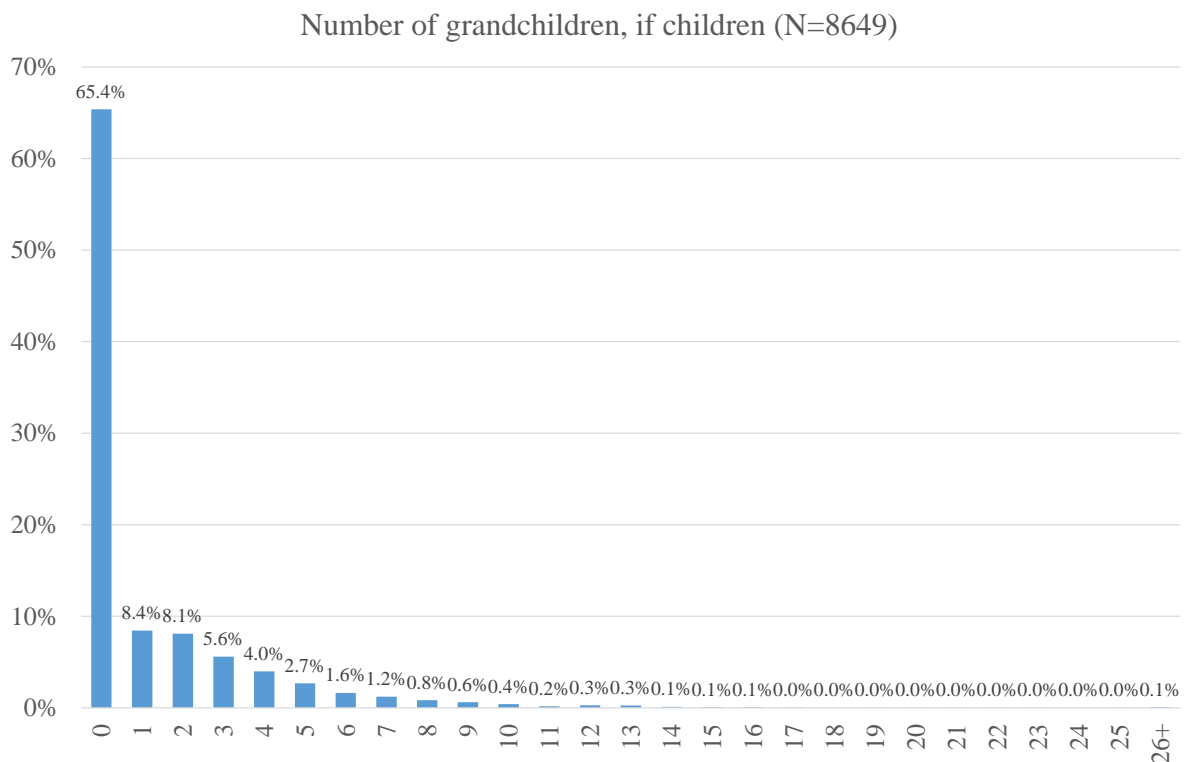


Figure 32 Number of Grandchildren.



Figure 33 Distribution of Age of Respondents Who Have Grandchildren.

3.11. Highest Educational Qualification. (Q13)

In Figure 34 we summarize the highest education of our respondents. If we compare our sample to the national educational pattern – see Table 5 – we see some interesting differences. We have more graduates than in a national sample and the national sample makes no distinction between first and higher degrees. We have less people with 5 or more GCSEs but some of this may be that we give respondents an opportunity to answer that they have craft or occupational qualifications which is not reported by ONS. We also note the high proportion of people in the national sample with no qualifications. It is possible that some of this high fraction is due to the non-recording of occupational qualifications in the national data. A final important distinction is that we give respondents the opportunity to not respond by returning ‘Prefer not to say’. In the national sample these people can only be put into ‘Other’ of No Qualifications. In summary we are content that our sample affords us the opportunity to study people of a range of educational backgrounds although we know that our sample appears to have oversampled slightly those with higher education and under-sampled those with few or no qualifications.

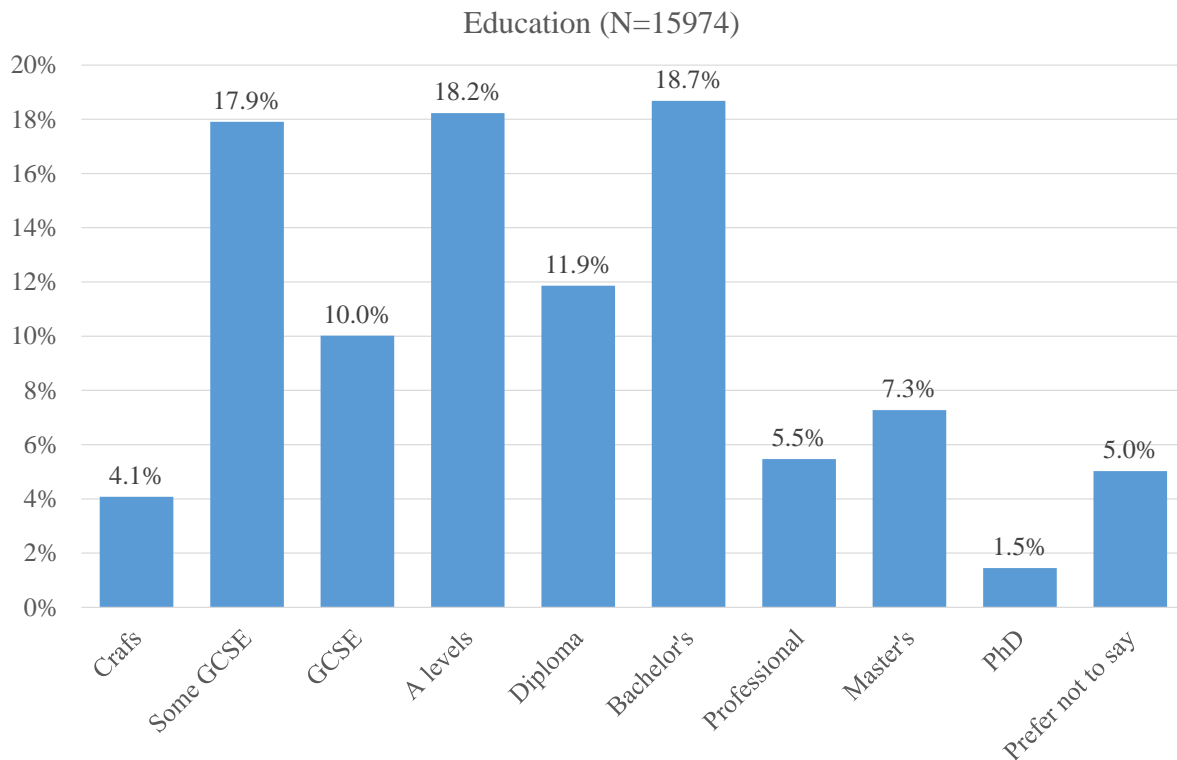


Figure 34 Highest Educational Qualification.

Table 5 Highest Educational Qualifications.

	Population	Our Sample
PhD		1.5%
Master's Degree, Post graduate diploma		7.3%
Professional Qualifications		5.5%
Diploma, Certificate of Education		11.9%
Bachelor's Degree	27.2%	18.7%
2 or More A levels	12.3%	18.2%
5 or more GCSEs	15.3%	10.0%
1-4 GCSEs	13.3%	17.9%
Apprenticeships	3.6%	
Craft of Occupational Certificate		4.1%
Other	5.7%	
No Qualifications	22.7%	
Prefer not to Say		5.0%

Source: 2011 Census, England and Wales only.

3.12. Occupation (Q14; N=15975)

Figure 35 provides a breakdown of the fraction of our sample in different occupations. In Table 6 we compare this with the total population in the eligible sample. We use the standard ONS classification of broad Occupations. To add to this we allowed our sample to declare themselves as: unemployed, student, retired or homemaker. Table 6 uses the latest ONS and HESA data numbers on the size of these sub-populations to provide a total sample. We compare these population figures and percentages with our own sample. We can see that our sample is over-represented with Administrative and Secretarial people, Managers and those in the Professions. We also under-represent the inactive and the retired but over-represent students and the unemployed.

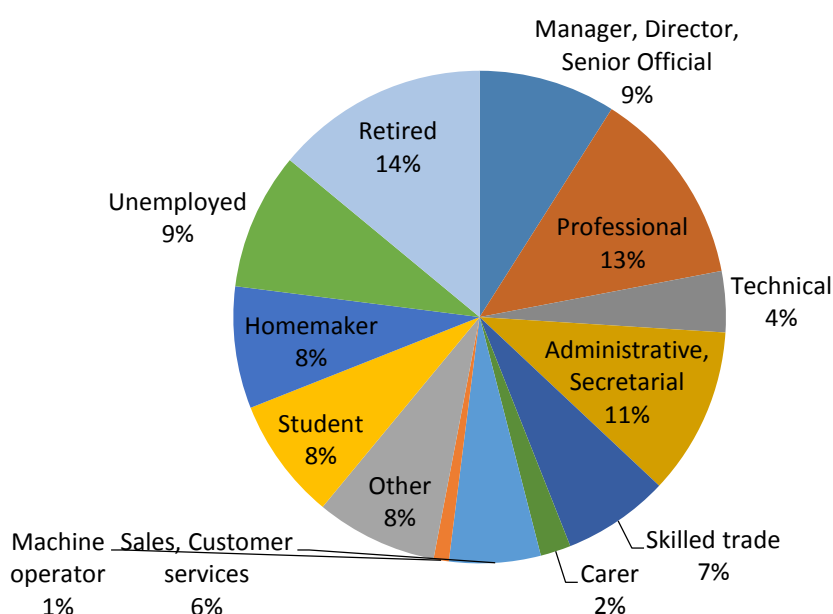


Figure 35 Occupational Classification of Our Sample.

Table 6 Occupational Classification of Sample.

Standard Occupational Classification (SOC 2010)	Population	Our Sample
1 Managers, directors and senior officials	5.8%	9.3%
2 Professional occupations	11.5%	13.2%
3 Associate professional and technical occupations	8.1%	4.0%
4 Administrative and secretarial occupations	6.2%	10.7%
5 Skilled trades occupations	6.3%	6.6%
6 Caring, leisure and other service occupations	5.4%	2.3%
7 Sales and customer service occupations	4.5%	6.1%
8 Process, plant and machine operatives	3.6%	1.1%
9 Elementary occupations	6.3%	8.3%
Retired	17.5%	13.5%
Students	4.4%	8.0%
Unemployed	3.3%	8.8%
Homemaker & Inactive	17.0%	7.9%

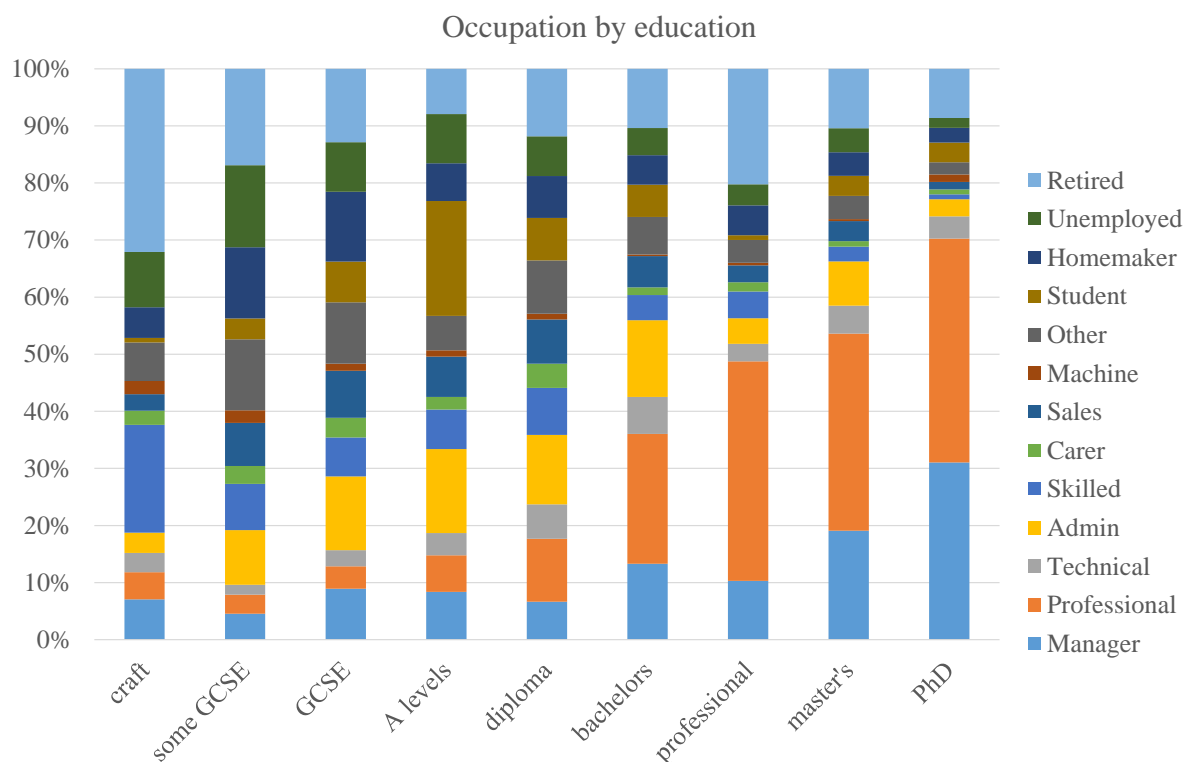


Figure 36 Occupation by Education Level in Our Sample.

3.13. Economic sector, if in work (Q15; N=9882)

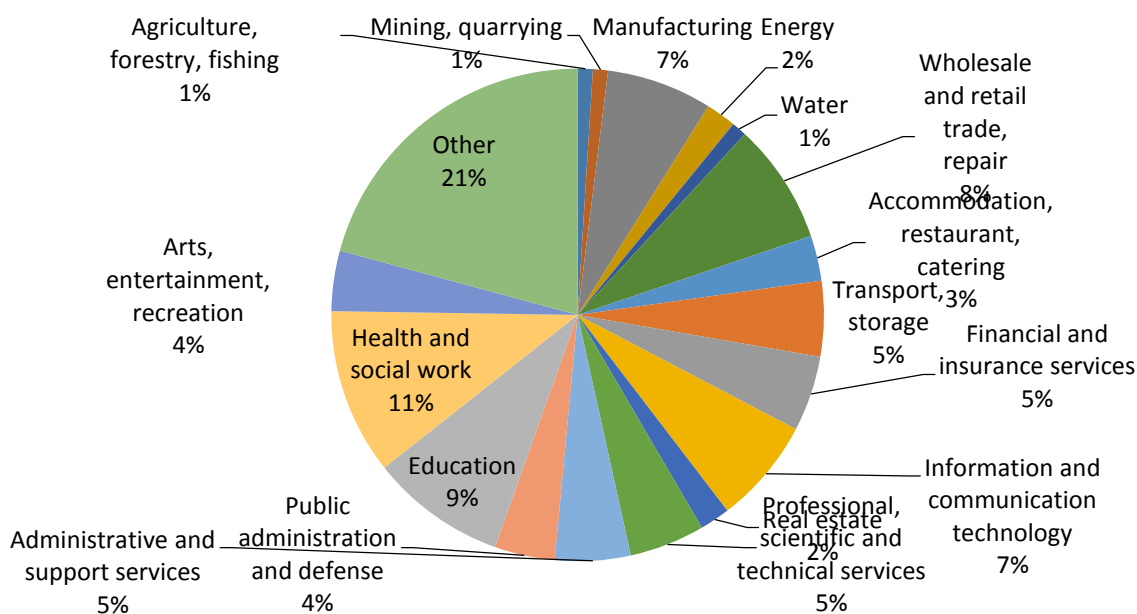


Figure 37 Employment Sector Distribution in Our Sample.

Table 7 Employment Sector Distribution.

Sector	ONS	Our Sample
Agriculture, Forestry & Fishing	1.6%	1.4%
Mining, Quarrying & Utilities	1.2%	0.5%
Energy		1.7%
Water		0.7%
Manufacturing	8.3%	7.4%
Construction	4.6%	
Motor Trades	1.8%	
Wholesale	4.0%	
Retail	10.0%	7.7%
Transport & Storage (inc Postal)	4.4%	4.8%
Accommodation & Food Services	7.0%	3.1%
Recreation		3.9%
Information & Communication	3.9%	6.9%
Finance & Insurance	3.6%	5.3%
Property	1.9%	1.6%
Professional, Scientific & Technical	8.0%	4.6%
Business Administration and Support Services	8.2%	4.9%
Education	9.1%	9.3%
Health	13.2%	10.6%
Public Administration	4.6%	4.5%
Other	4.6%	21.1%

Source: Office for National Statistics

3.14. Income (Q91)

The income distribution in our sample roughly matches that of the population. The bands shown in Figure 38 are the deciles of the household income distribution in Great Britain 2010-2012, except for the highest decile which we split in two. We thus expect every bar in Figure 38 to equal 10%, except the rightmost two which should add up to 10%. We see that we oversampled the poorest – just like we oversampled students – and that the top fifth of the income distribution are underrepresented.

In Figure 39 to Figure 49 we graph respondents' assets and debts in a range of categories. Figure 50 shows net assets relative to income.

Table 8 has the descriptive statistics.

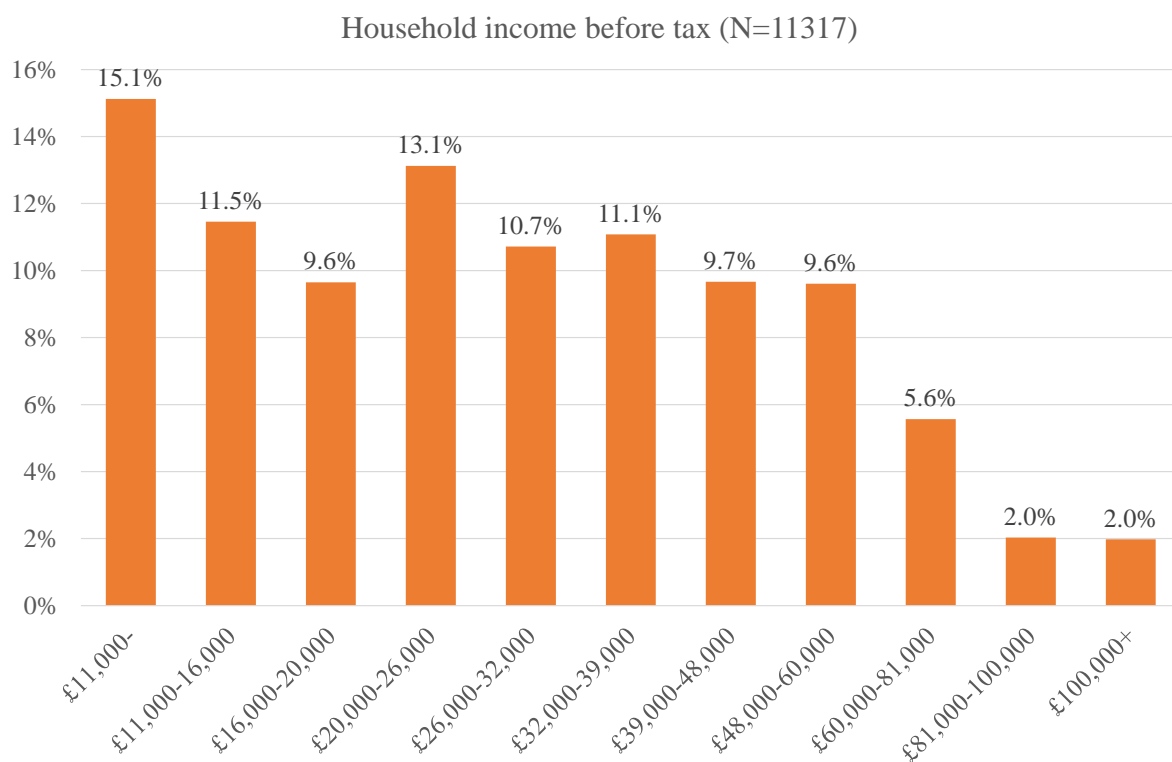


Figure 38 Distribution of Gross Household Income.

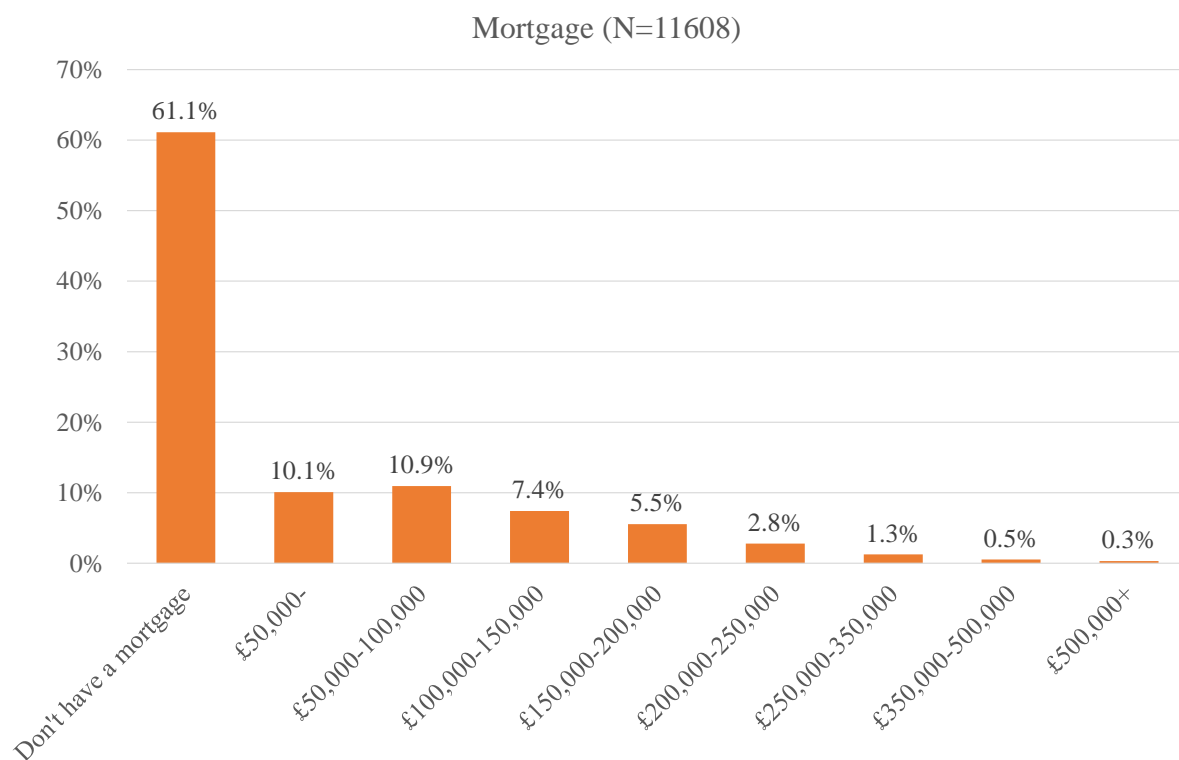


Figure 39 Value of the remaining principal on mortgage.

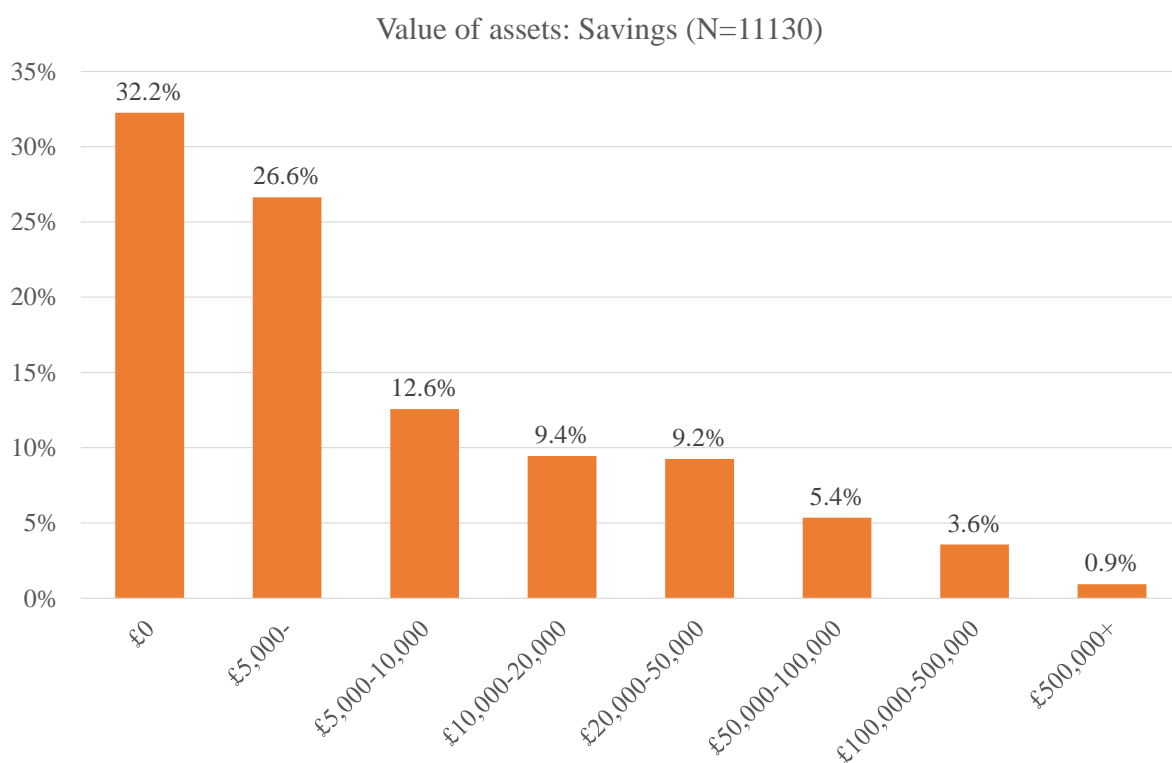


Figure 40 Total savings.

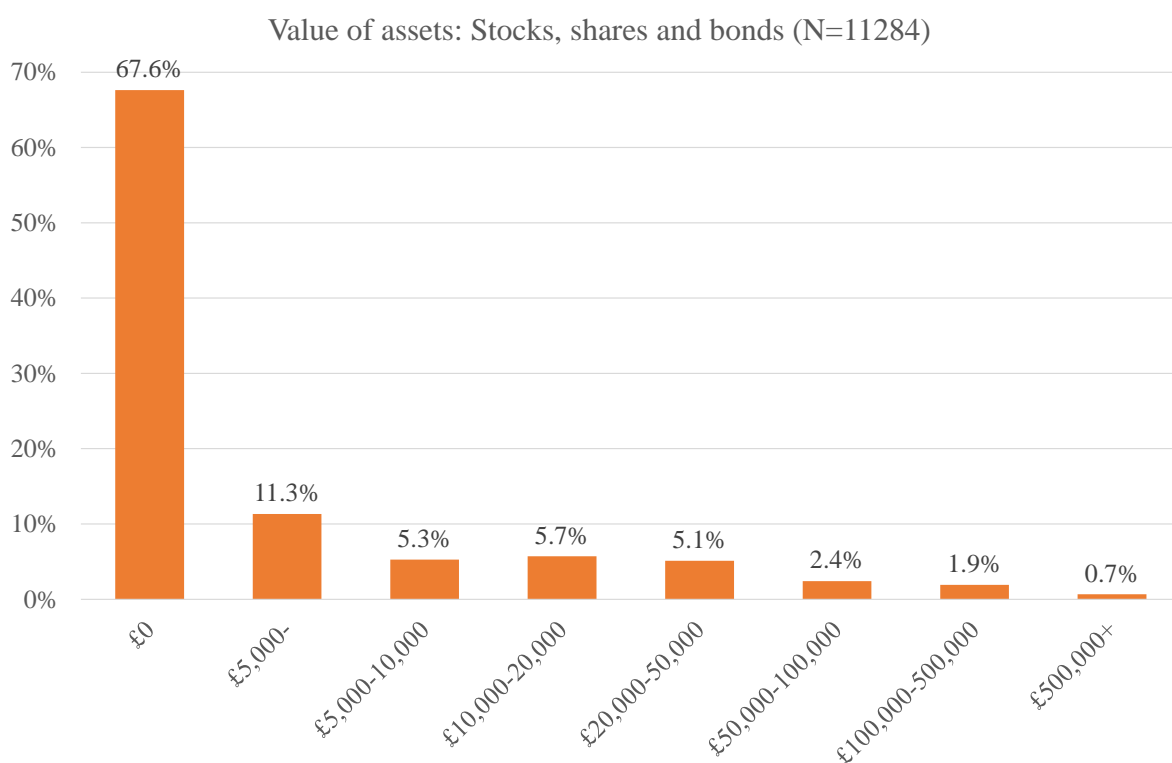


Figure 41 Total value of stocks, shares and bonds owned by respondent.

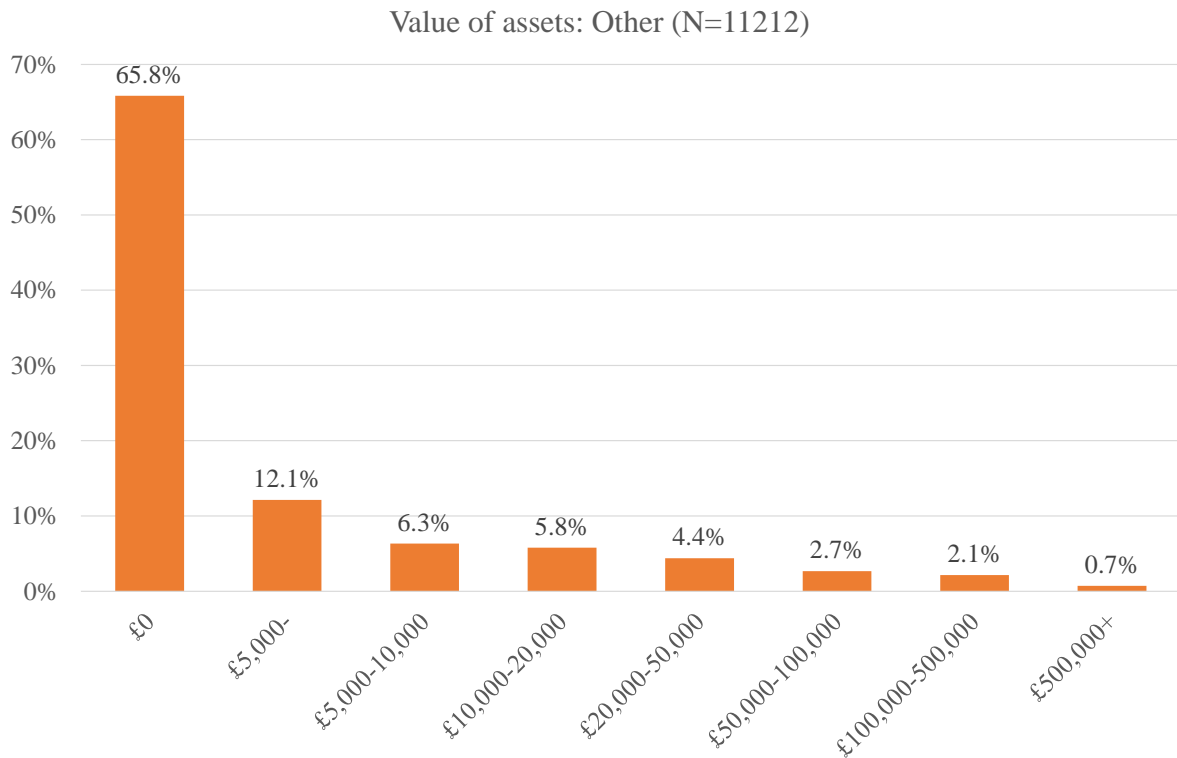


Figure 42 Total value of other assets.

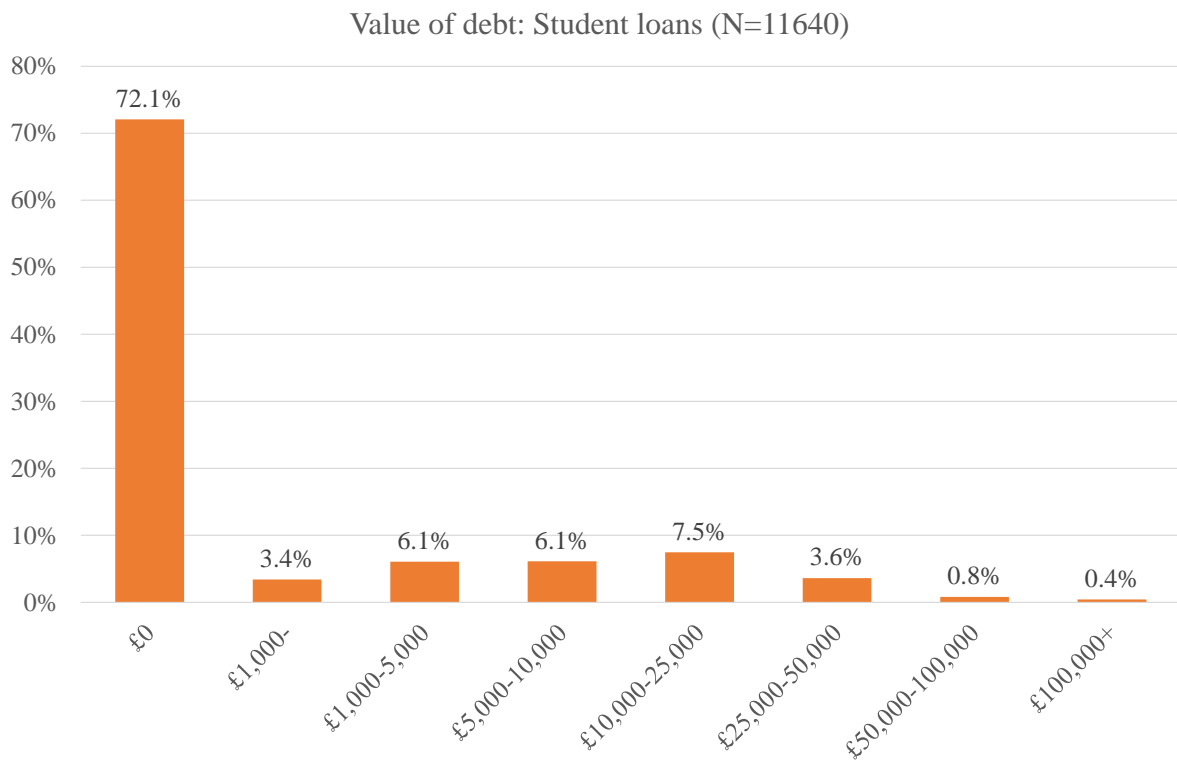


Figure 43 Value of student loans.

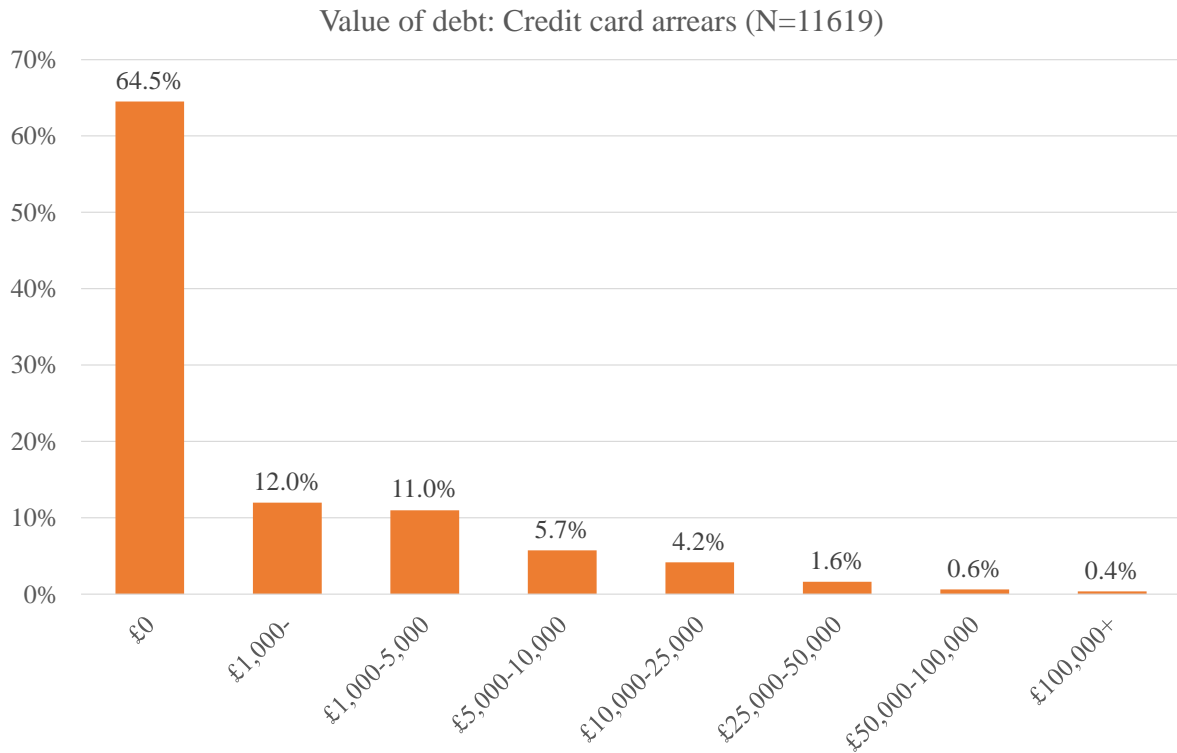


Figure 44 Value of credit card arrears.

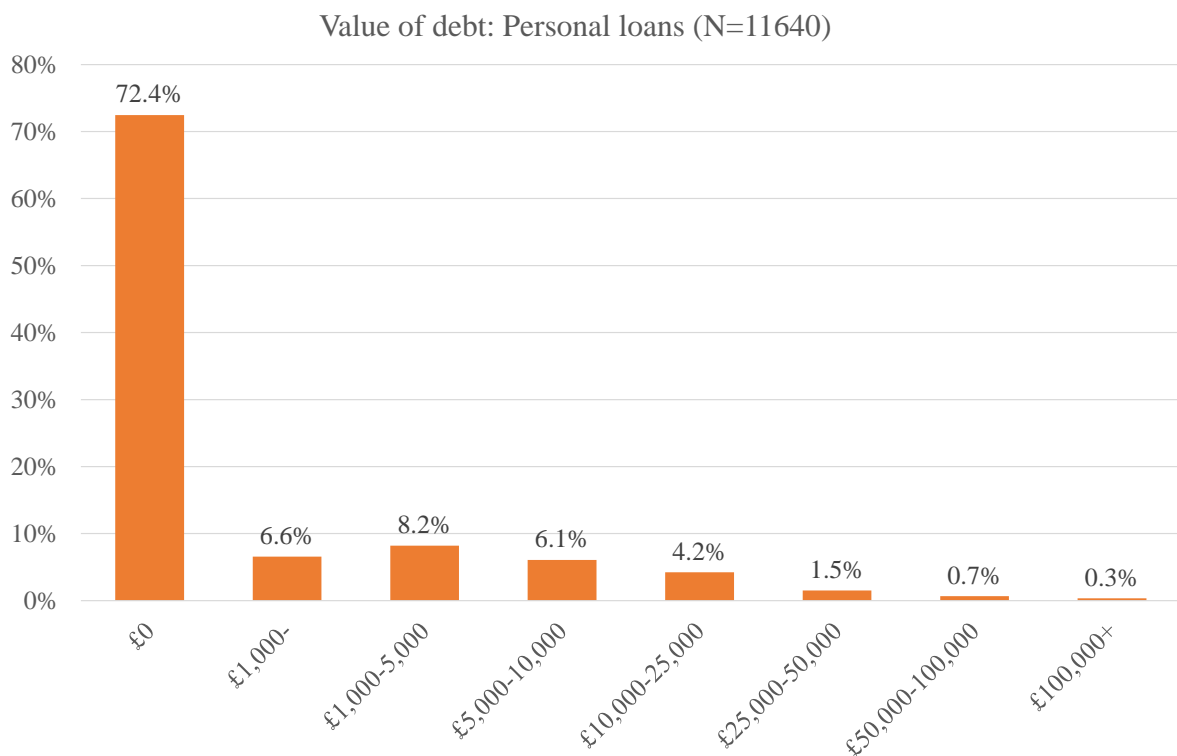


Figure 45 Value of personal loans.

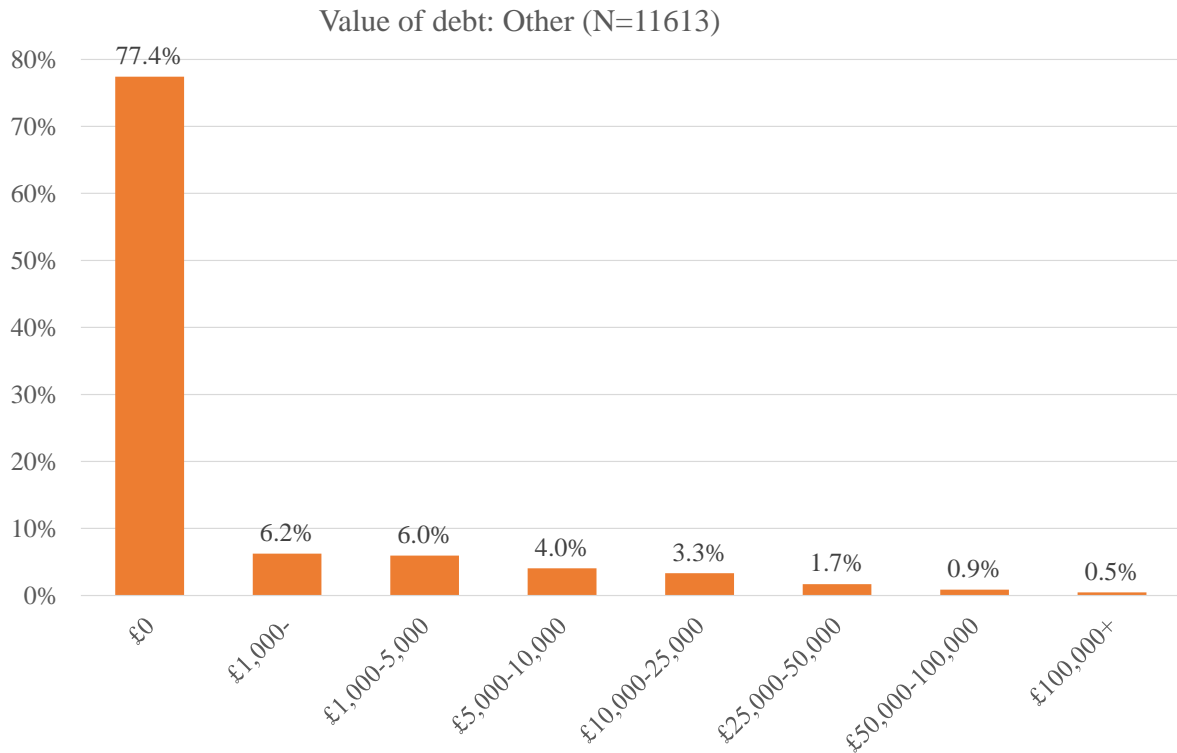


Figure 46 Value of other debts.

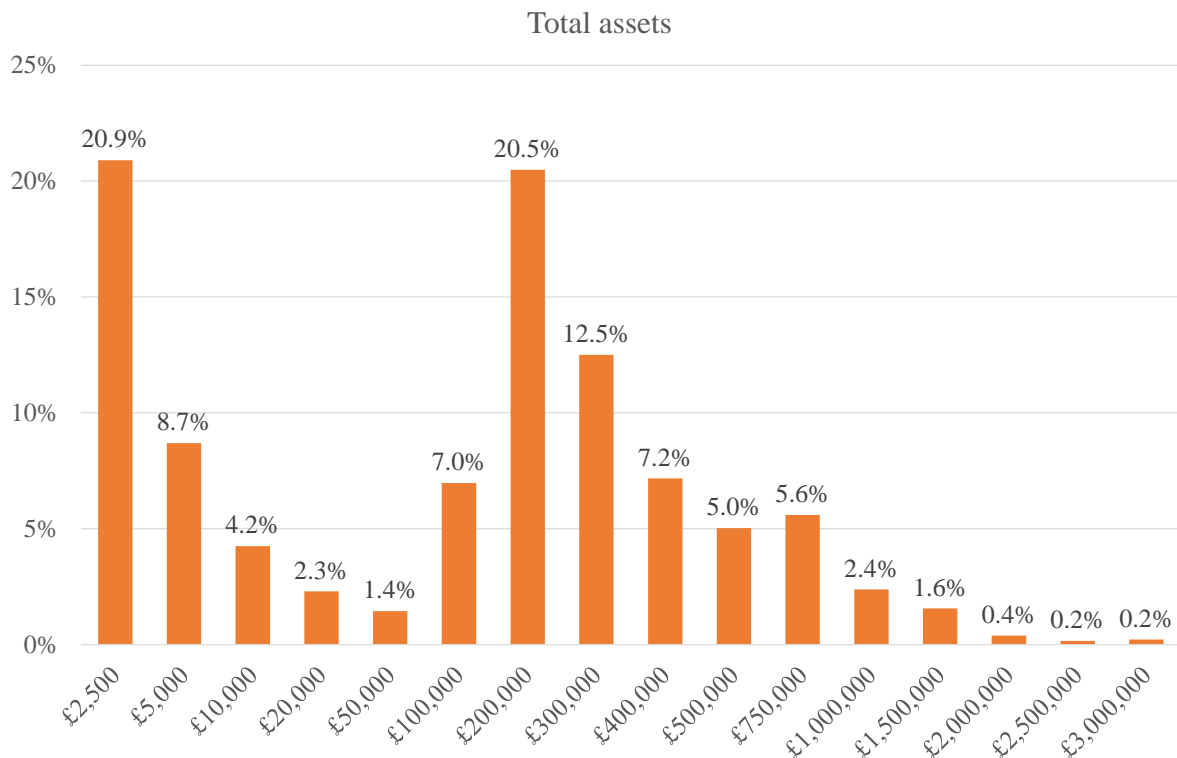


Figure 47 Total value of all assets owned by respondent.

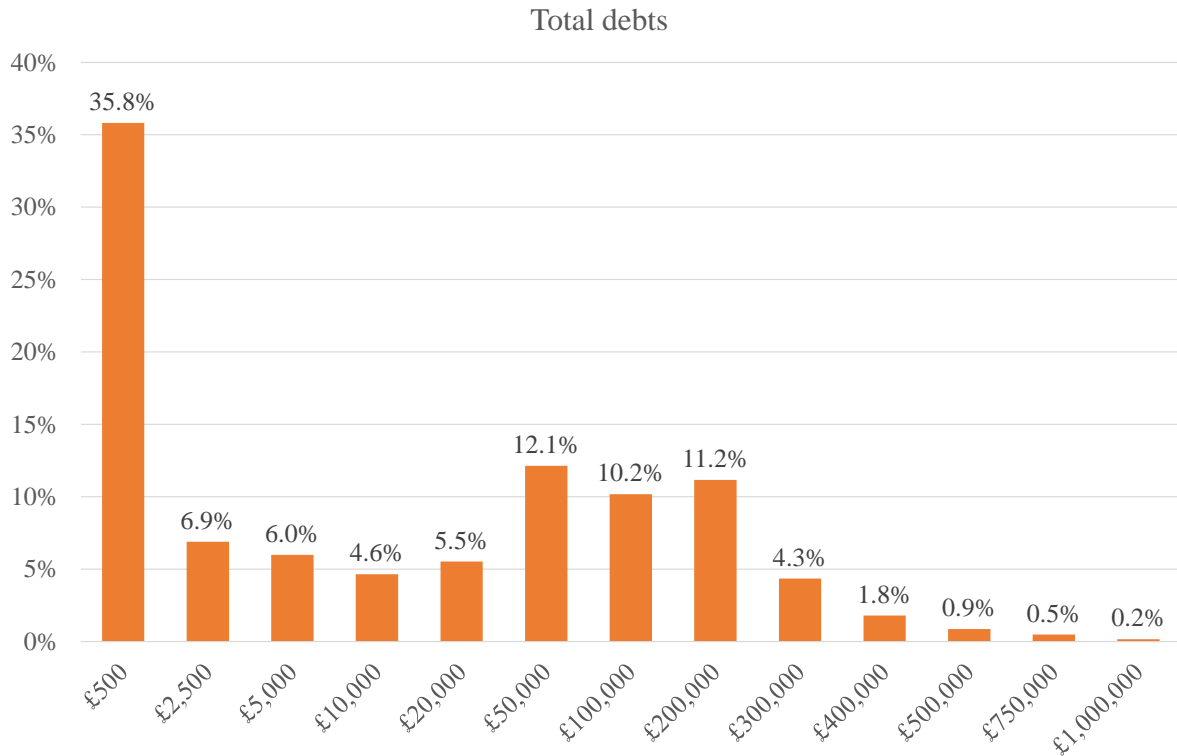


Figure 48 Total value of all debts owed by respondent.

Net assets equal total assets minus total debts. We also show net assets relative to annual income.

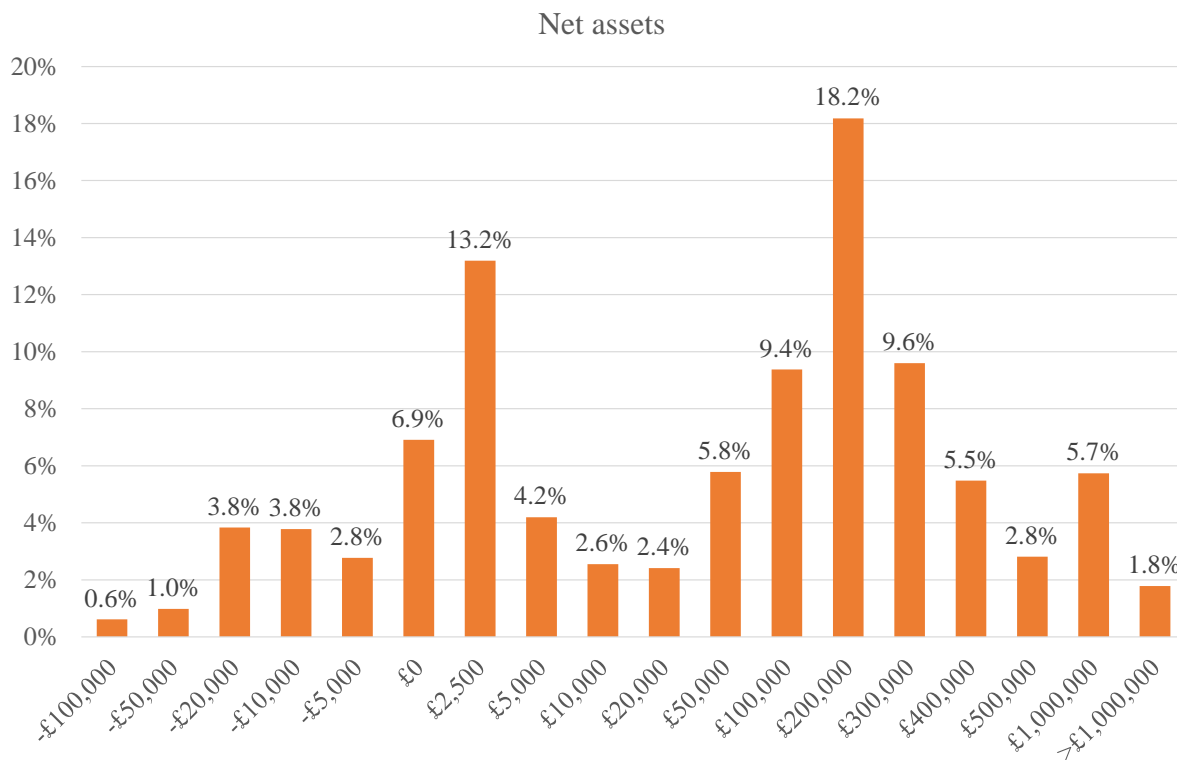


Figure 49 Net value of all assets and debts owed and owned by respondent.

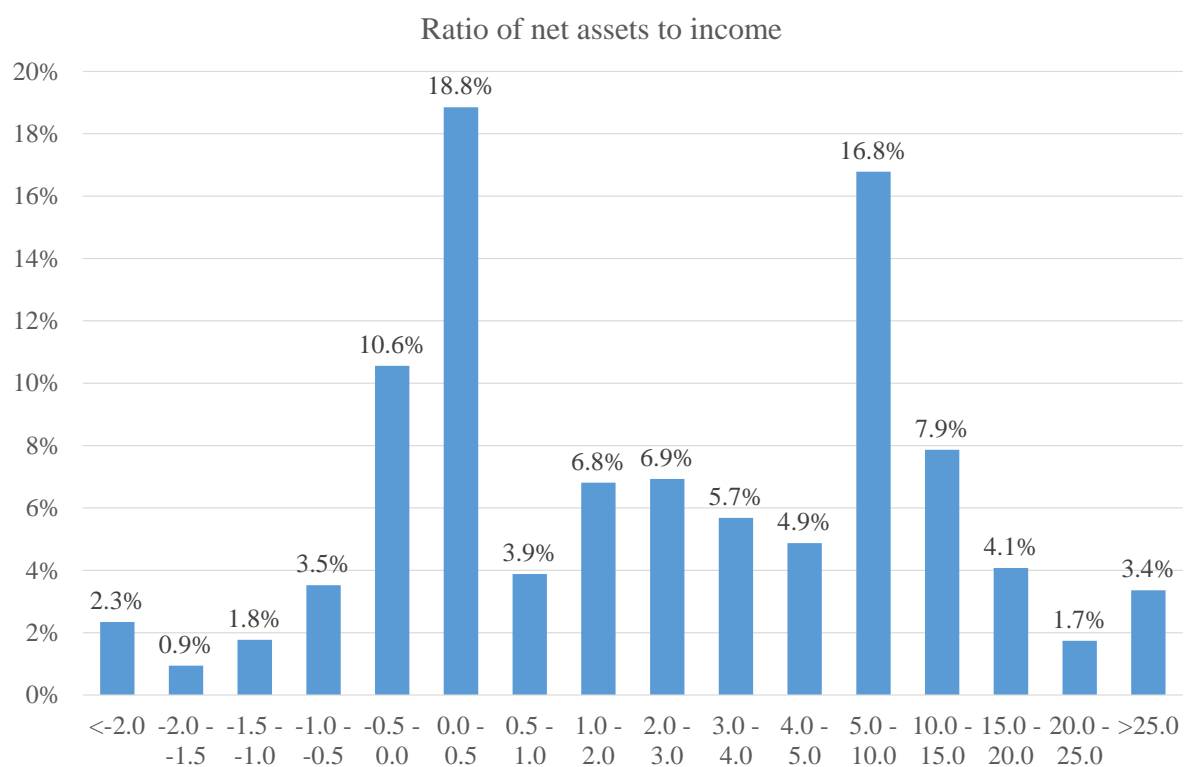


Figure 50 Ratio of total assets minus total debts to annual income.

Table 8 Summary Statistics Relating to Financial Variables.

	Zeros included					Zeros excluded				
	Mean	Std Dev	Median	Mode	Obs	Mean	Std Dev	Median	Mode	Obs
Gross Household Income	33,070	25,270	29,000	10,000	11,317	33,070	25,270	29,000	10,000	11,317
Resale Value of House	161,256	187,629	150,000	0	11,705	252,779	179,025	250,000	150,000	7,467
Value of Mortgage	25,188	72,984	2,500	0	11,130	37,175	86,119	7,500	2,500	7,541
Total Savings	13,920	58,091	0	0	11,285	42,978	95,769	7,500	2,500	3,655
Value of Stocks etc	14,987	60,837	0	0	11,213	43,844	97,794	7,500	2,500	3,833
Value of Other Assets	43,506	76,495	0	0	11,609	111,863	86,019	75,000	75,000	4,515
Value of Student Loans	4,079	11,698	0	0	11,640	14,600	18,337	7,500	15,000	3,252
Value of Credit Card Arrears	2,839	9,822	0	0	11,619	8,003	15,187	3,000	500	4,122
Value of Personal Loans	2,731	9,790	0	0	11,640	9,908	16,635	3,000	3,000	3,208
Value of Other Loans	2,725	10,929	0	0	11,613	12,065	20,403	3,000	500	2,623
Total Value of Assets	205,166	286,373	150,000	0	12,151	259,361	299,362	165,000	2,500	9,612
Total Value of Debts	53,408	95,940	6,500	0	12,151	83,211	108,909	35,000	500	7,799
Net Value of Assets	151,758	254,628	64,500	0	12,151	171,680	264,437	90,000	2,500	10,741
Ratio of Assets to Income	5.15	9.20	2.21	0.00	11,239	5.67	9.51	2.84	0.25	10,196

All variables are in pound sterling, except the bottom row (unitless) and the number of observations.

4. Results: Knowledge and Attitudes

4.1. Time (Q16, Q19, Q20, Q23, Q24)

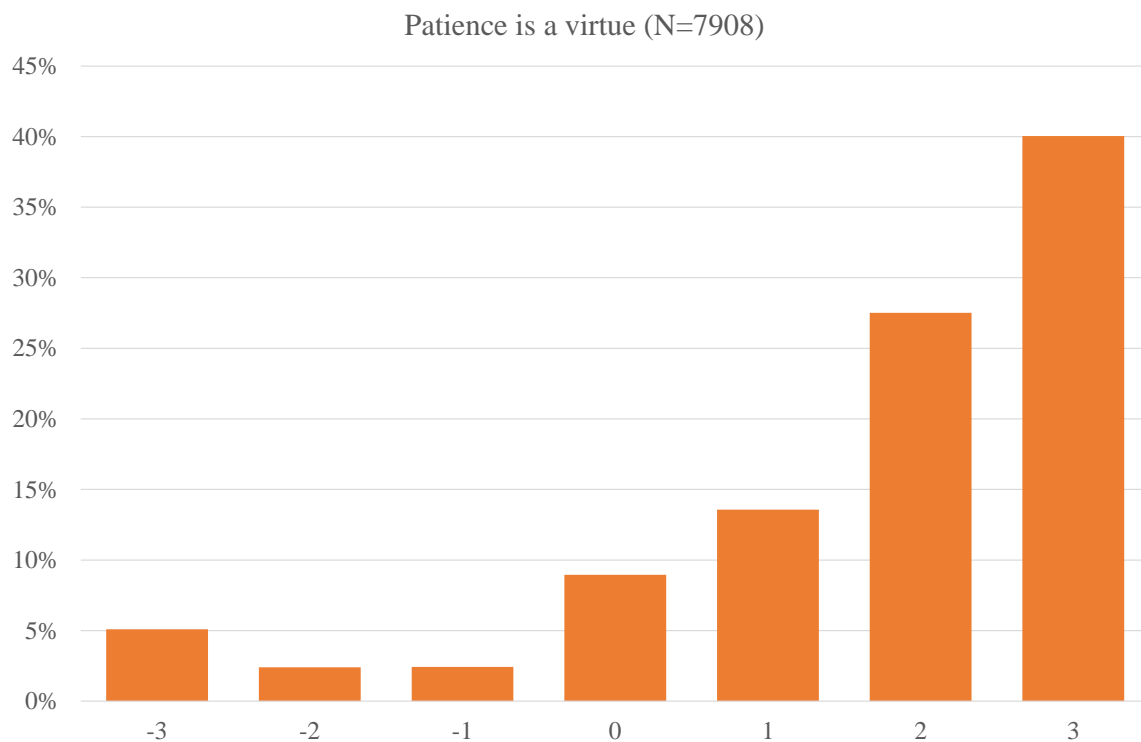


Figure 51 Agreement to statement that patience is a virtue.

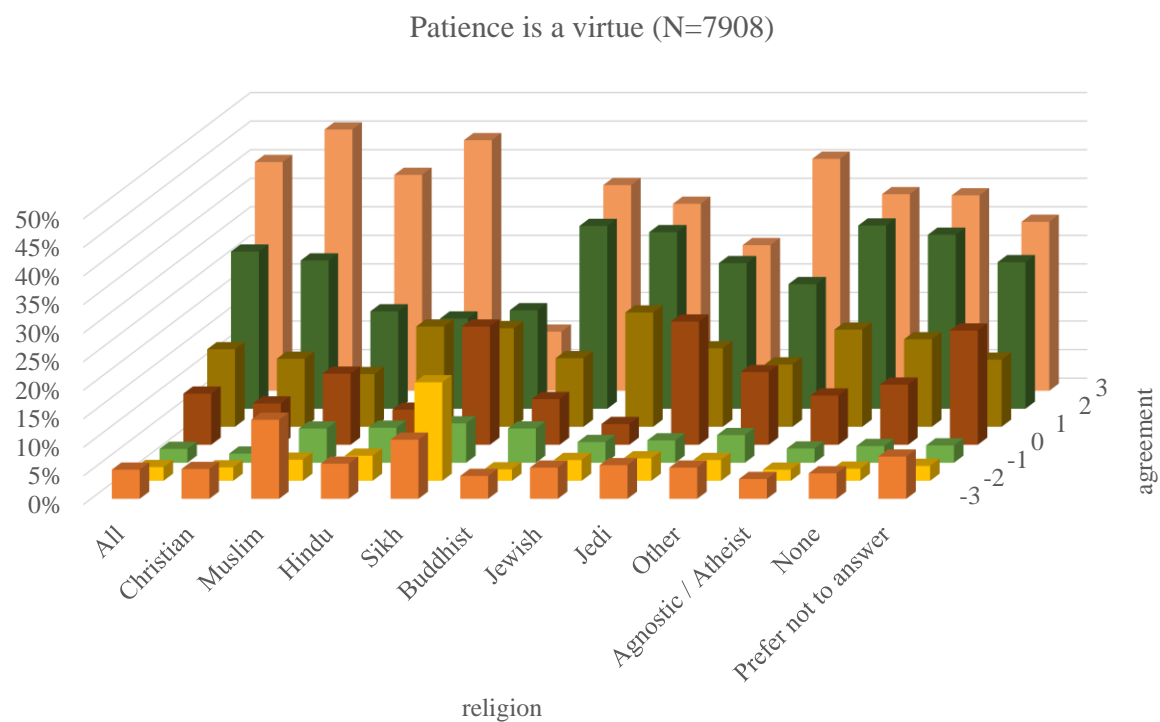


Figure 52 Agreement to statement that patience is a virtue by religion.

Questions 19, 20 ask respondents to choose between a sum of money now or later. The questions were informed by (Voors et al. 2012, Ifcher and Zarghamee 2011, Tanaka, Camerer, and Nguyen 2010). If a respondent answers she would rather have £1000 in a year than £500 now, then this imposes a lower bound on her discount rate, for

$$£500 < \frac{£1000}{1+r} \Leftrightarrow r < 100\%$$

If the same respondent answers she would prefer £750 today over £1000 in a year's time, then this imposes an upper bound on her discount rate, because

$$£750 > \frac{£1000}{1+r} \Leftrightarrow r > 33\%$$

Combining the two answers, we find

$$100\% > r > 33\%$$

The graphs below display the mid-points of these intervals. Results are shown for all respondents, for respondents who gave consistent answers in the sense that they did not reverse their preferences, and for respondents who are financially literate and numerate (see below).



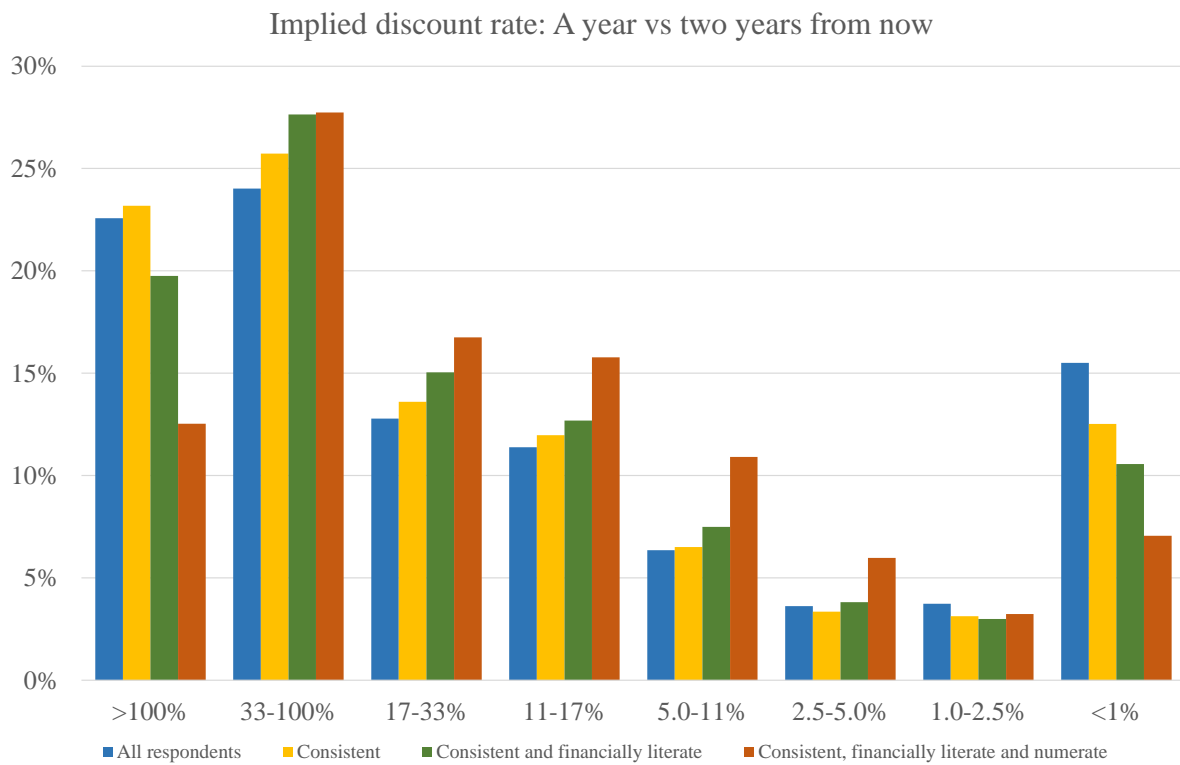
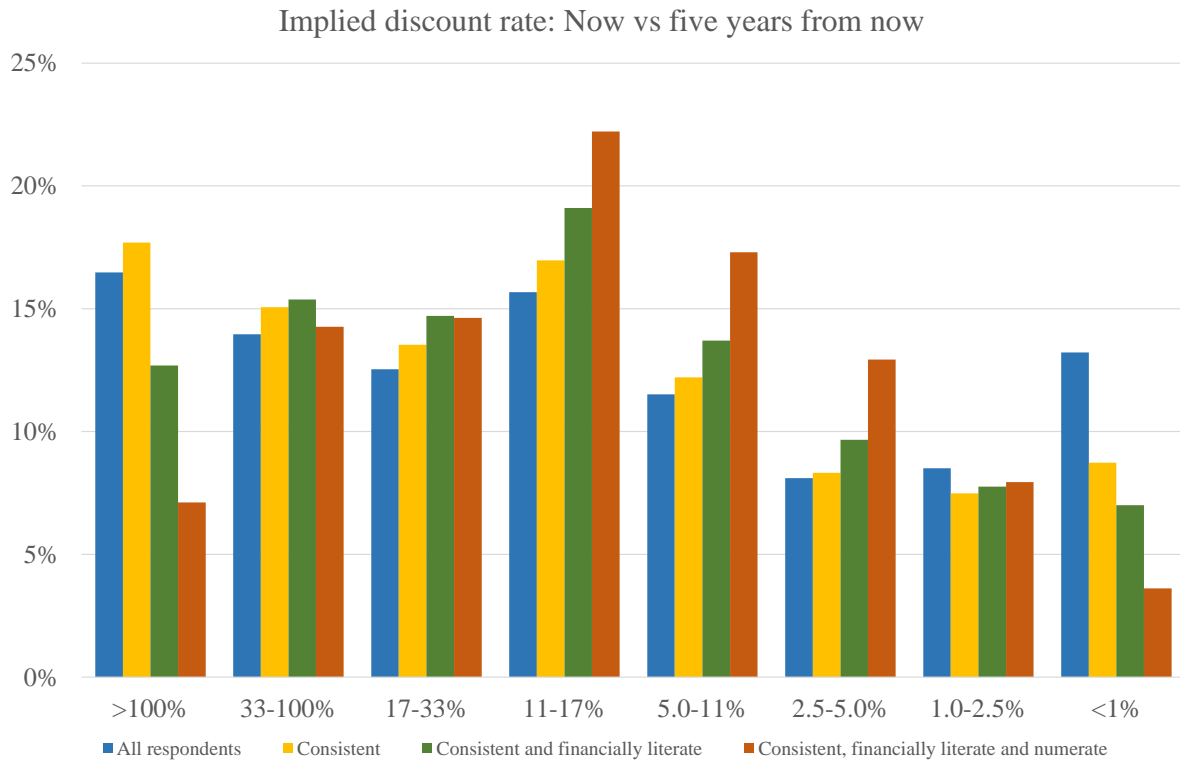
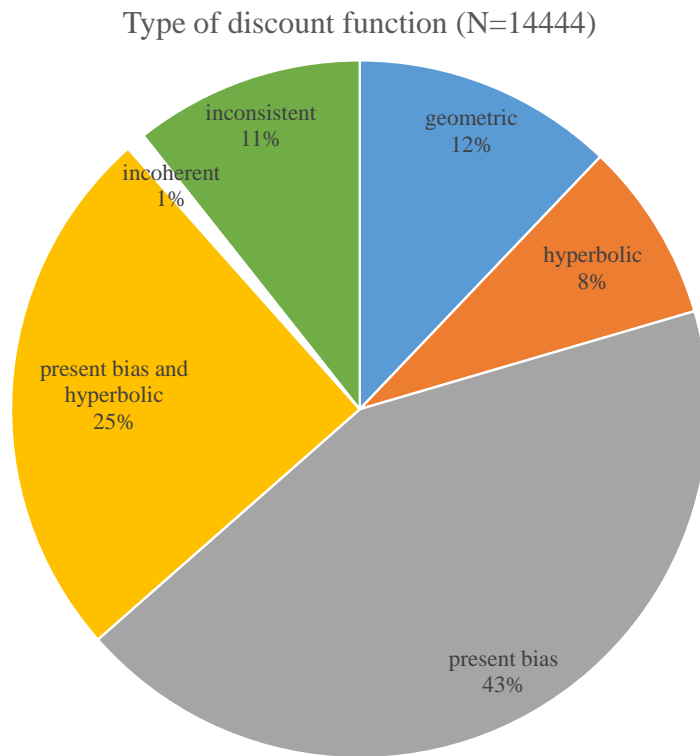




Table 9 Descriptive statistics for the implied discount rates.

	mean	St dev	median	mode	#obs
Now v a year from now	1.49	1.88	0.33	5.00	15,537
Now v five years from now	0.95	1.65	0.17	0.17	15,468
A year from now v two years from now	1.23	1.65	0.33	1.00	14,449
A year from now v six years from now	0.81	1.52	0.17	0.17	14,448

Respondents were asked four times to make a choice between receiving a sum of money now or later. Four discount rates were thus implied. If the discount rates are the same, then the respondent is said to display “geometric time preference”. If the discount rate is the same between making choices in the future, but different for making choices today, then the respondent is said to display “present bias”. If her discount rate falls as the respondent peers further into the future, then the respondent is said to display “hyperbolic time preference”. Respondents may display both present bias and hyperbolic time preference. See Benhabib, Bisin, and Schotter (2010) for a discussion. As noted above, some respondents gave inconsistent answers for a given time horizon; other respondents were incoherent between time horizons.



4.2. Risk (Q17, Q92)



Figure 53 Agreement to statement that gambling is bad.

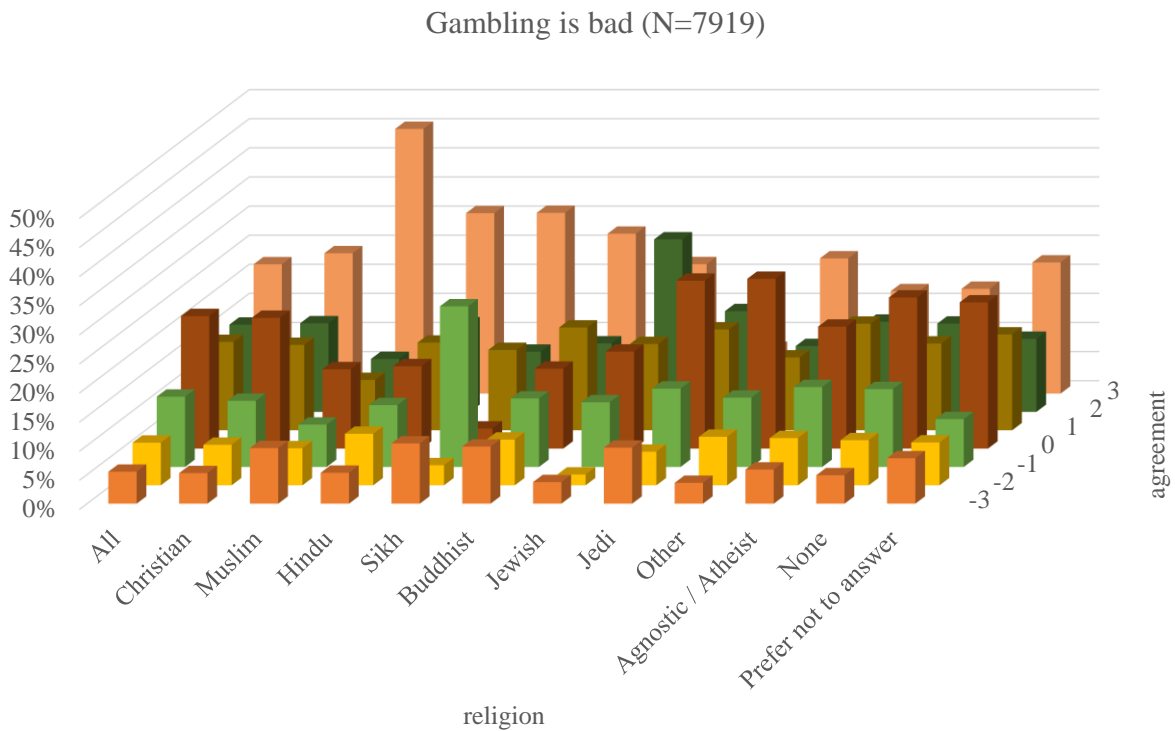


Figure 54 Agreement to statement that gambling is bad by religion.

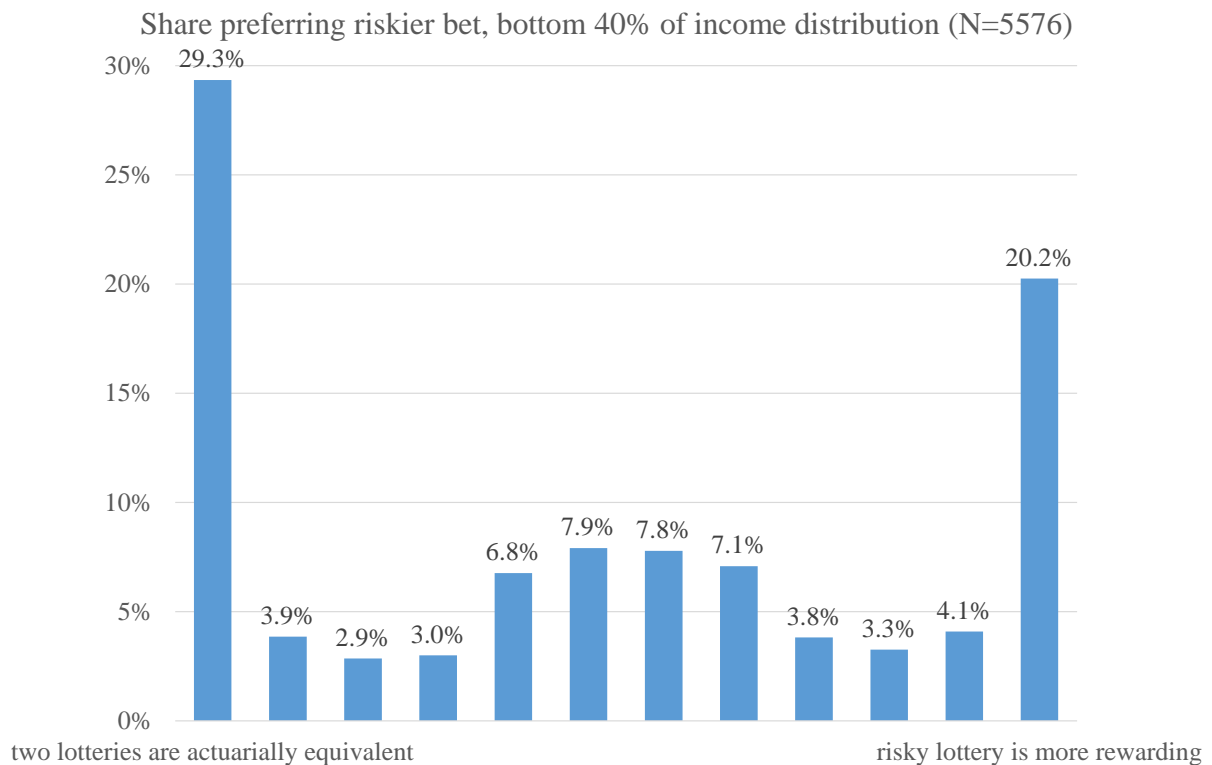


Figure 55 Poor respondents who prefer the riskier bet.

Some respondents switched back and forth between riskier and less risky bets. Their replies were excluded as inconsistent.

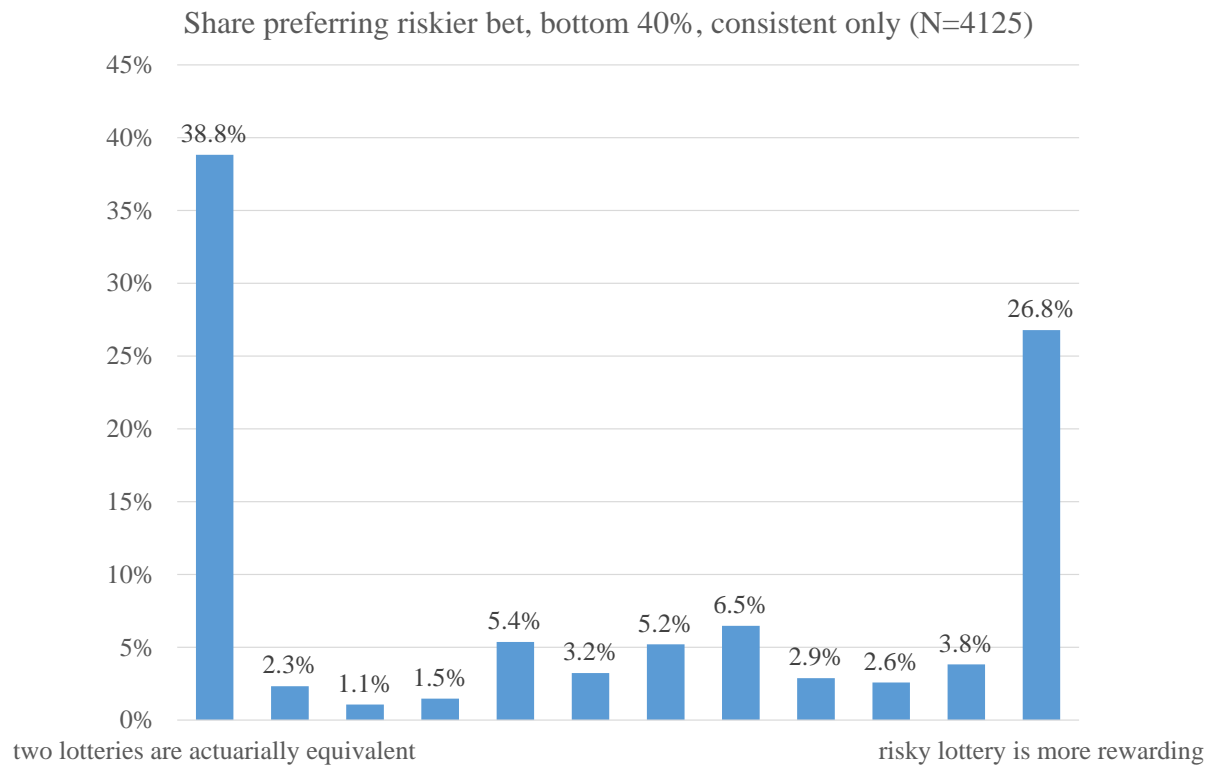


Figure 56 Poor respondents who consistently prefer the riskier bet.

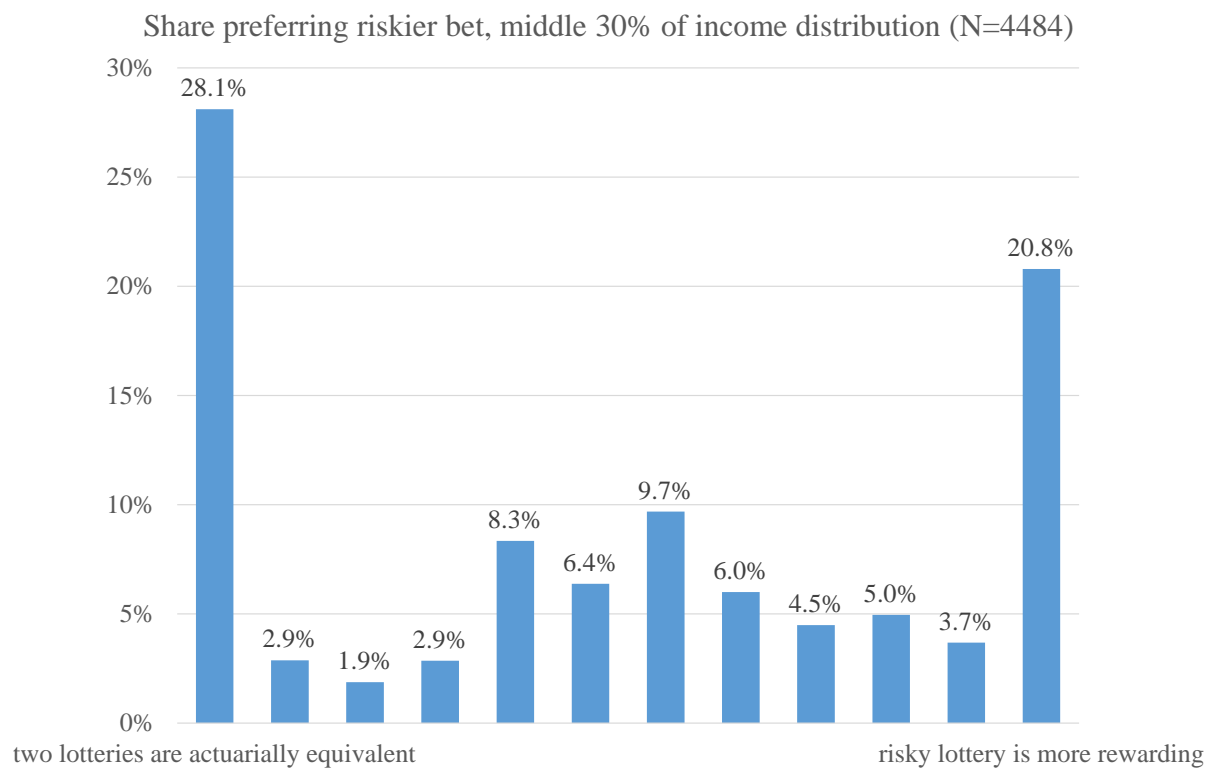


Figure 57 Middle-income respondents who prefer the riskier bet.

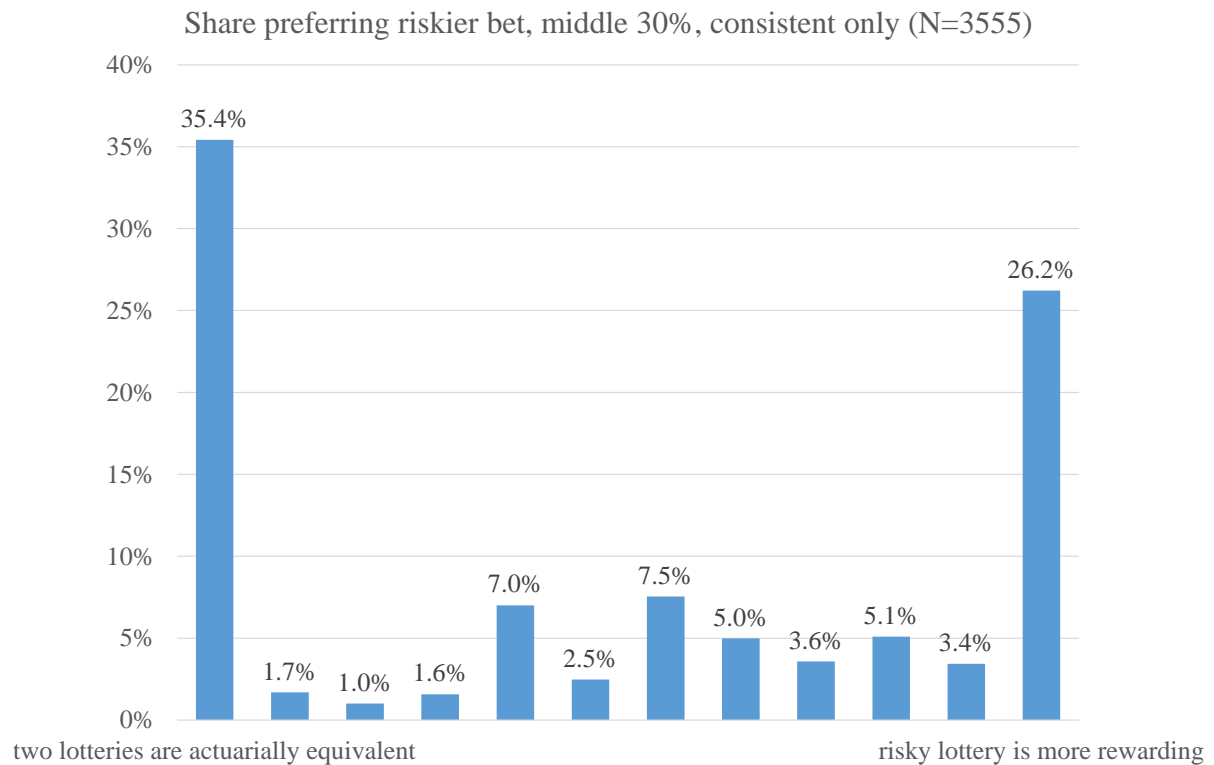


Figure 58 Middle-income respondents who consistently prefer the riskier bet.

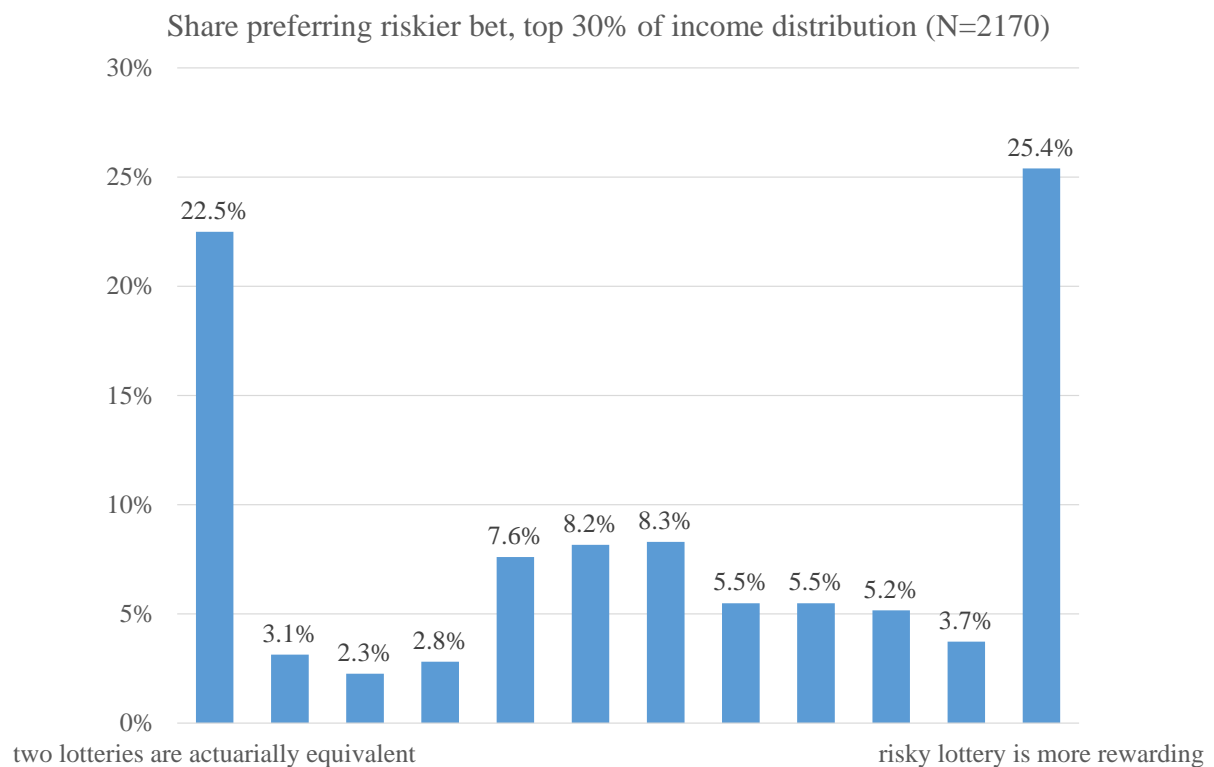


Figure 59 Rich respondents who prefer the riskier bet.

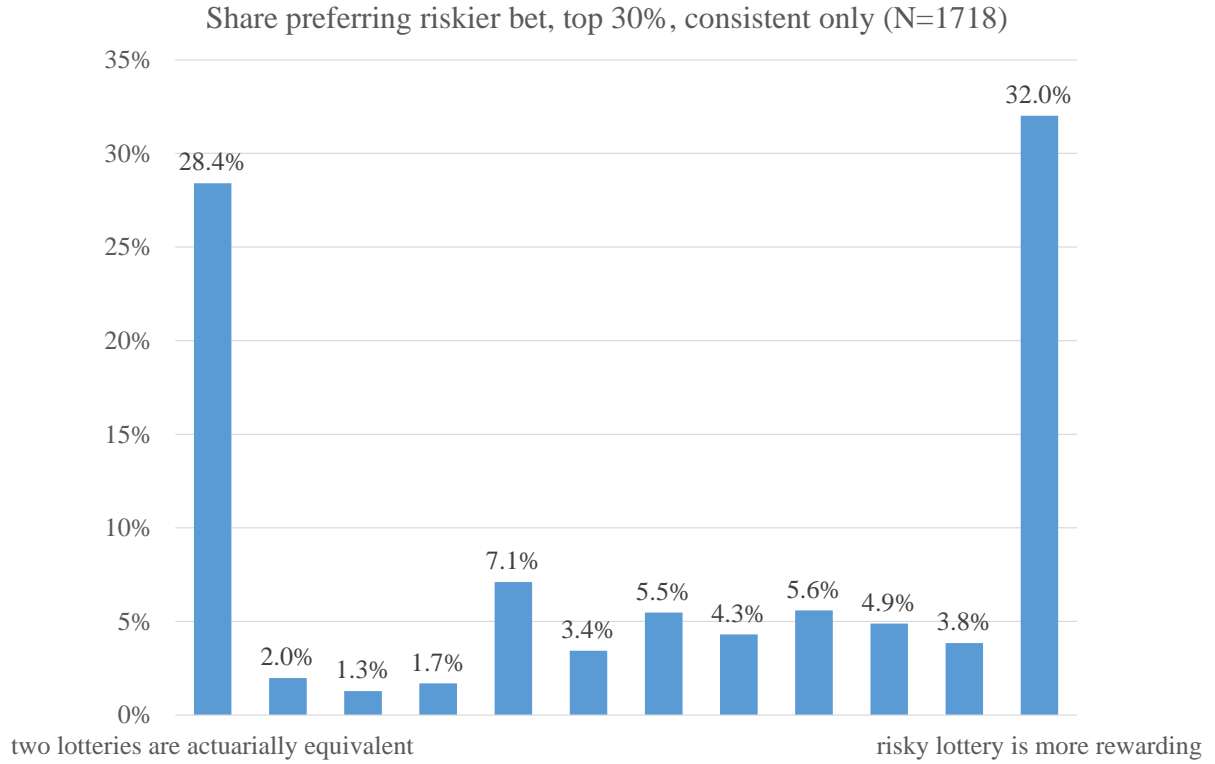


Figure 60 Rich respondents who consistently prefer the riskier bet.

The above questions were informed by (Tanaka, Camerer, and Nguyen 2010, Voors et al. 2012). Respondents who prefer less risky bets over more risky ones are said to be more risk averse. We here estimate two parameters that describe risk aversion. The Arrow-Pratt rate of risk aversion η (Pratt 1964, Arrow 1970) follows from equating the pay-off from the two bets

$$\frac{1}{2} \frac{(Y + S_L)^{1-\eta}}{1-\eta} + \frac{1}{2} \frac{(Y + S_H)^{1-\eta}}{1-\eta} = \frac{5}{6} \frac{(Y + R_L)^{1-\eta}}{1-\eta} + \frac{1}{6} \frac{(Y + R_H)^{1-\eta}}{1-\eta}$$

and solving this for η . In this equation, Y is income, S_L is the low pay-off in the safe lottery, S_H is the high pay-off in the safe lottery, $R_L(<S_L)$ is the low pay-off in the risky lottery, and $R_H(>S_H)$ is the high pay-off in the risky lottery.

The Kahneman-Tversky risk sensitivity ε (Kahneman and Tversky 1979) similarly follows from equating the pay-off from the two bets

$$\frac{1}{2} S_L^\varepsilon + \frac{1}{2} S_H^\varepsilon = \frac{5}{6} R_L^\varepsilon + \frac{1}{6} R_H^\varepsilon$$

and solving this for ε . The crucial difference with Arrow-Pratt is that this does not depend on income. The sign is also reversed.

As above with time preference, responses imply a lower and upper bound on risk aversion. The graphs below show the mid-points of the intervals.

There is a high correlation between the alternative measures of risk sensitivity. For all observations, the correlation between Arrow-Pratt and Kahneman-Tversky is -0.90; excluding inconsistent response, the correlation increases to -0.91.

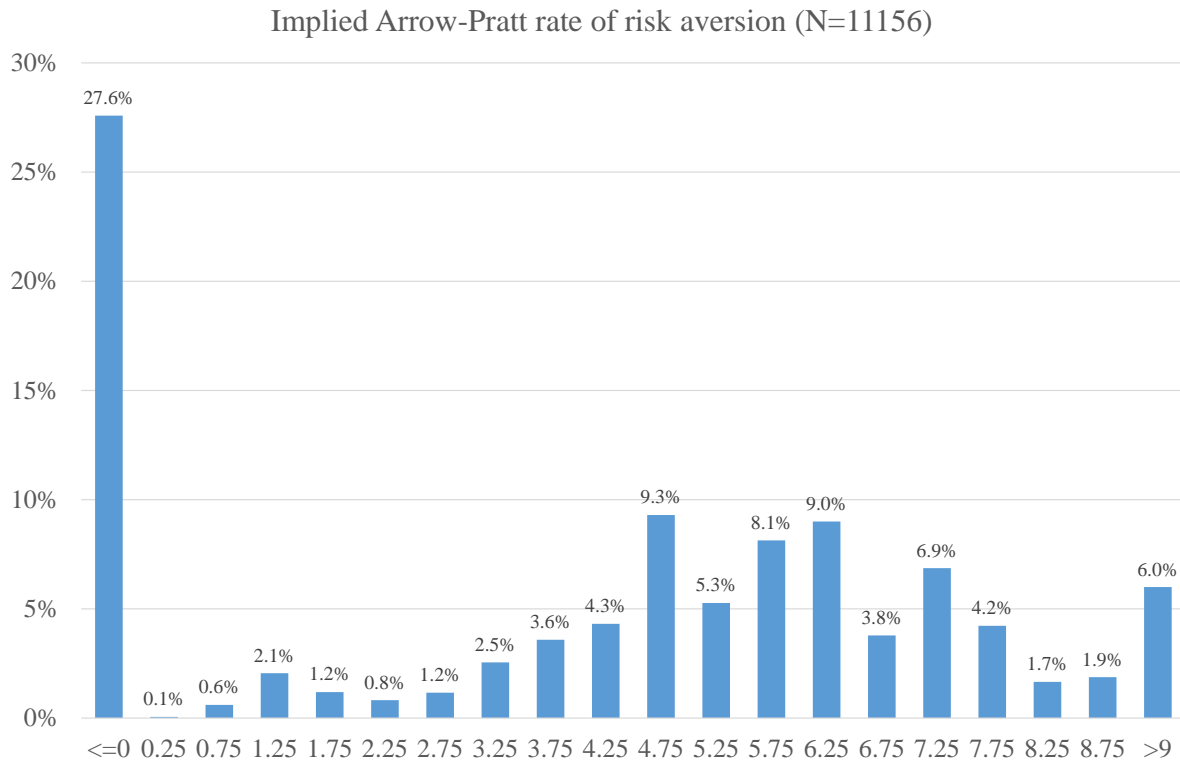


Figure 61 Risk aversion according to Arrow-Pratt.

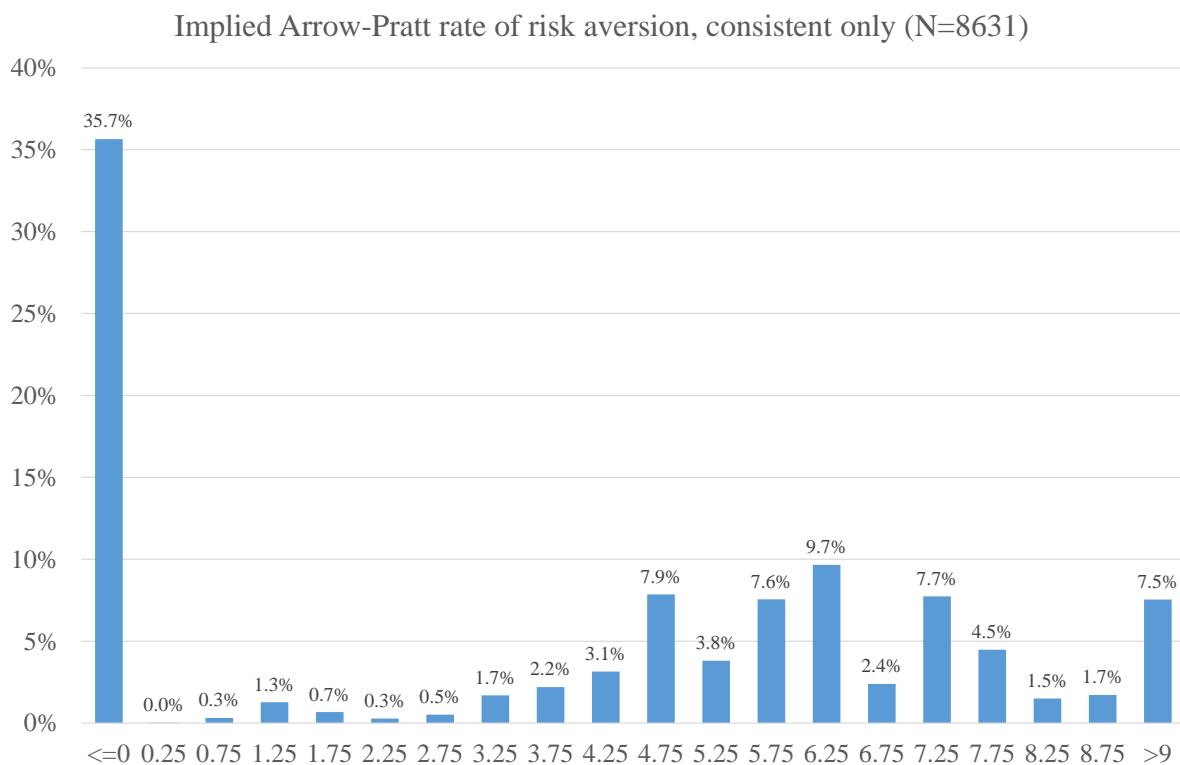


Figure 62 Risk aversion according to Arrow-Pratt for consistent responses only.

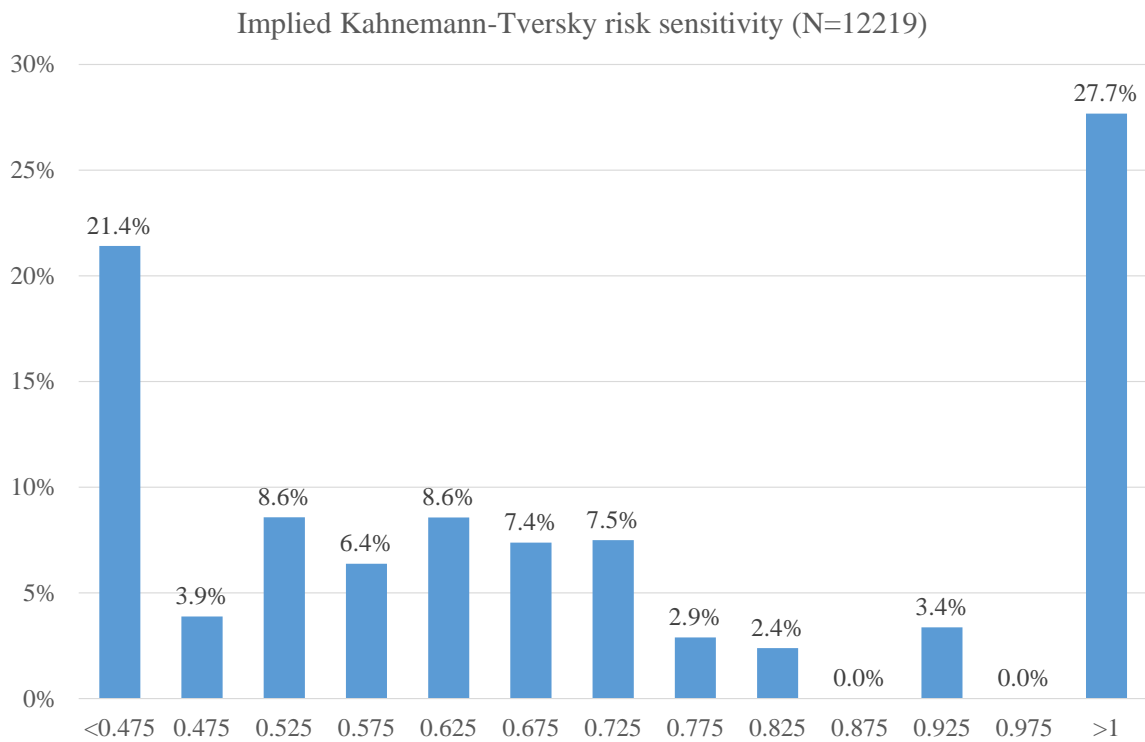


Figure 63 Risk sensitivity according to Kahnemann-Tversky.

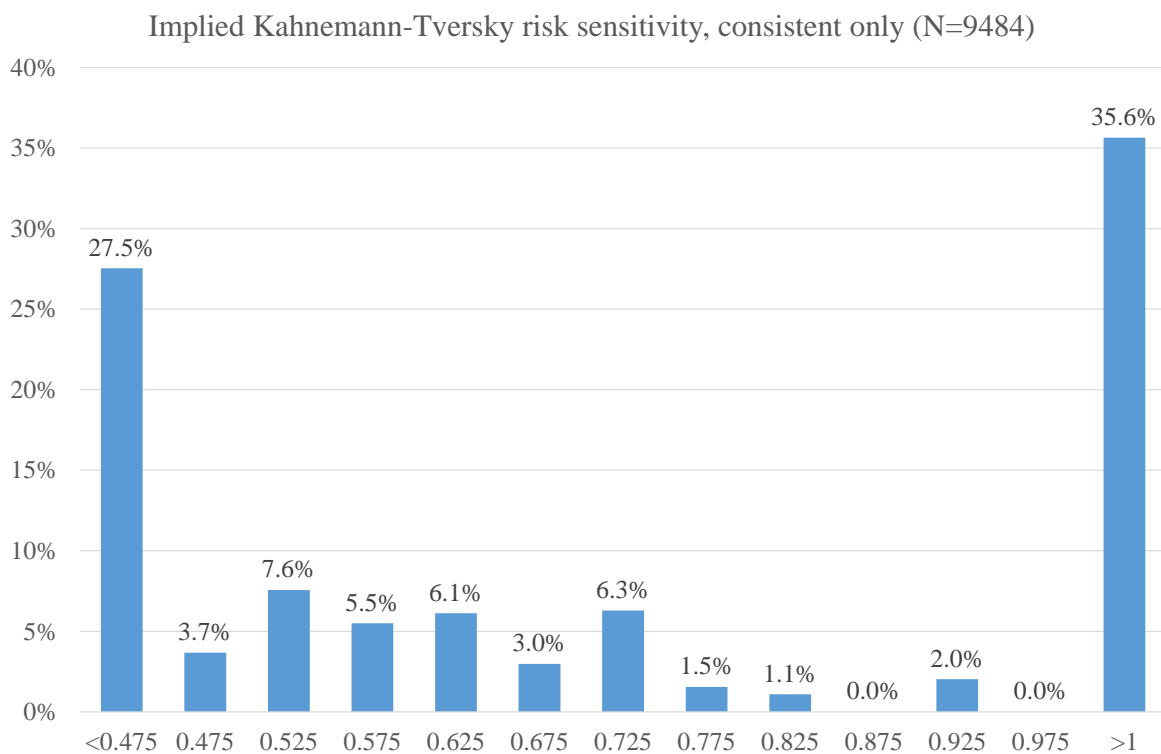


Figure 64 Risk sensitivity according to Kahnemann-Tversky for consistent responses only.

Table 10 Descriptive statistics of the measures of risk sensitivity.

		mean	st dev	median	mode	#obs
Arrow-Pratt		3.93	3.12	4.30	-0.10	11297
Arrow-Pratt	consistent	3.76	3.35	4.30	-0.10	8740
Kahnemann-Tversky		0.71	0.23	0.66	1.03	12218
Kahnemann-Tversky	consistent	0.72	0.25	0.61	1.03	9484

4.3. Social value orientation (Q18, Q28, Q33, Q37)

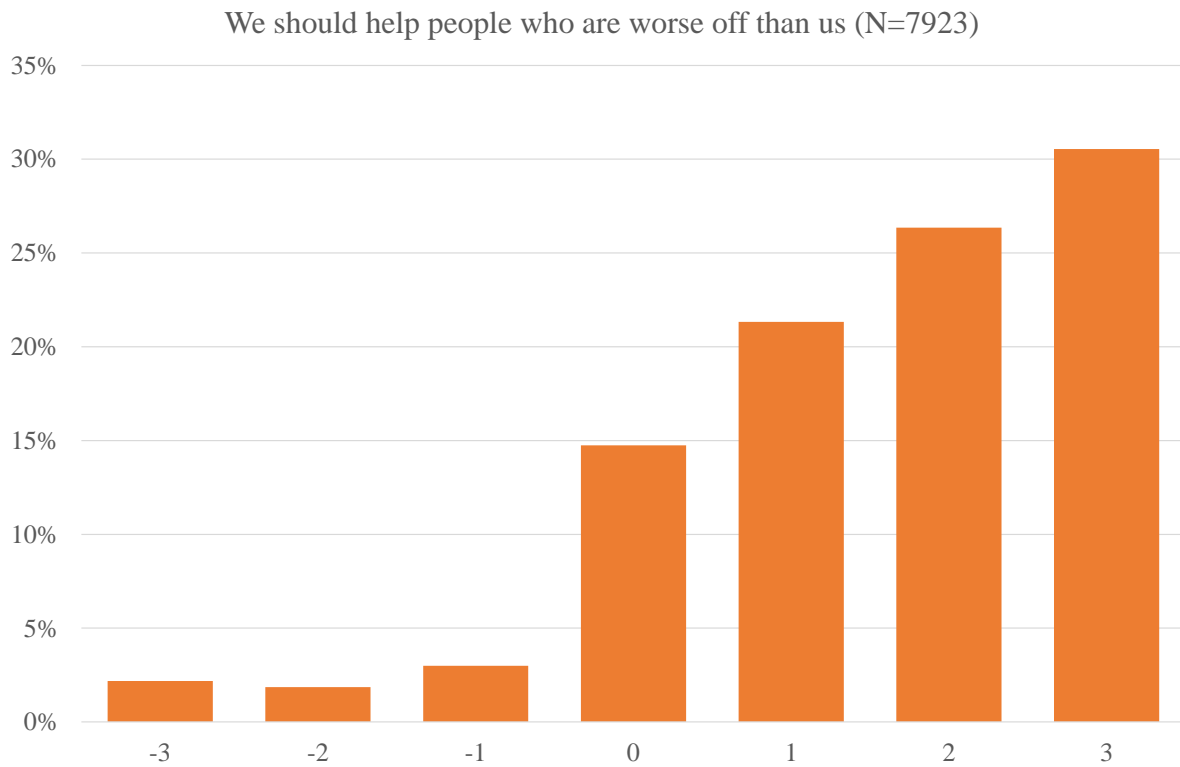


Figure 65 Agreement to statement that we should help people who are worse off than us.

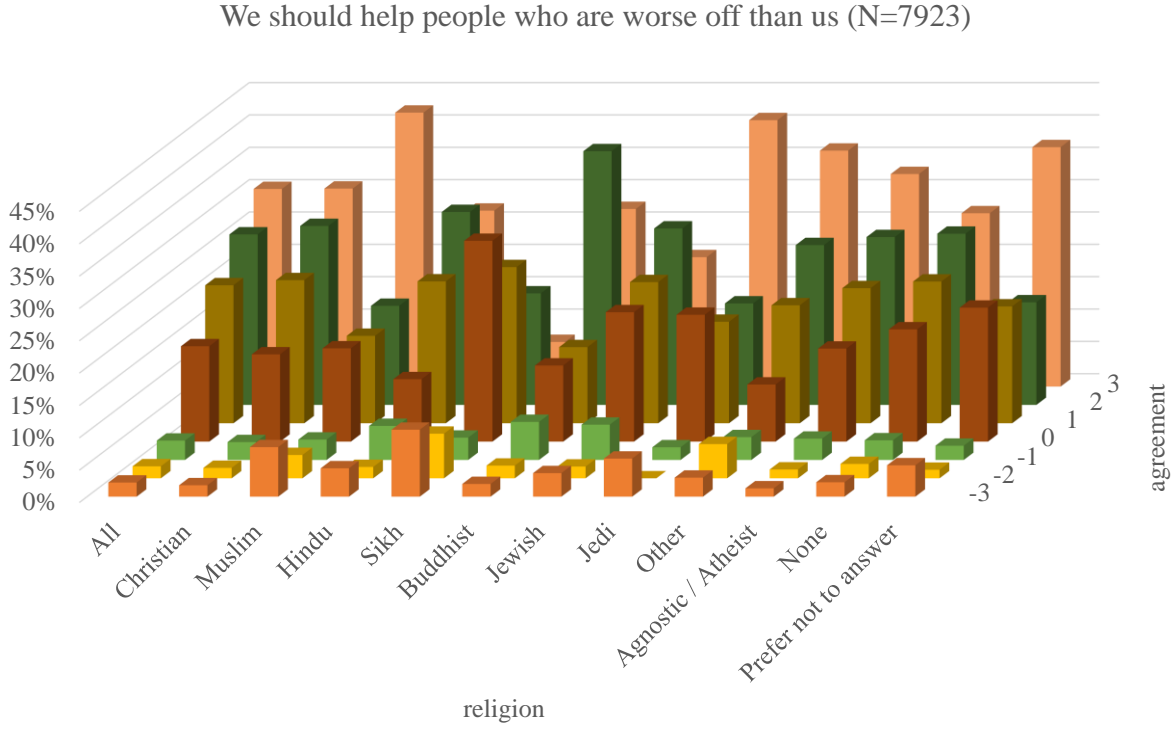


Figure 66 Agreement to statement that we should help people who are worse off than us by religion.

In Question 28, respondents played six dictator games: They were asked to choose distributed a prize between themselves and someone else. The questions are the same as in Murphy, Ackermann, and Handgraaf (2011). Both the order of the games and their scales were randomized. Prior to playing these games, respondents were shown a picture of the other player. The other players were male or female, very young, young, middle-aged or old; the other players were all white, blond and pretty.

The ring measure R of social value orientation is defined as

$$R = \arctan \frac{\sum_{i=1}^N P_O - 50N}{\sum_{i=1}^N P_S - 50N}$$

where P_O is the pay-off given to the other party and P_S is the pay-off taken by the dictator herself in the $N=6$ dictator games. If $R > 57.15^\circ$, the respondent is called “altruistic”, because she gives to the other regardless of her own pay-off. If $R < -12.04^\circ$, the respondent is called “competitive”, because she aims to take more than the other even at her own expense. If $22.45^\circ < R < -12.04^\circ$, the respondent is called “individualistic”, as she aims to maximise her own pay-off regardless of the other. If $57.15^\circ < R < 22.45^\circ$, the respondent is called “prosocial”. For those respondents, another 8 dictator games are played to distinguish between “egalitarian” ($50^\circ < R < 40^\circ$) and “inequity averse” respondents.

Although six questions were asked, these pertain to different aspects of social value orientation and therefore cannot be used to assess the internal consistency of the responses. The order of the questions was randomized, the scale of the questions was flipped, and the

answers at either extreme are valid. Therefore, the pattern of answers cannot be used either to assess internal consistency.

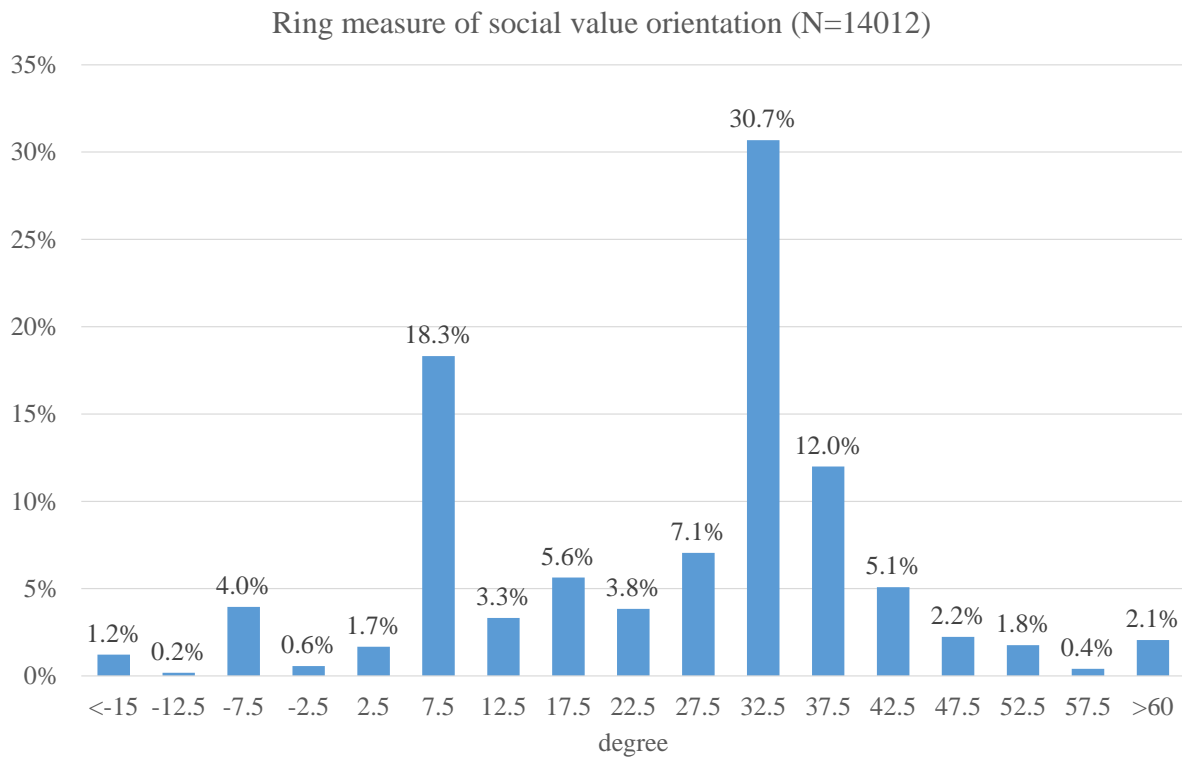


Figure 67 Ring measure of social value orientation.

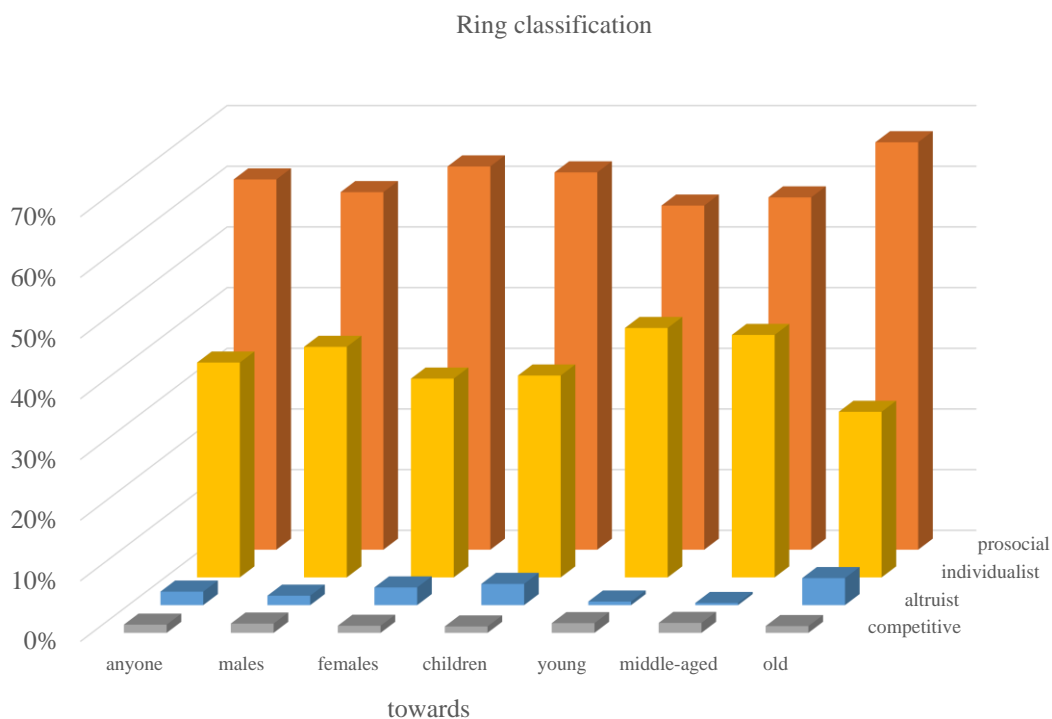


Figure 68 Frequency of social attitudes by type of recipient.

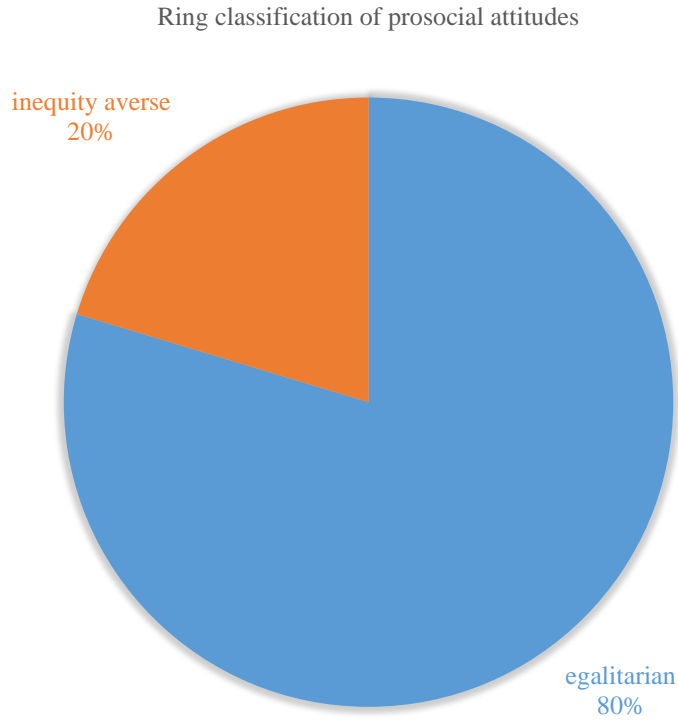


Figure 69 Frequency of alternative pro-social attitudes.

Two questions were asked about the distribution of income between three people. Respondents should choose between an income distribution that is higher on average but more unequal and one that is lower on average but more equal. The first question was centred on the 70th percentile of the UK income distribution, the second question on the 40th percentile. Half of the respondents were shown female names, half were shown male names.

Respondents who prefer a more equal but lower income distribution are said to be more inequity averse. We here estimate two parameters that describe inequity aversion (Bergson 1954, 1938, Samuelson 1956). The rate of inequity aversion γ and the subsistence, or reserve, income \underline{Y} follow from equating the income distribution from the two choice-sets

$$\sum_{i=1}^3 \frac{(Y_{i,1}^H - \underline{Y})^{1-\gamma}}{1-\gamma} = \sum_{i=1}^3 \frac{(Y_{i,2}^H - \underline{Y})^{1-\gamma}}{1-\gamma}$$

$$\sum_{i=1}^3 \frac{(Y_{i,1}^L - \underline{Y})^{1-\gamma}}{1-\gamma} = \sum_{i=1}^3 \frac{(Y_{i,2}^L - \underline{Y})^{1-\gamma}}{1-\gamma}$$

and solving for γ and \underline{Y} , while minimizing the distance of \underline{Y} to zero.

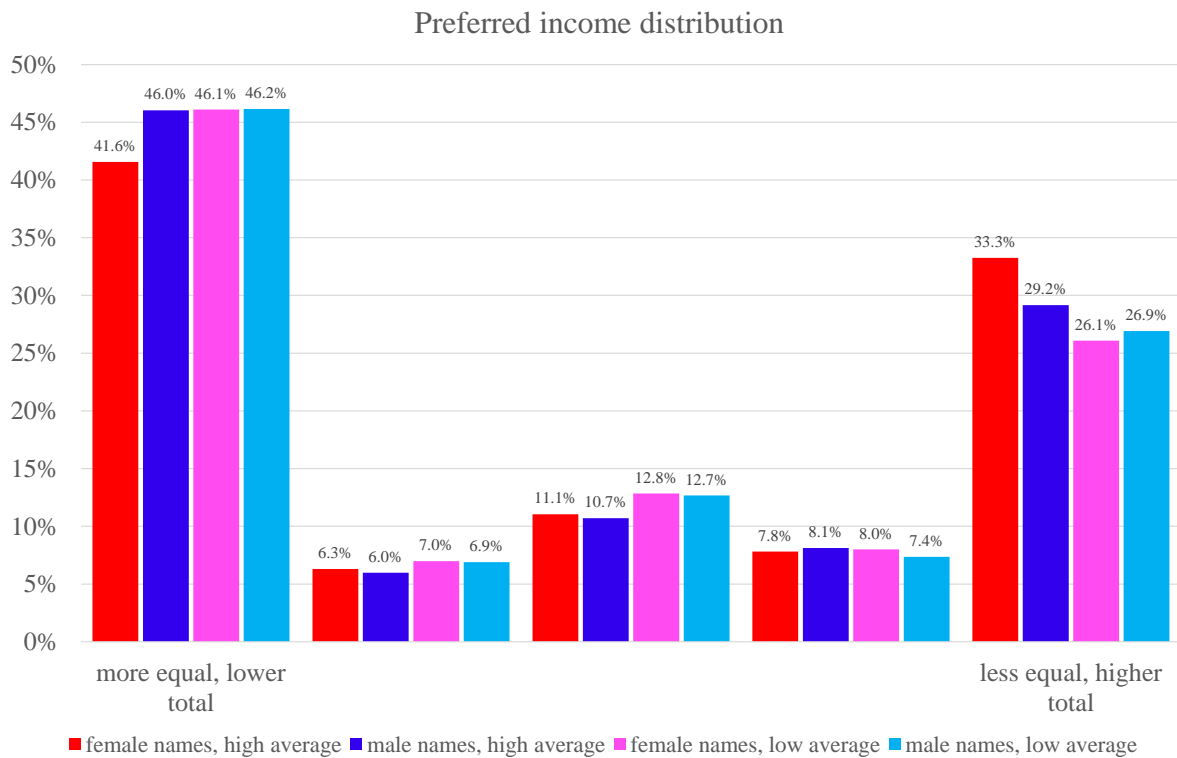


Figure 70 Preferences over the income distribution by objects' gender and respondents' income.

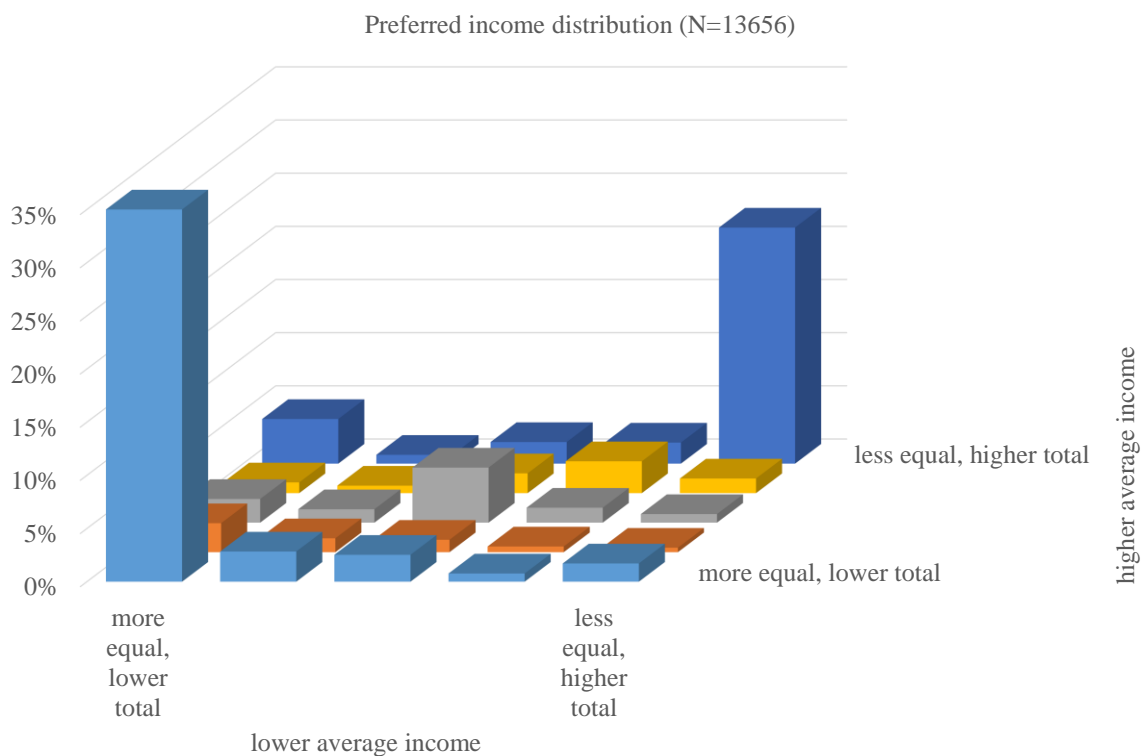


Figure 71 Preferences over the income distribution by objects' income.

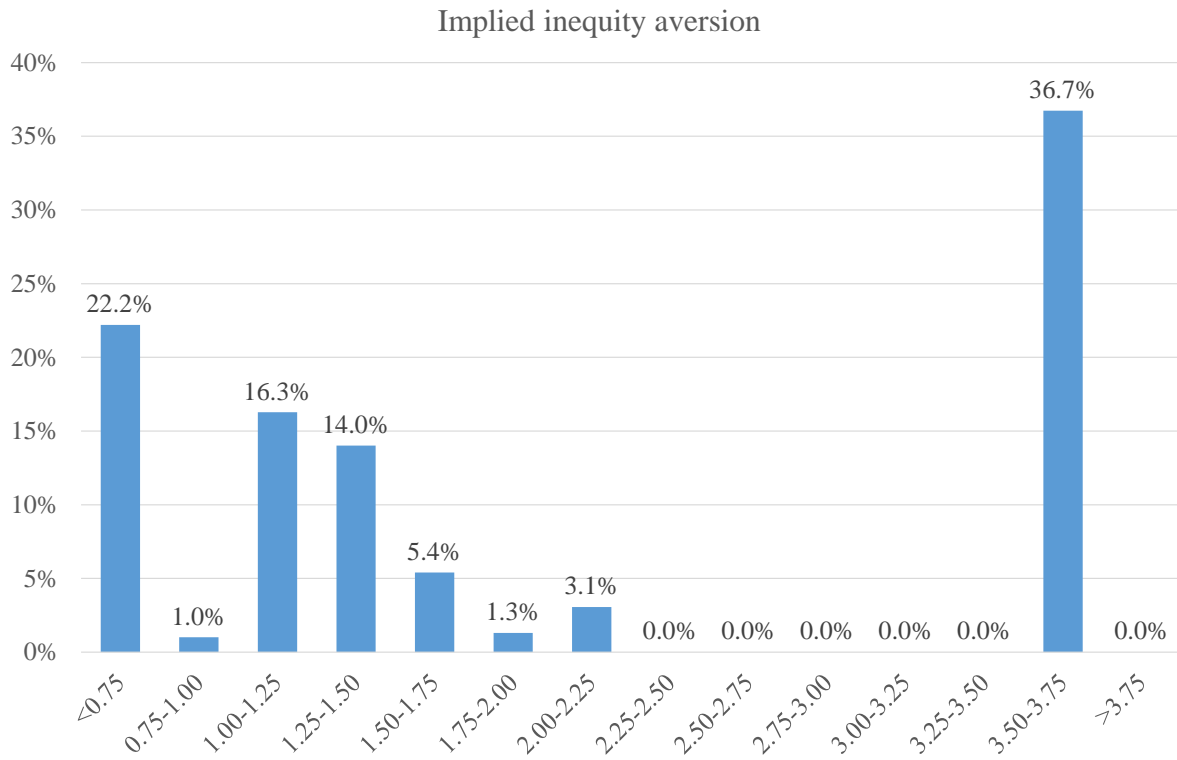


Figure 72 Aversion to income inequality.

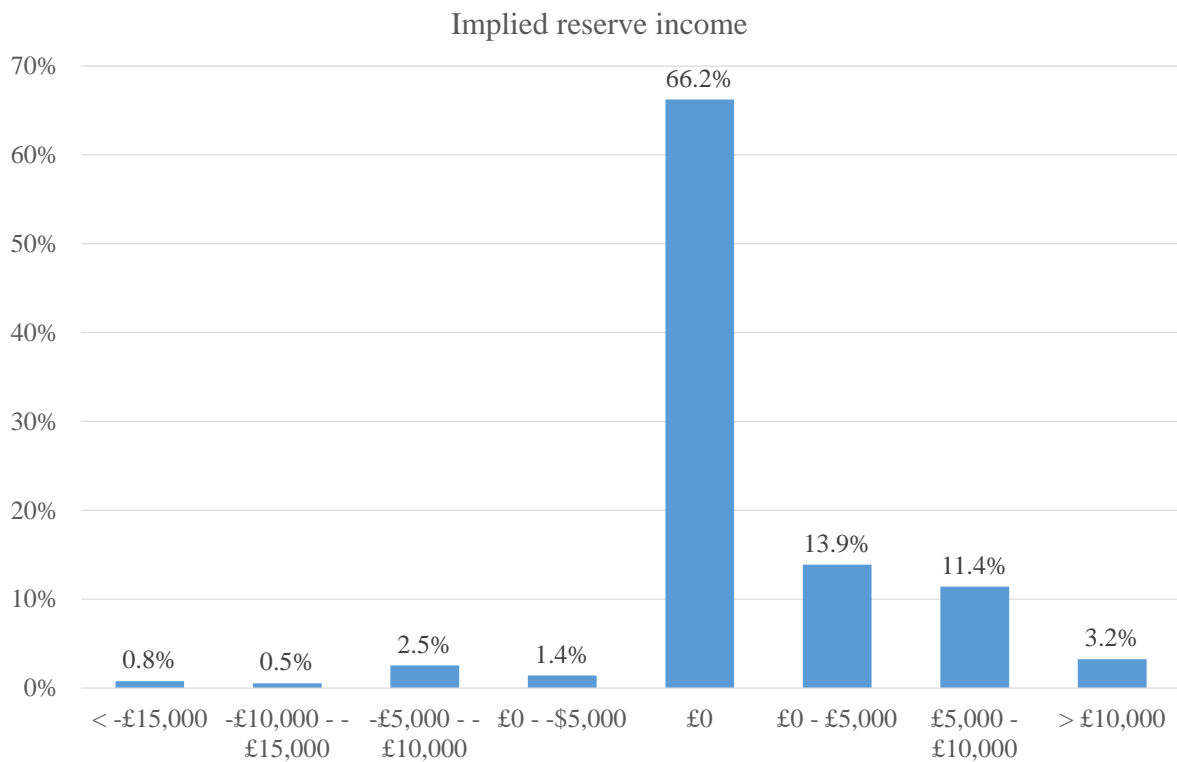


Figure 73 Reserve income.

Table 11 Descriptive statistics for other-regarding preferences.

	mean	st dev	median	mode	#obs
Social-value orientation	25.8	16.1	33.2	34.8	14011
Inequity aversion	2.0	1.3	1.5	3.7	13655
Reserve income	911	5276	0	0	13655

4.4. Progress (Q21, Q22)

These questions were inspired by Corneo and Grüner (2002).

Q21 Compared with your parents when they were about your age, are you better or worse in your income and standard of living generally? (N=14535)

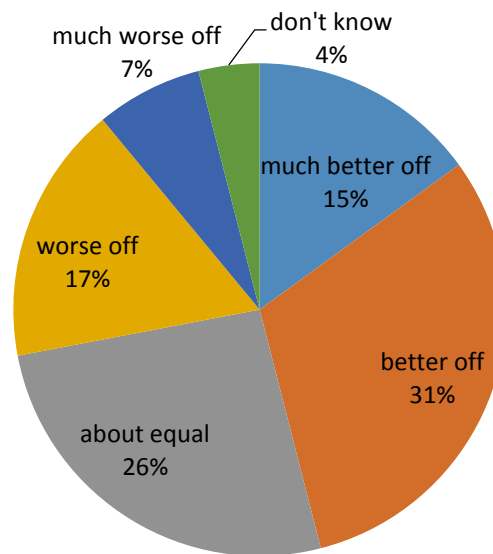


Figure 74 Standard of living compared to parents.

Q22 Compared with you, do you think that your children, when they reach your age, will be better or worse in their income and standard of living generally? (N=14531)

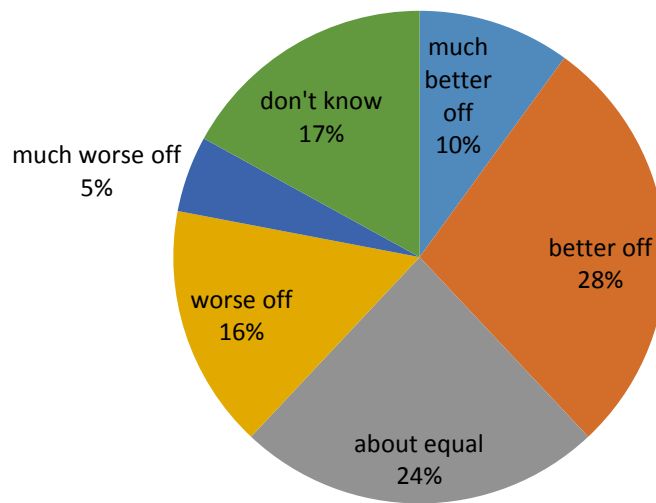


Figure 75 Expected standard of living of children compared to self.

Q21 asks how respondents compared to their parents at the same stage of their lives. Q22 asks how respondents expect their children to compare relative to themselves. Combining the two questions in Figure 76 reveals that most respondents (55%) think that their children will be better off than themselves, and that they themselves are better off than their parents. The second largest group (14%) thinks that nothing has changed or will change, while 12% believe in a seminal decline of well-being from one generation to the next.

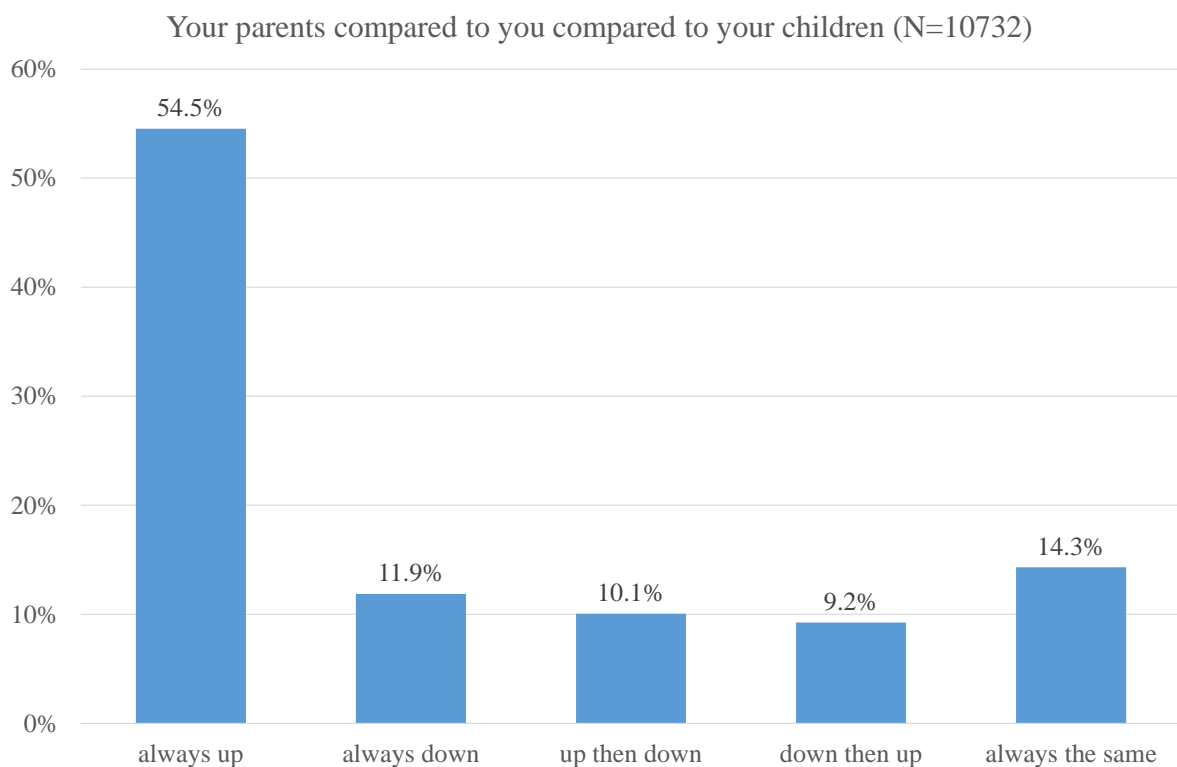


Figure 76 Standard of living of respondent's parents, respondent, and respondent's children.

4.5. Numeracy and financial literacy (Q25, Q26, Q27, Q29, Q30, Q31)

A bat and a ball cost £5.50. The bat costs £5.00 more than the ball. How much does the ball cost? (N=16993)

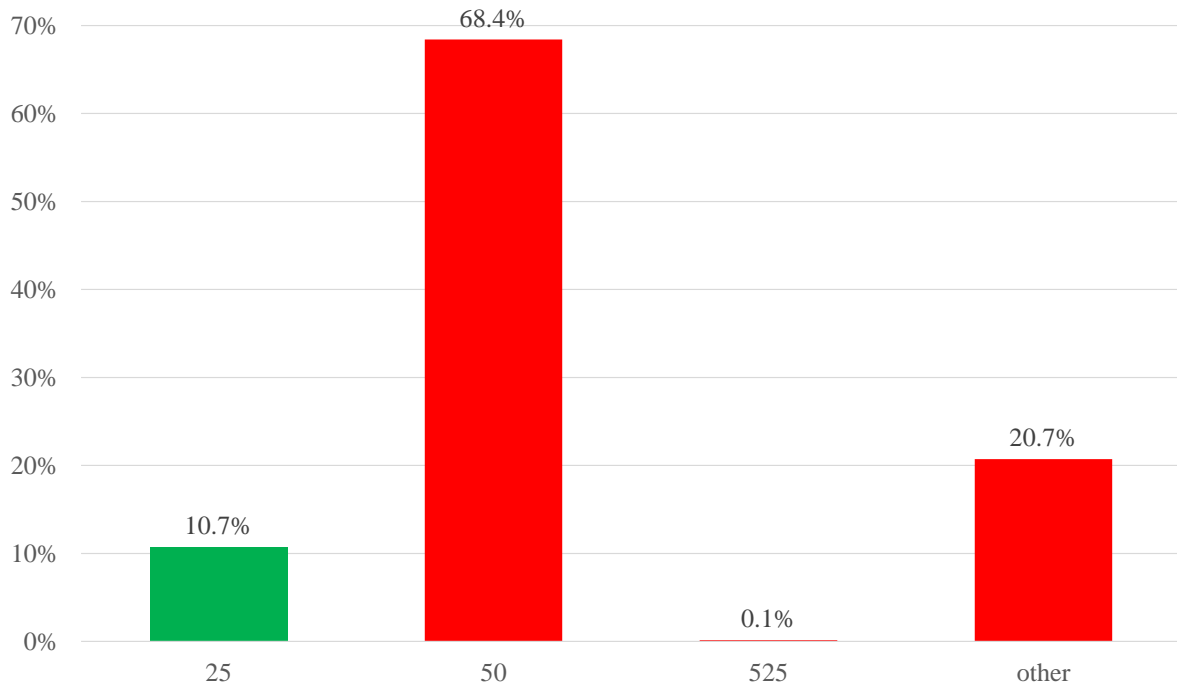


Figure 77 Frequency of answers to a mathematical problem.

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? (N=17011)

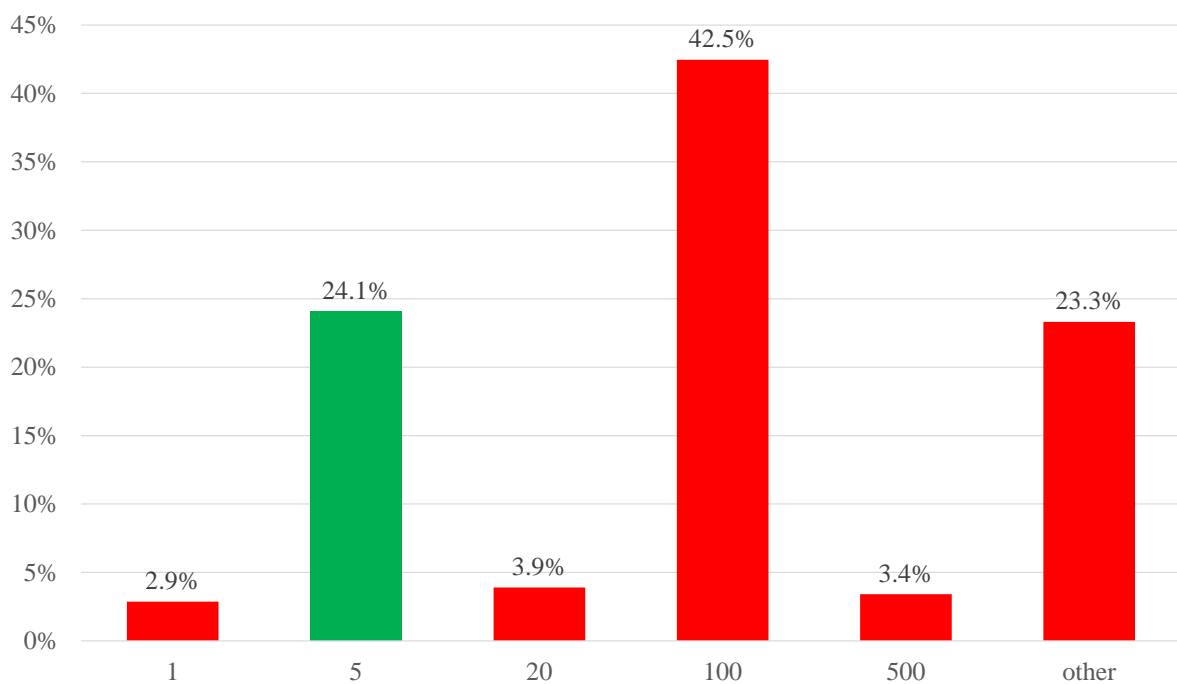


Figure 78 Frequency of answers to a second mathematical problem.

In a lake, there is a patch of lily pads. Every day, the patch doubles in size.
If it takes 48 days for the patch to cover the entire lake, how long would it
take for the patch to cover half of the lake? (N=16997)

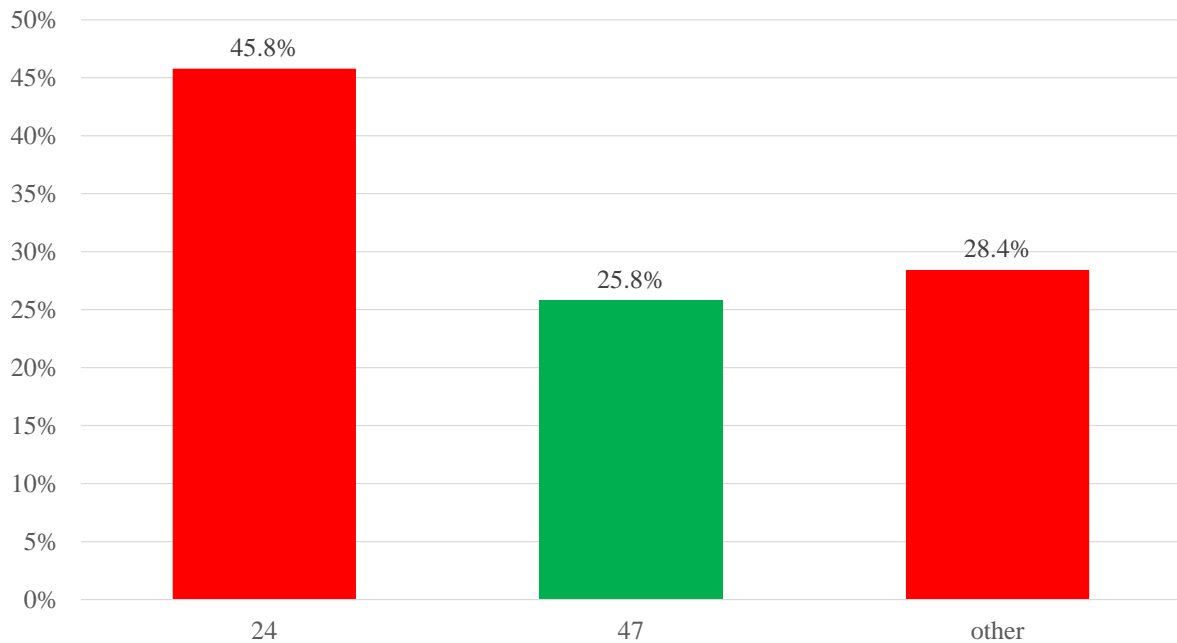


Figure 79 Frequency of answers to a third mathematical problem.

These questions were taken from Frederick (2005). The numeracy score equals the number of correct answers to Questions 25, 26 and 27.

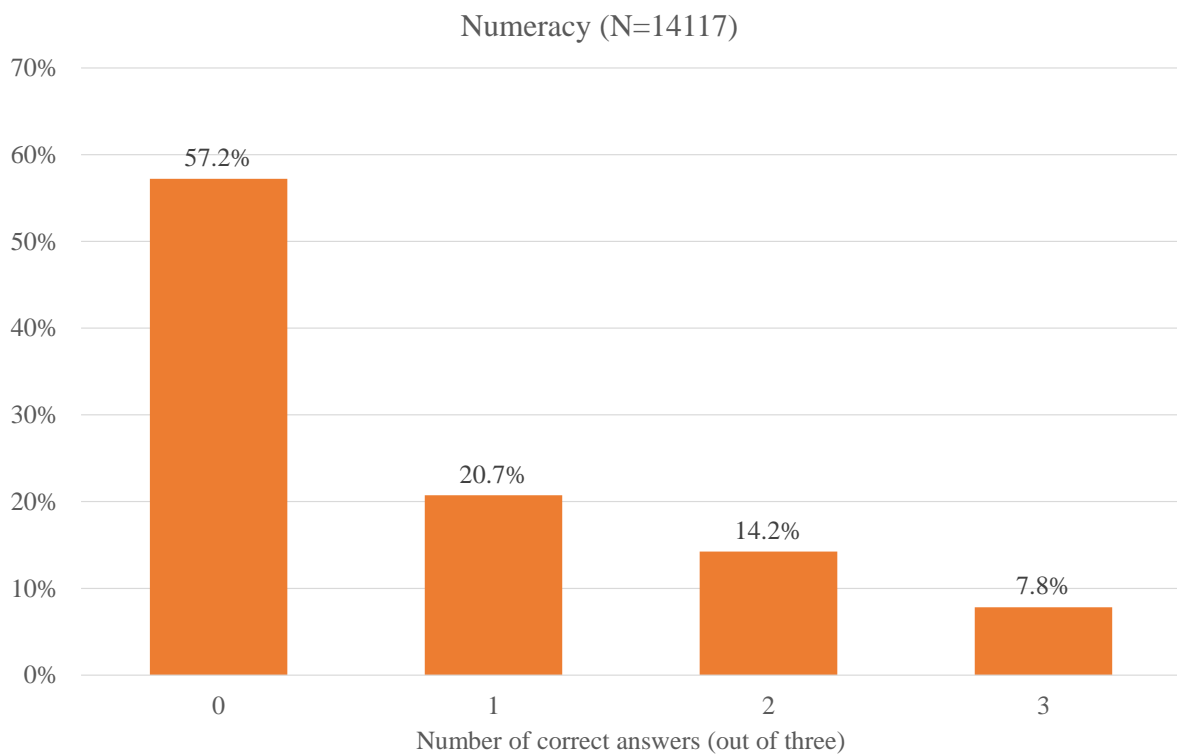


Figure 80 Number of correct answers to three mathematical problems.

Q29: Suppose you had £100 in a savings account and the interest rate was 2 percent per year. After 5 years, how much do you think you would have in the account if you left the money to grow? (N=13846) Correct answer is “more ...”.

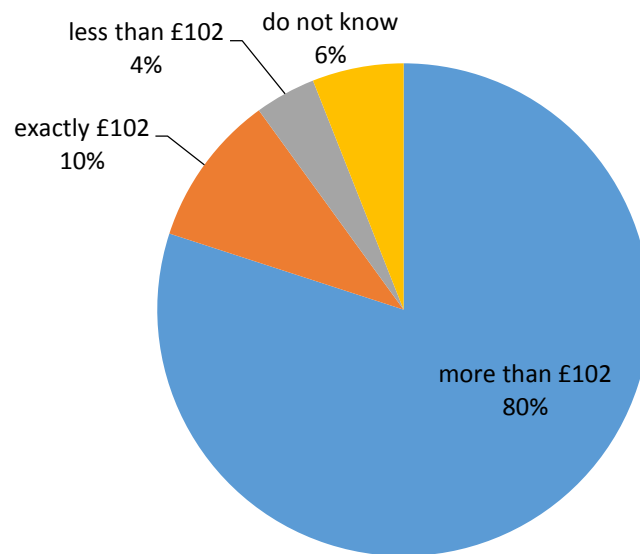


Figure 81 Frequency of answers to a financial question.

Q30 Imagine that the interest rate on your savings account was 1 percent per year and inflation was 2 percent per year. After 1 year, would you be able to buy ... (N=13843) Correct answer is “less ...”.

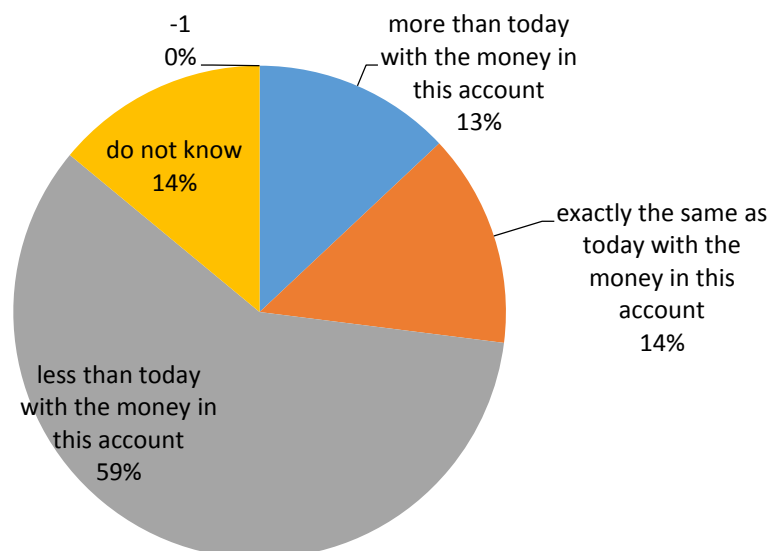


Figure 82 Frequency of answers to another financial question.

Q31 Do you think that the following statement is true or false? “Buying a single company share usually provides a safer return than a mix of shares.” (N=13841) Correct answer is “false”.

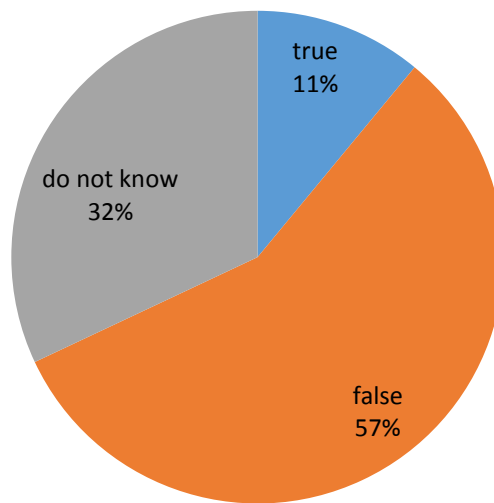


Figure 83 Frequency of answers to a third financial question.

These questions were taken from Lusardi and Mitchell (2014). The financial literacy score equals the number of correct answers to Questions 29, 30 and 31.

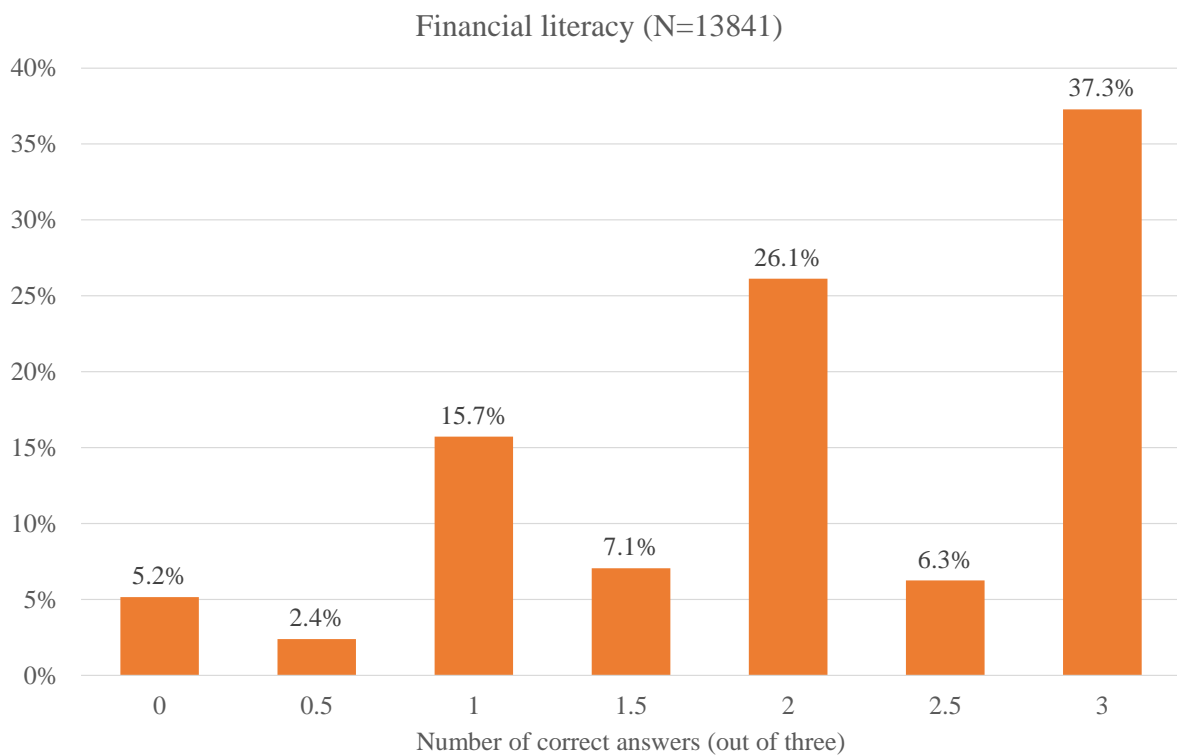


Figure 84 Number of correct answers to three financial questions.

4.6. Political orientation (Q34, Q35, Q36)

The following questions were taken from the British Social Attitudes Survey 2013.³

Q34 Government should redistribute income from the better off to those who are less well off. (N=13691)

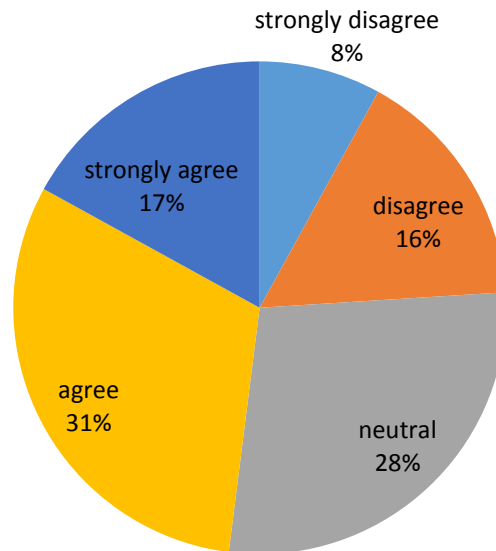


Figure 85 Agreement to statement that government should redistribute income.

Q35 Ordinary working people do not get their fair share of the nation's wealth. (N=13690)

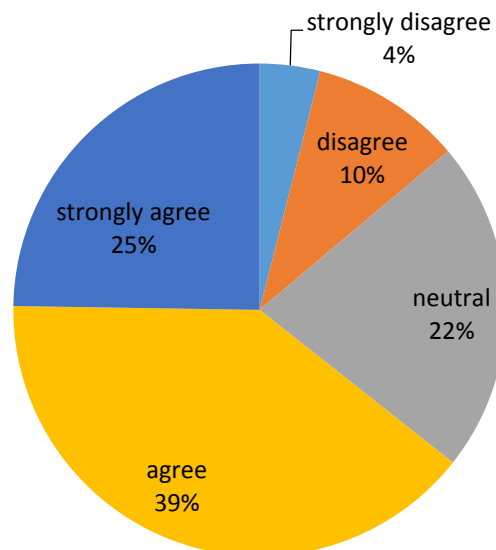


Figure 86 Agreement to statement that working people do not get their fair share.

³ <http://www.bsa.natcen.ac.uk/>

Q36 How important is hard work for getting ahead in life? (N=13659)

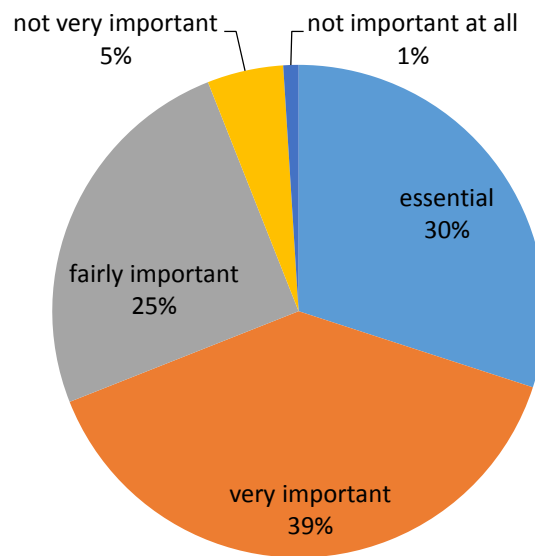


Figure 87 Agreement to statement that hard work is important.

5. Results: Health

The questions about health were posed to every other respondent. Half of these respondents were shown a picture with “I love the NHS”, the other half a picture with “NHS in crisis”.

5.1. Health status (Q38)

How is your health in general? Would you say it was ... (N=6755)

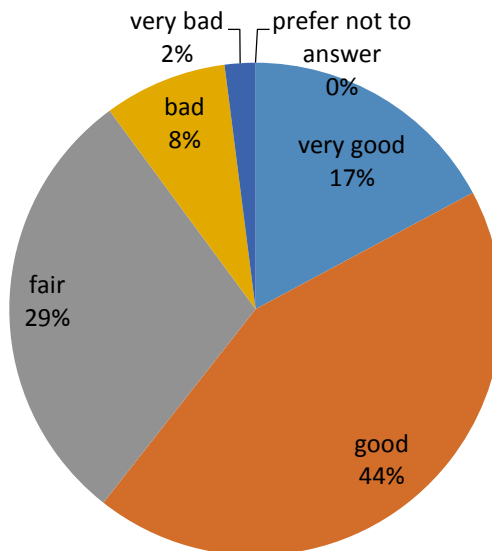


Figure 88 Self-assessed health status.

5.2. Health habits (Q39, Q40, Q41, Q42, Q43, Q44)

Q39. Have you ever smoked? (N=6755)

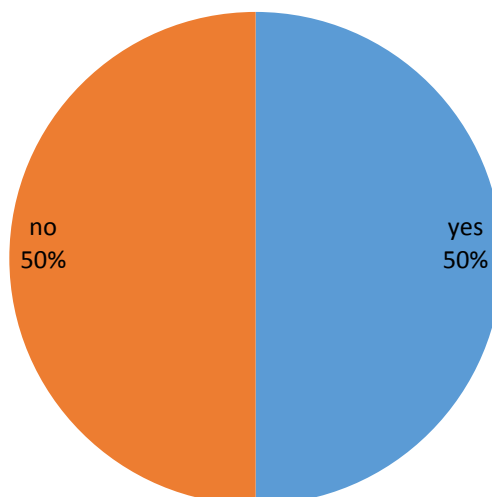


Figure 89 Life-time smoking habit.

Q40. Do you smoke at all nowadays? (smokers only; N=3384)

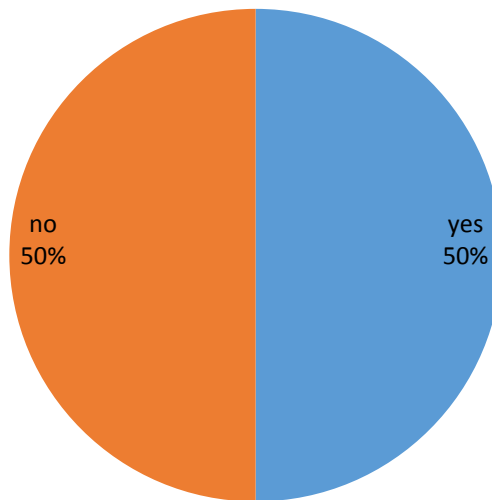


Figure 90 Current smoking habit.

Q41. Do you ever drink alcohol? (N=7655)

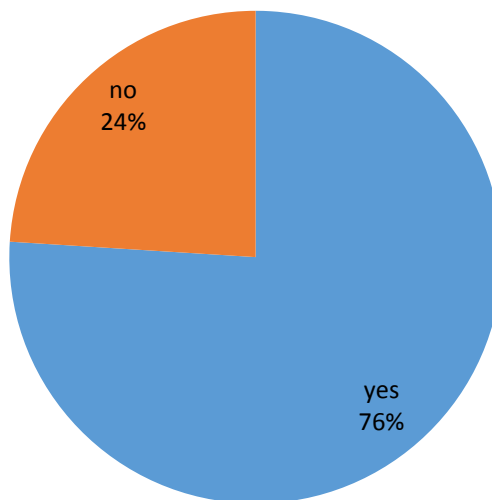


Figure 91 Current drinking habit.

Q42. Have you always been a non-drinker or did you stop drinking for some reason? (non-drinkers only; N=1647)

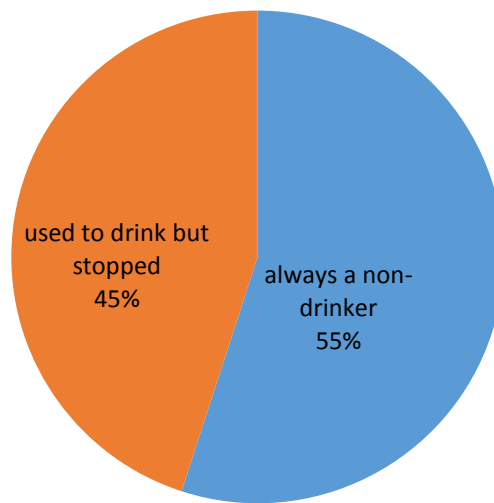


Figure 92 Life-time drinking habit.

Q43. How often have you had an alcoholic drink of any kind during the last 12 months? (drinkers only; N=5105)

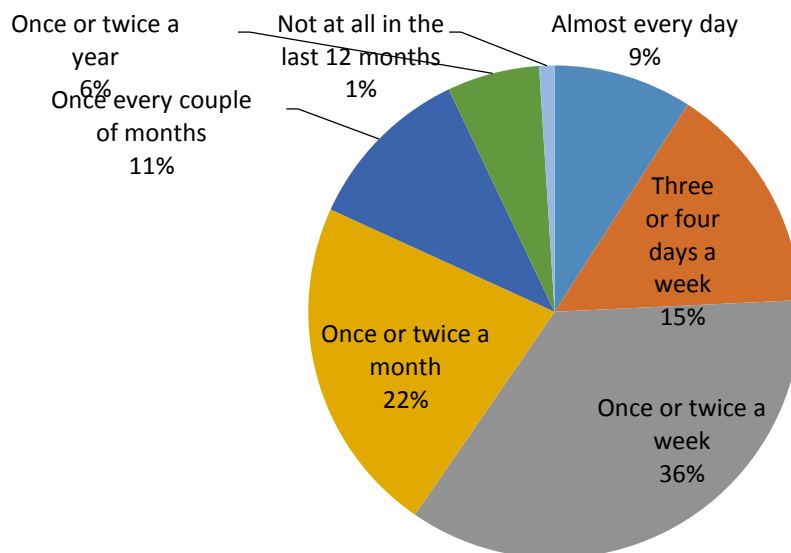


Figure 93 Frequency of alcohol use.

Q44. How often have you had physical exercise of any kind during the last 12 months?
(N=5397)

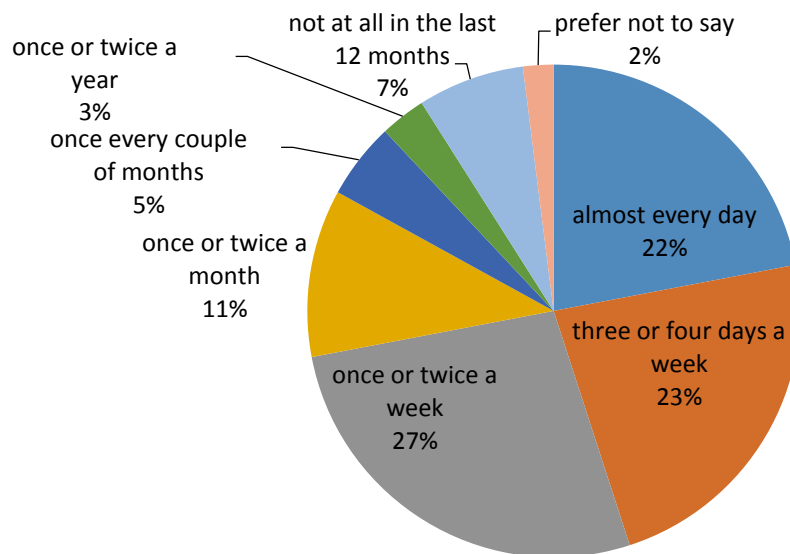


Figure 94 Frequency of physical exercise.

5.3. Height and weight (Q45, Q46)

We asked people about their height and weight. As asked them to report this in metres and kilogrammes, respectively, but some answered in feet and inches, or in stones and pounds.

We converted these answers into metres and kilogrammes to the best of our ability, but measurement error was introduced.

The body mass index is defined as weight over height squared. The NHS considers a healthy BMI to lie between 18.5 and 24.9.

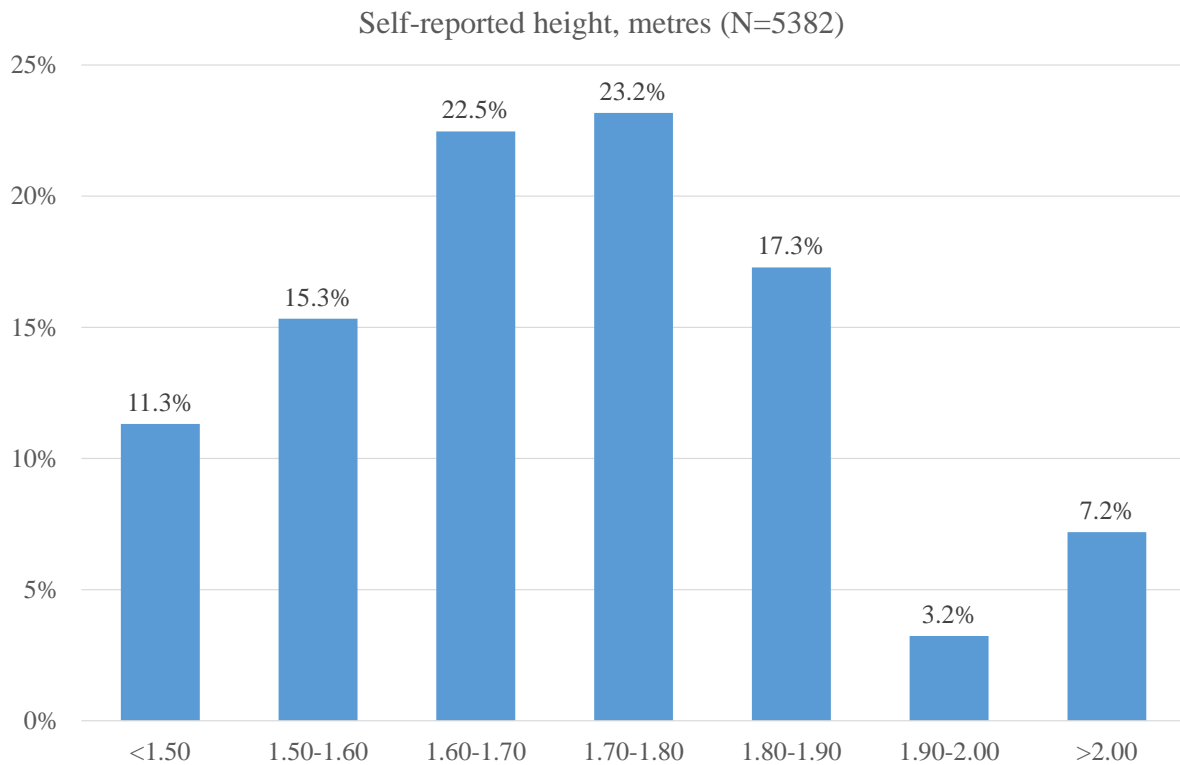


Figure 95 Self-reported height.

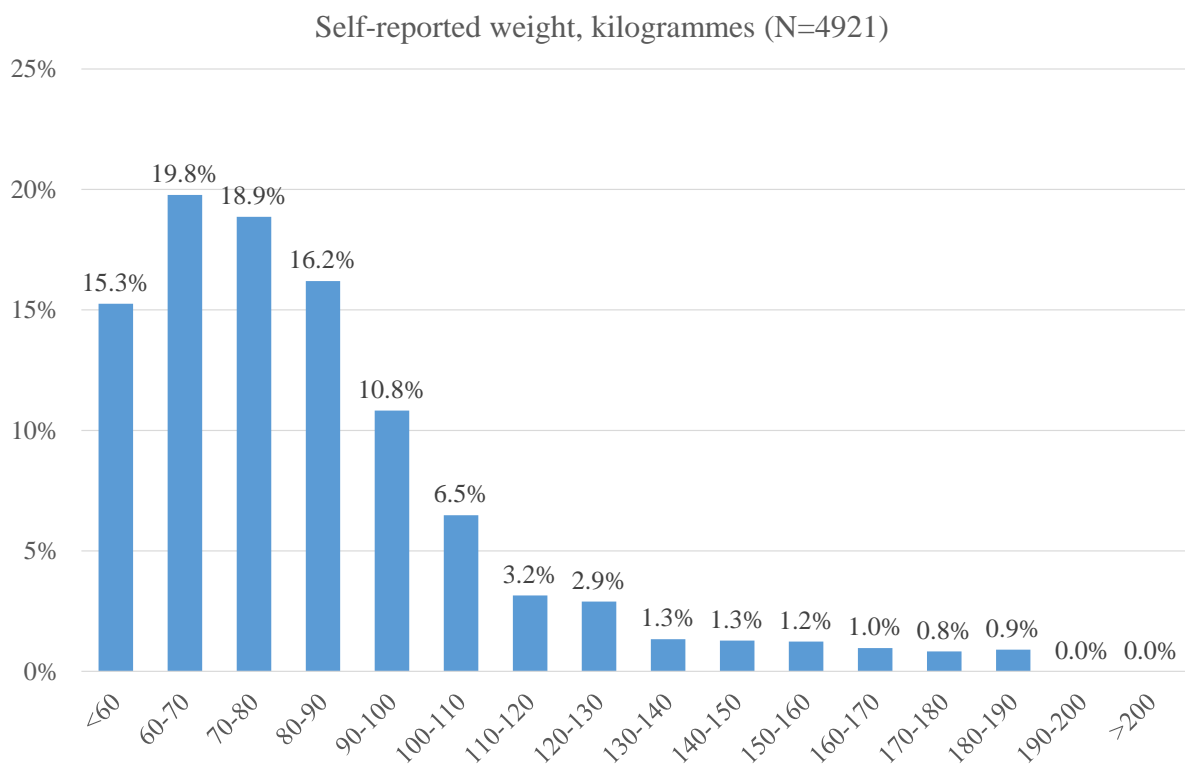
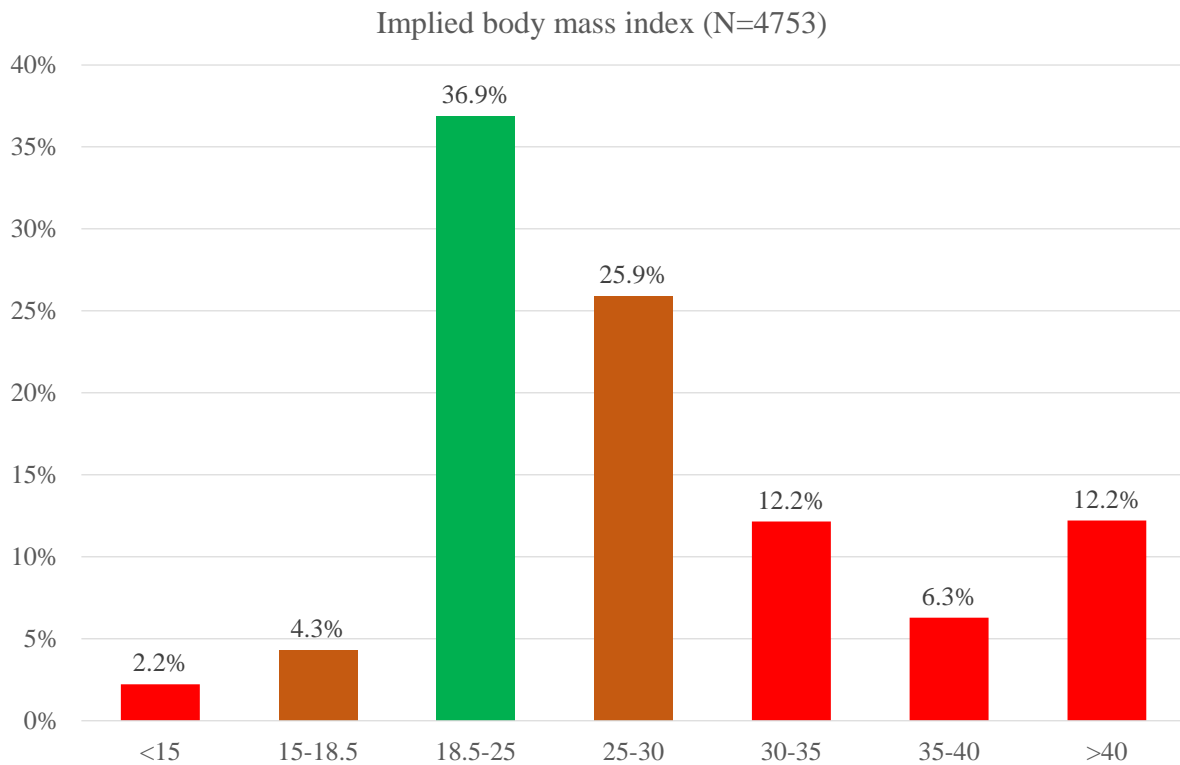


Figure 96 Self-reported weight.



5.4. National Health Service (Q47, Q48, Q49, Q50)

Q47. Do you agree? (N=6651)

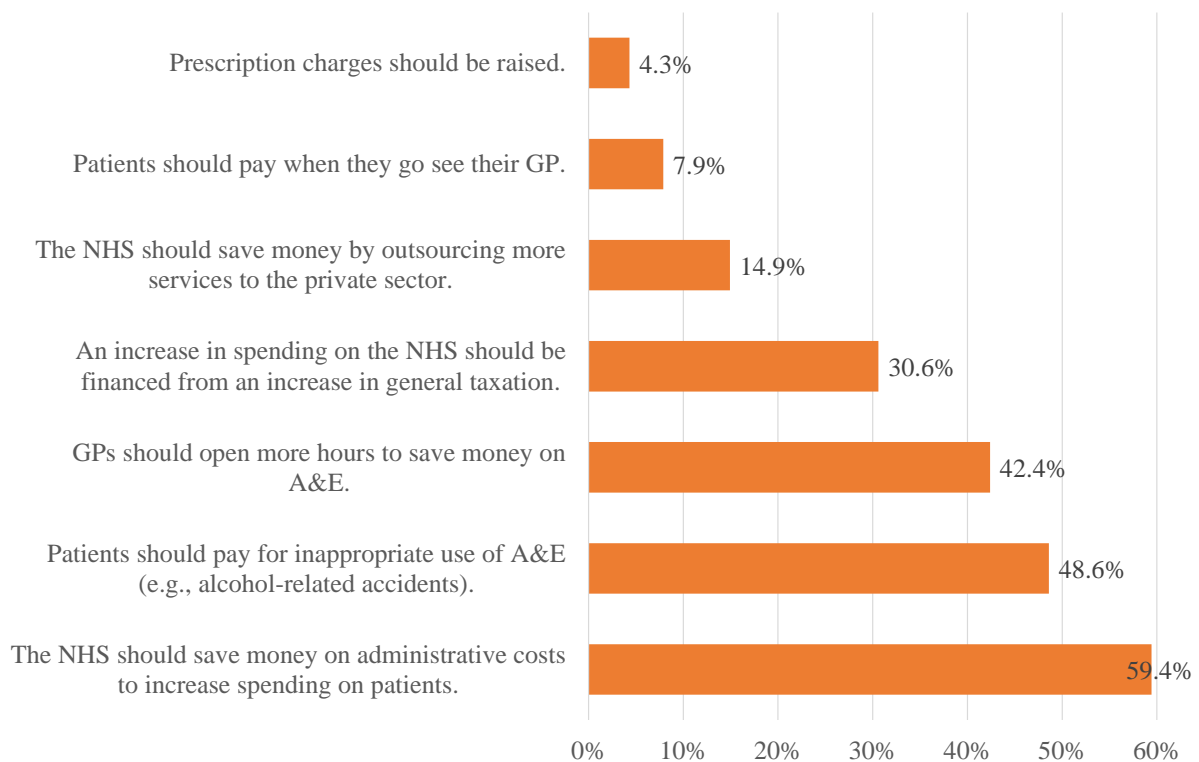


Figure 97 Attitudes towards NHS funding.

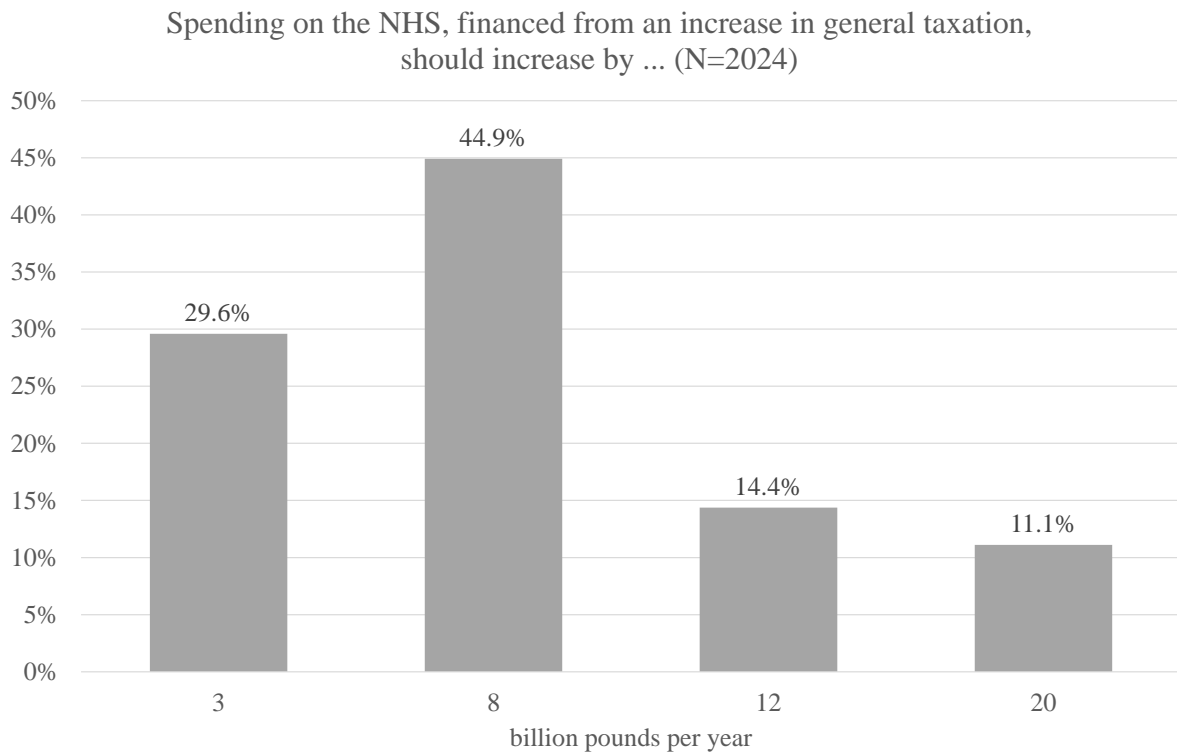


Figure 98 Increase in NHS funding.

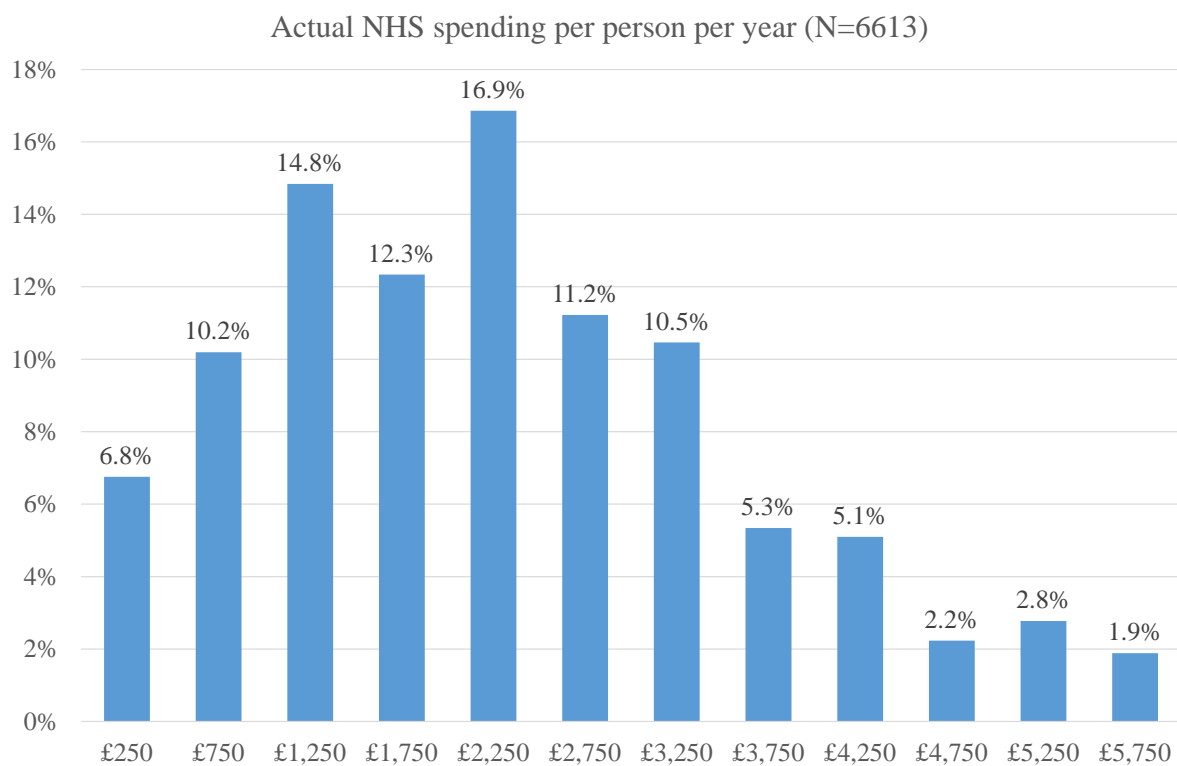


Figure 99 Perceived NHS spending per person per year.

Respondents were split randomly in three groups of equal size. Some were asked to answer on a scale of £0 to £4000, some on a scale of £0 to £5000, and some on a scale of £0 to £6000. Figure 100 shows that the results are similar across the three groups.

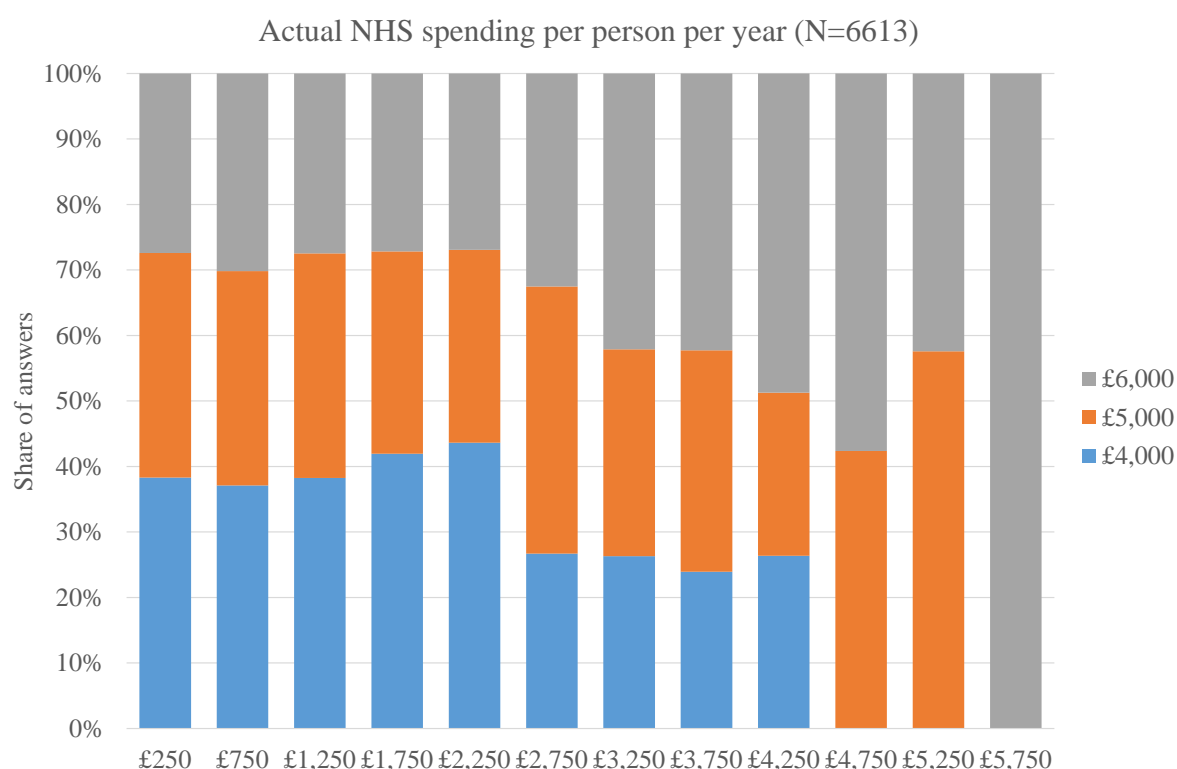


Figure 100 Respondents' perception of actual NHS spending by anchor given in question.

We then informed the interviewees that the National Health Service spends £1950 per person per year.⁴ The correlation between the perceived actual spending and the desired spending is 0.35.

⁴ See <http://www.nuffieldtrust.org.uk/data-and-charts/health-care-spending-person-uk>

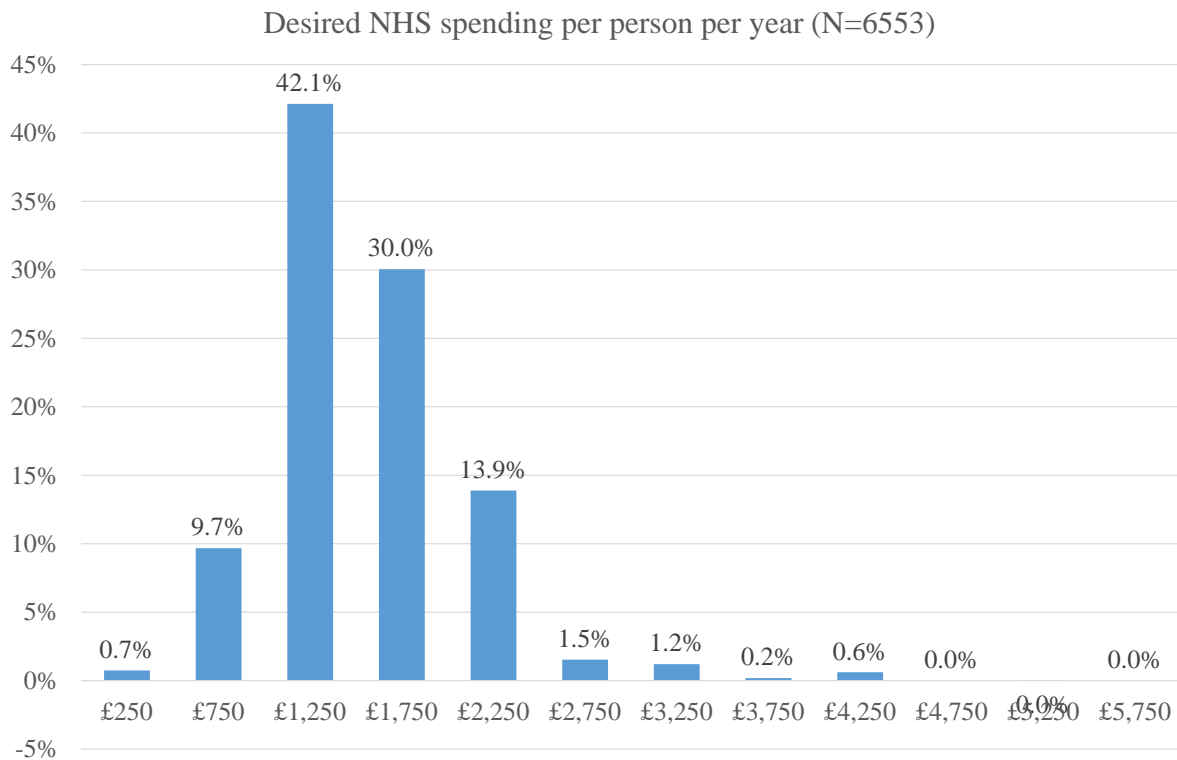


Figure 101 Desired NHS spending per person per year.

Respondents again were split randomly in three groups of equal size, as above. Figure 102 shows that the results are similar across the three groups.

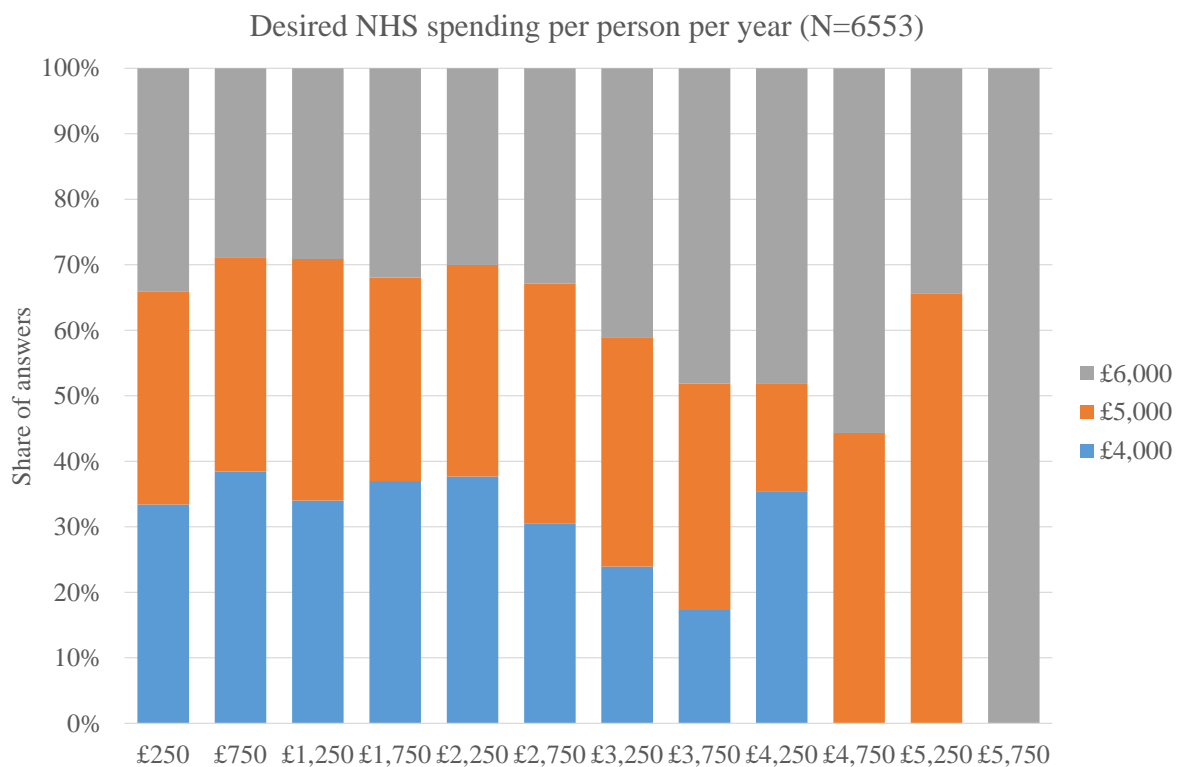


Figure 102 Respondents' desired NHS spending by anchor given in question.

6. Results: Pensions

The questions about pensions were posed to 50% of the respondents. Half of these respondents were shown a picture of an old man looking worriedly at a few coins, the other half a picture of a happy old man.

6.1. Source of income when retired (Q51; N=6687)

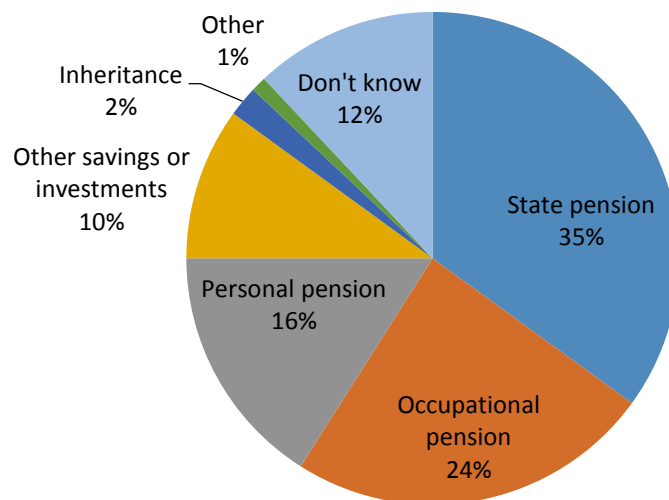


Figure 103 Expected main source of income when retired.

6.2. Responsibility for income when retired (Q52; N=6687)

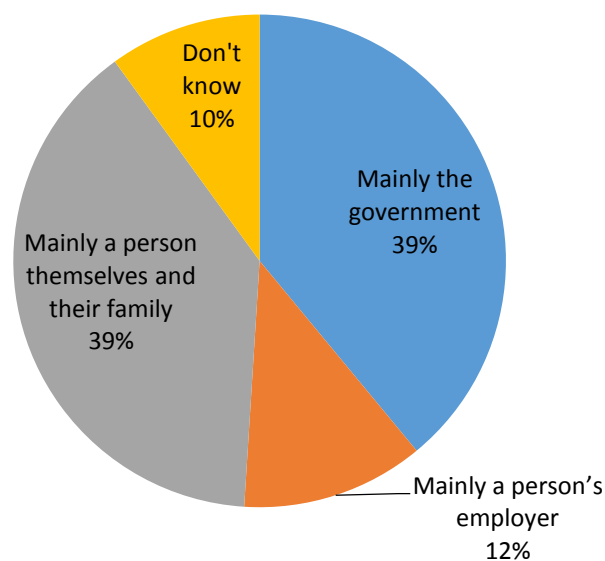


Figure 104 Main responsibility for income when retired.

6.3. Income when retired (Q53, Q54)

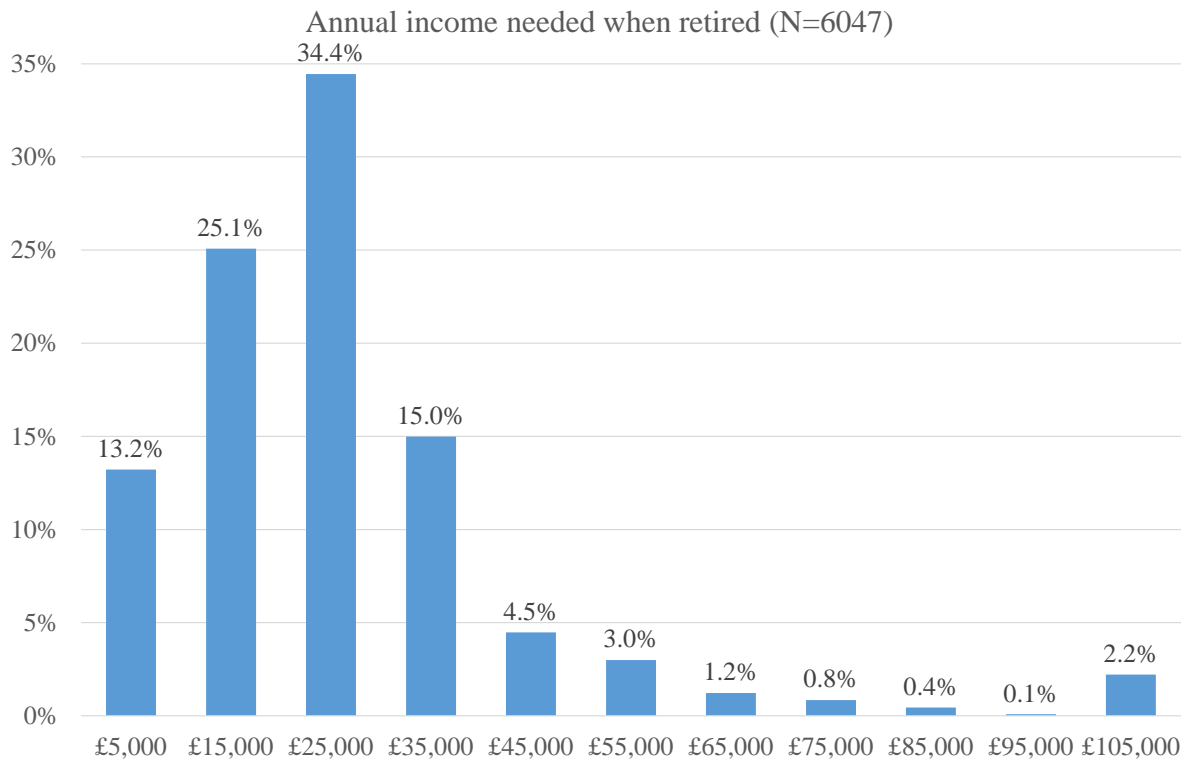


Figure 105 Annual income needed when retired.

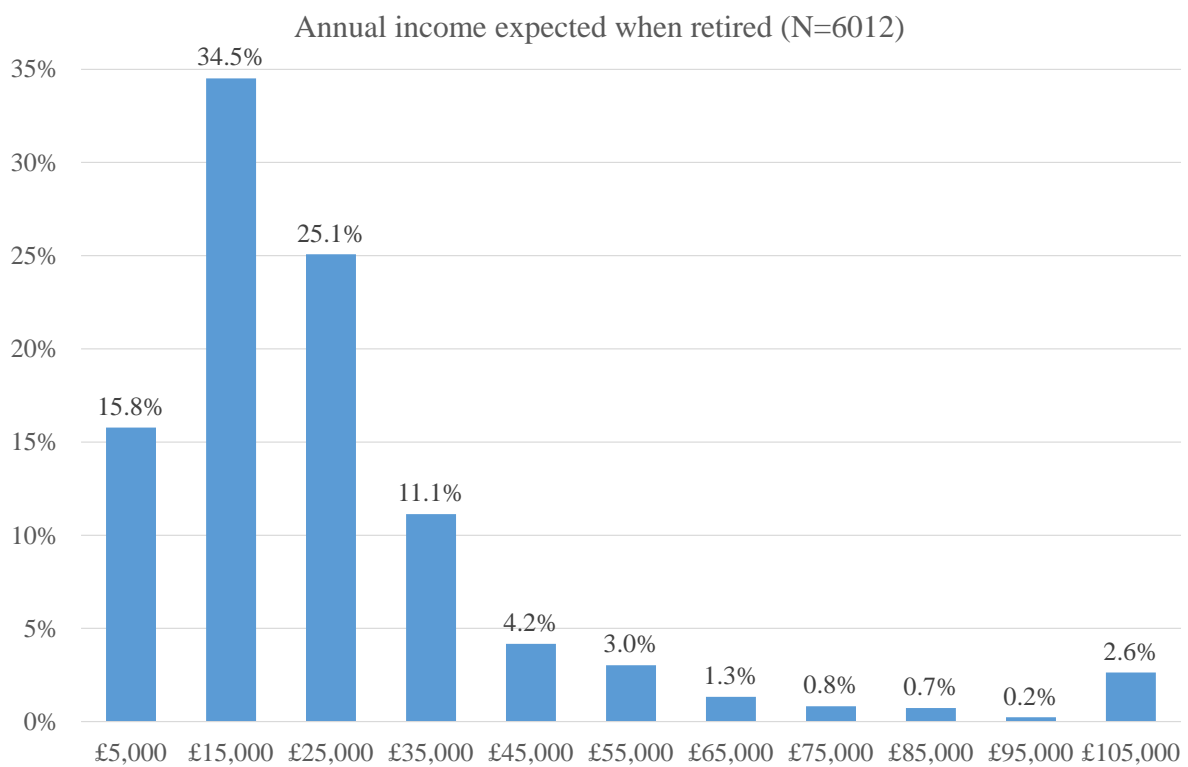


Figure 106 Annual income expected when retired.

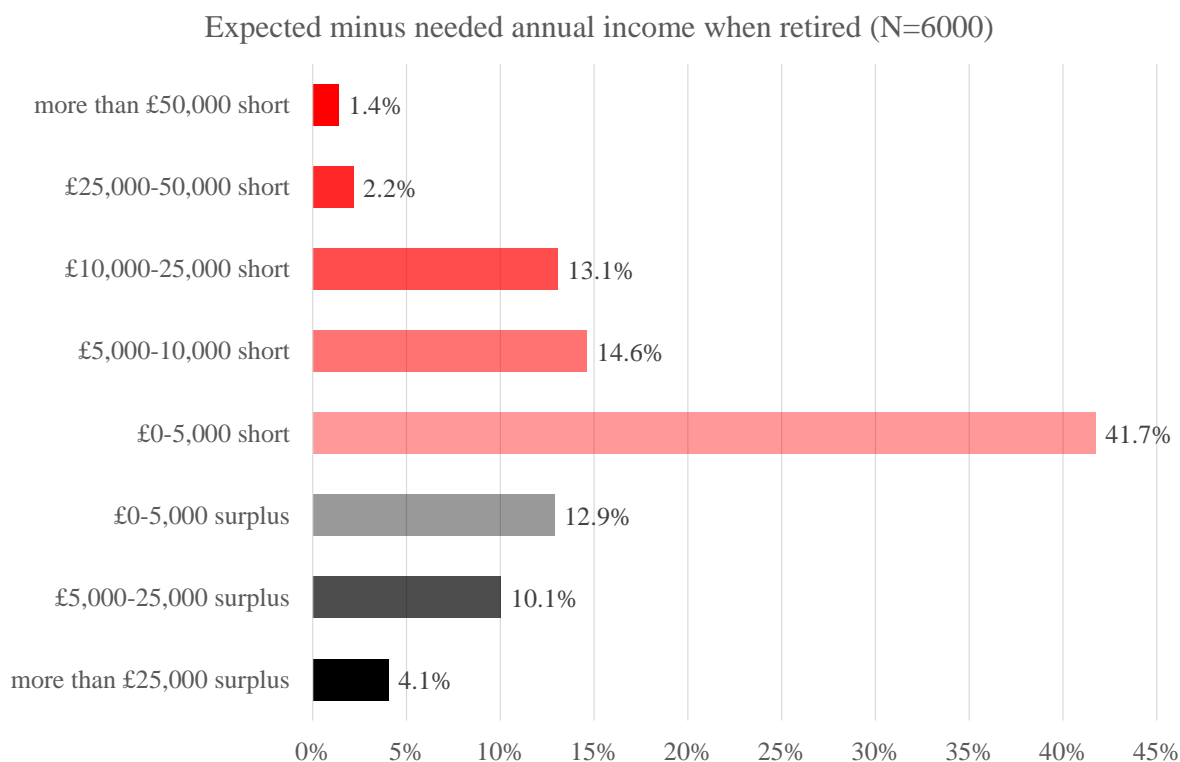
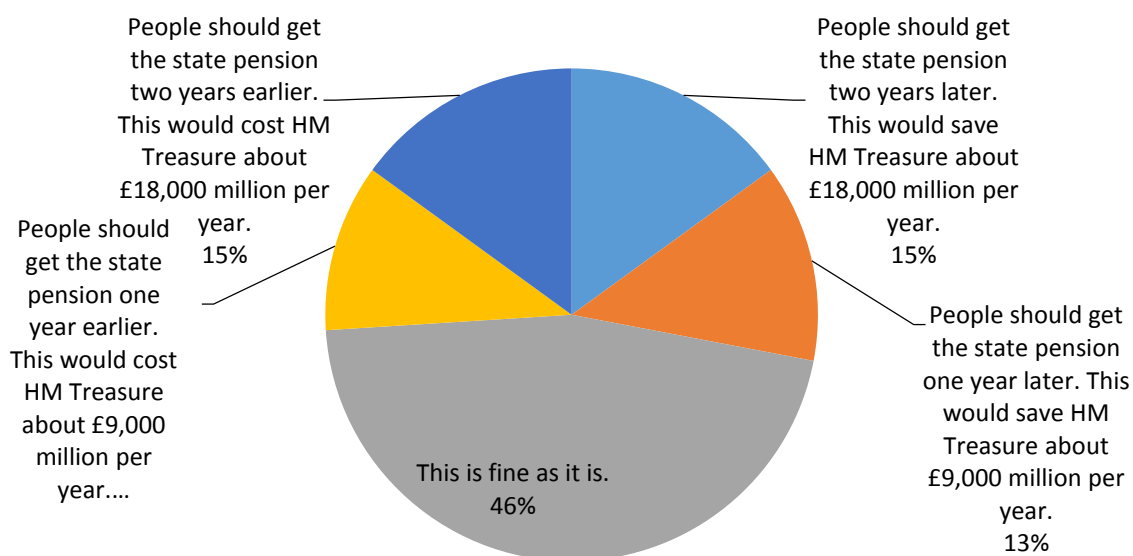


Figure 107 Difference between expected and needed annual income when retired.

6.4. State pension (Q55, Q56, Q57)

Q57. At the moment, women receive the state pension from 63 onwards and men from 65 onwards. As of 2018, men and women will receive the State Pension at 65. The pensionable age will go up to 66 by 2020, to 67 by 2028, and to 68 by 2046. What do you think of this? (N=6562)



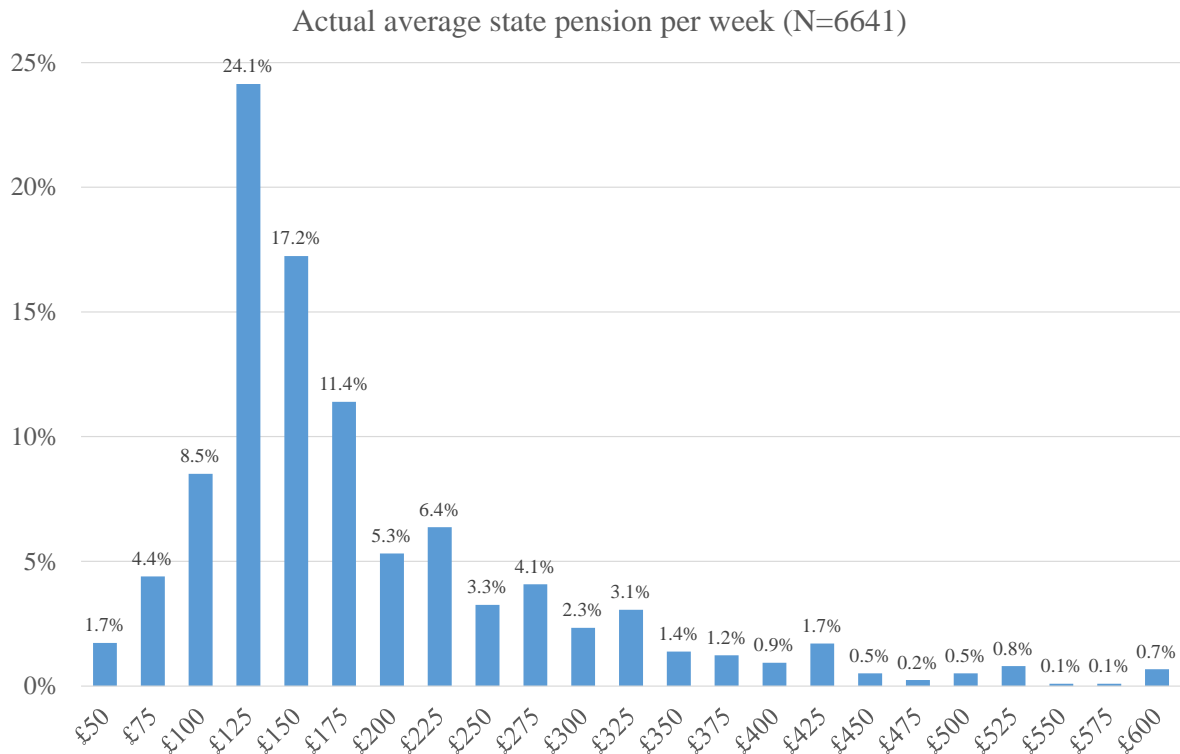


Figure 108 Perceived average state pension per week.

A third of respondents were asked to estimate the average state pension on a scale of £0 to £400, a third on a scale of £0 to £500 and a third on a scale of £0 to £600. This does not seem to affect the results.

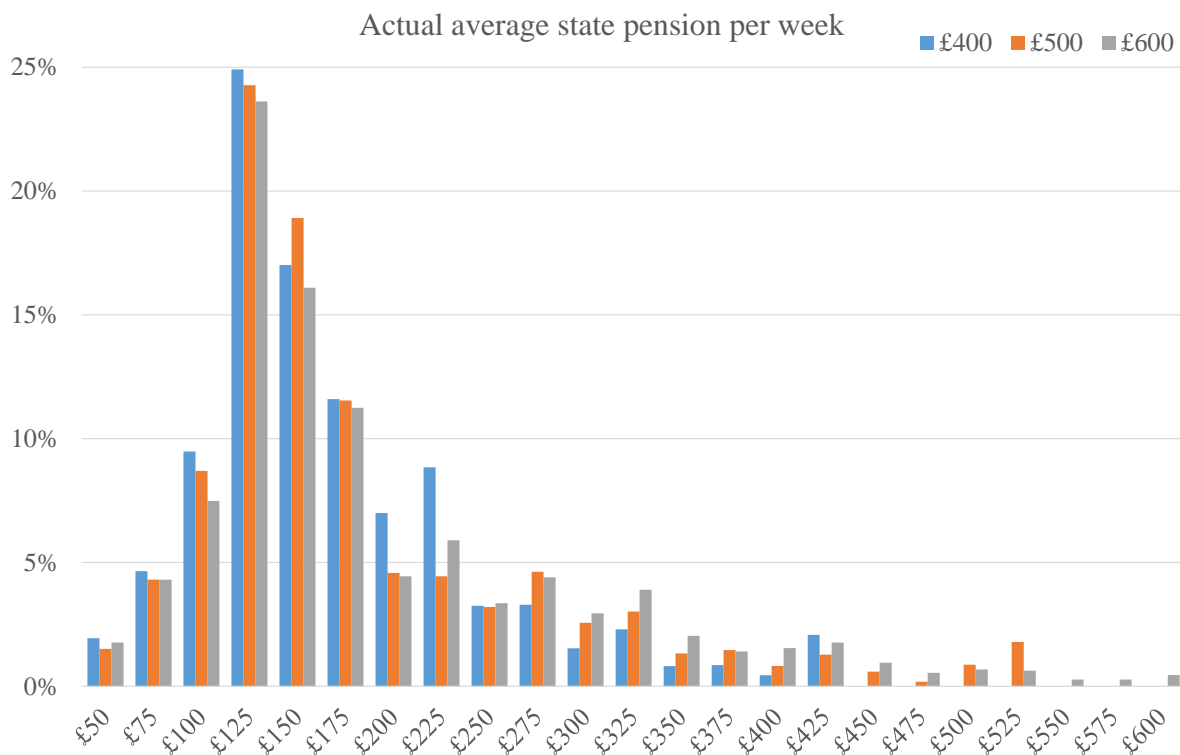


Figure 109 Perceived average state pension per week by response scale.

Respondents were informed that the average pensioner receives £105 per week from the state pension. In fact, it is £130/person/week.⁵ The correlation between the perceived actual and the desired state pension is 0.52.

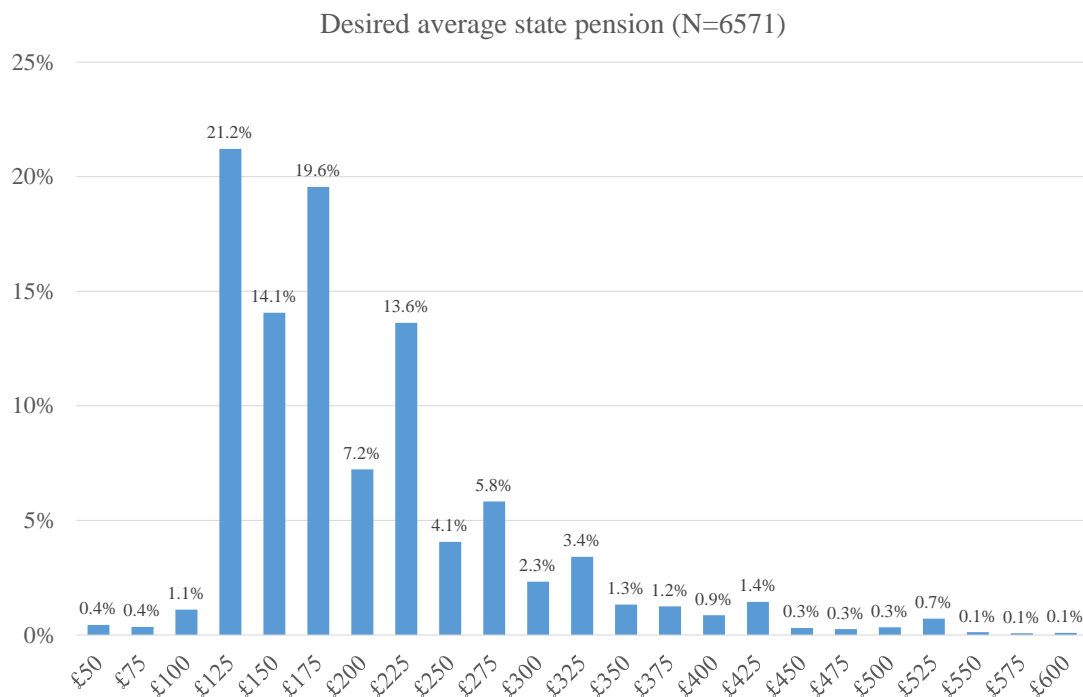


Figure 110 Desired average state pension per week.

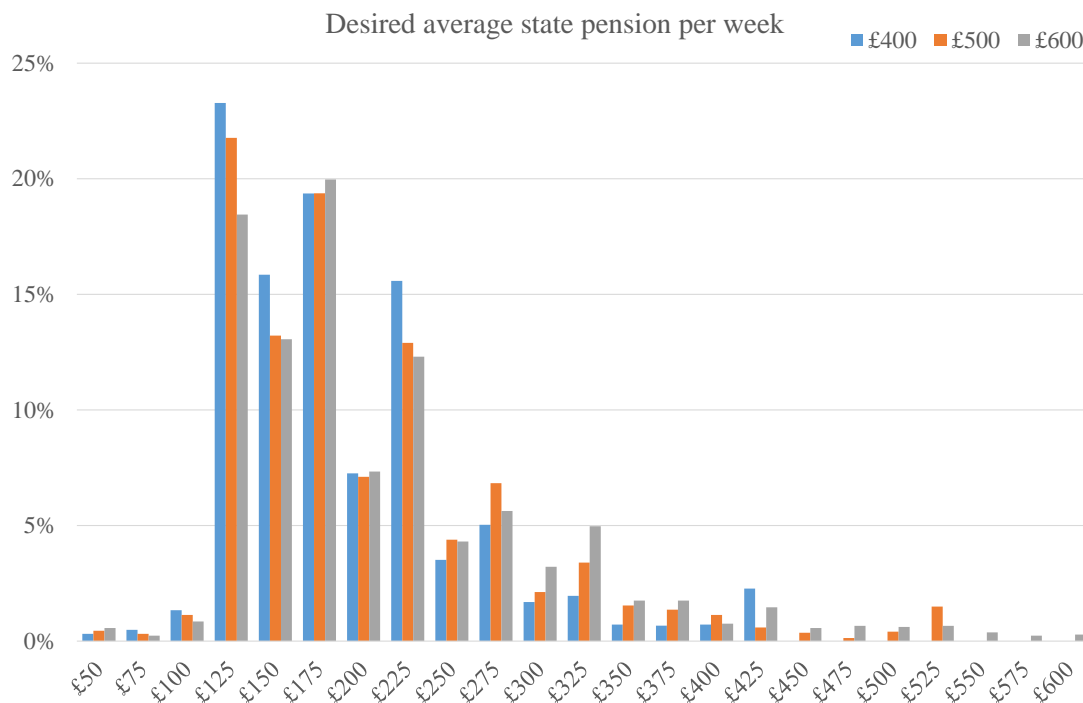


Figure 111 Desired average state pension per week by response scale.

⁵ See http://tabulation-tool.dwp.gov.uk/100pc/sp/ccdate/cnage/a_cawklyamt_r_ccdate_c_cnage.html

6.5. Largest bequest expected (Q58; N=6653)

Respondents were asked how much they would expect to inherit. For simplicity, we only asked about the largest bequest. We did not ask when or from whom they would expect an inheritance.

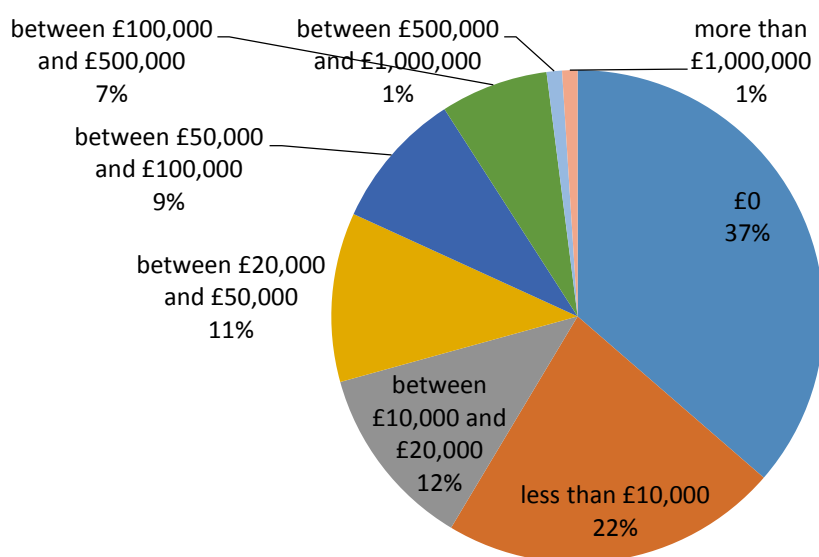


Figure 112 Largest bequest expected.

6.6. Life expectancy (Q59)

Respondents were asked to estimate the probability that they would live to a certain age. For instance, those who had earlier indicated that they were between 45 and 54, were asked for the chance that they would be alive at 55, 65, 75, 85 and 95 years of age. The graph below contrasts the results with the same information taken from the ONS National Life Tables 2012-2014.⁶

Some respondents gave inconsistent answers, that is, they gave a larger probability for living longer than for living shorter. Figure 114 shows the results without these respondents.

⁶ See <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-394848>

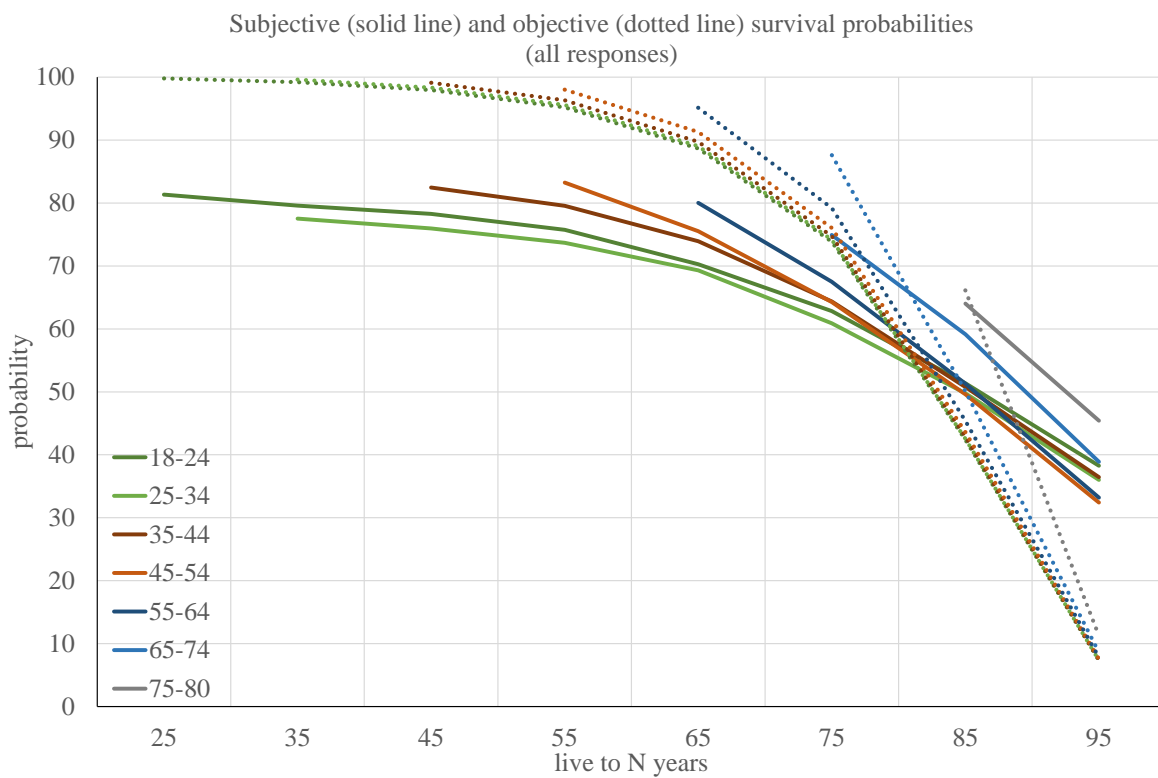


Figure 113 Perceived and actual survival probabilities by age group.

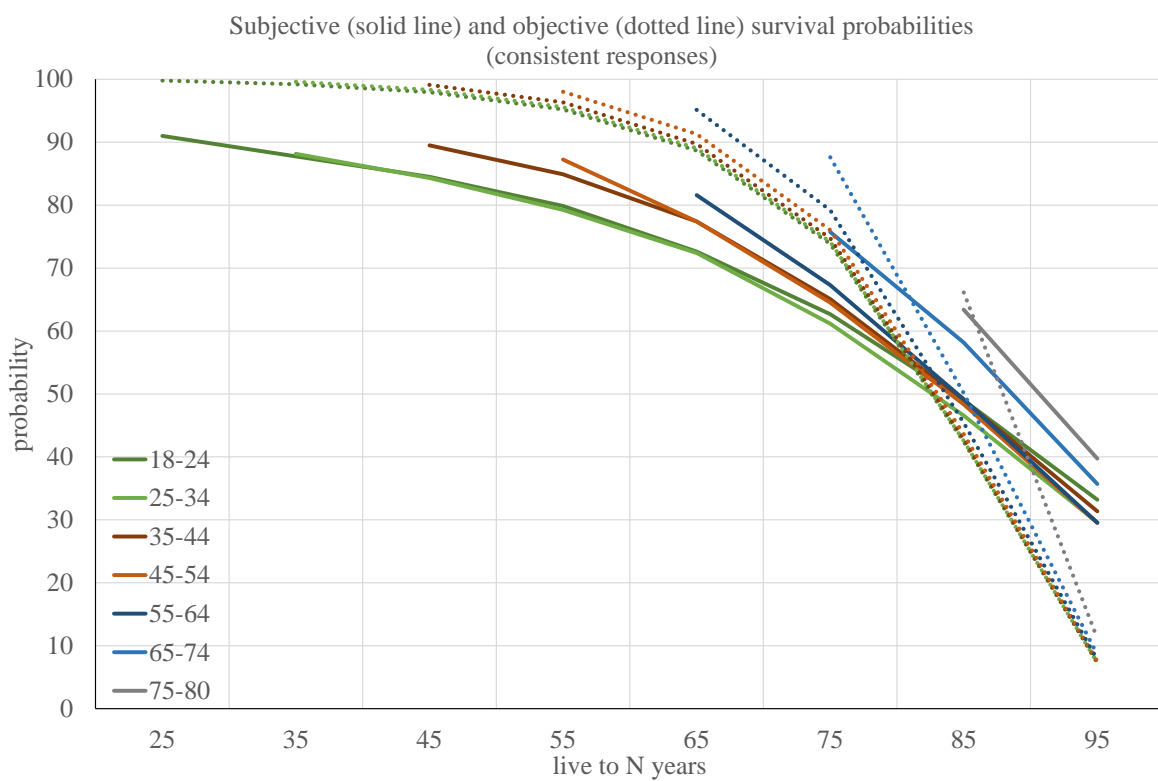


Figure 114 Perceived and actual survival probabilities by age group, inconsistent answers excluded.

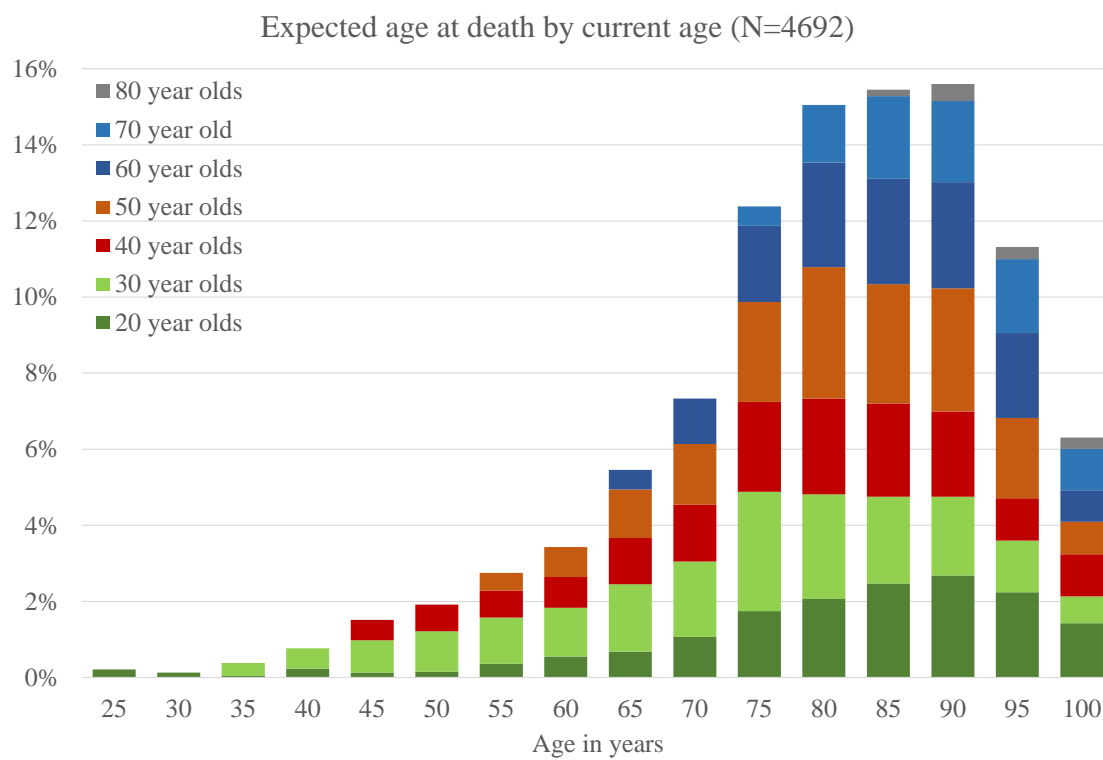


Figure 115 Expected age at death by current age.

7. Results: Education

The questions about education were posed to every other respondent. Half of these respondents were shown a picture of pupils studying, the other half a picture of unruly pupils.

7.1. Pre-school (Q60)

At the moment, 3 and 4 year-olds get 15 hours of free child care per week. (N=6533)

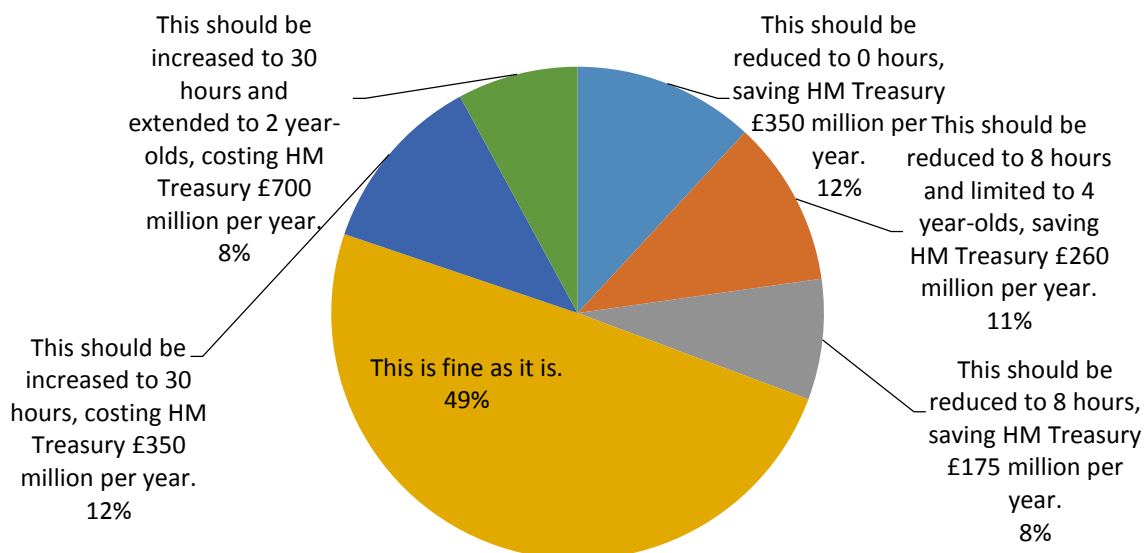


Figure 116 Attitudes towards free child-care.

7.2. Primary education (Q61, Q64, Q67)

Q62. In primary state schools, the average class size is 26 pupils. (N=6532)

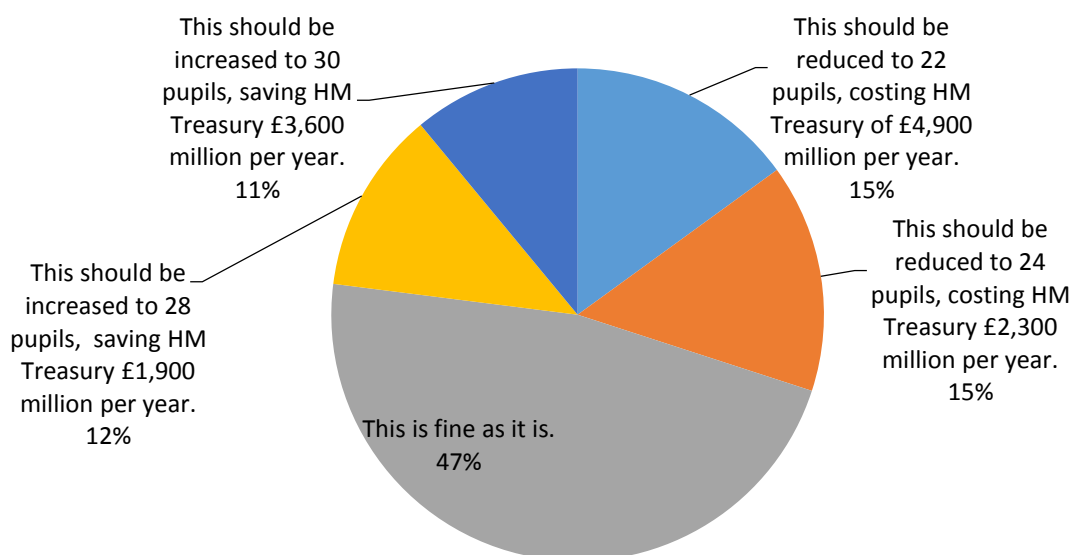


Figure 117 Attitudes towards average class size in primary schools.

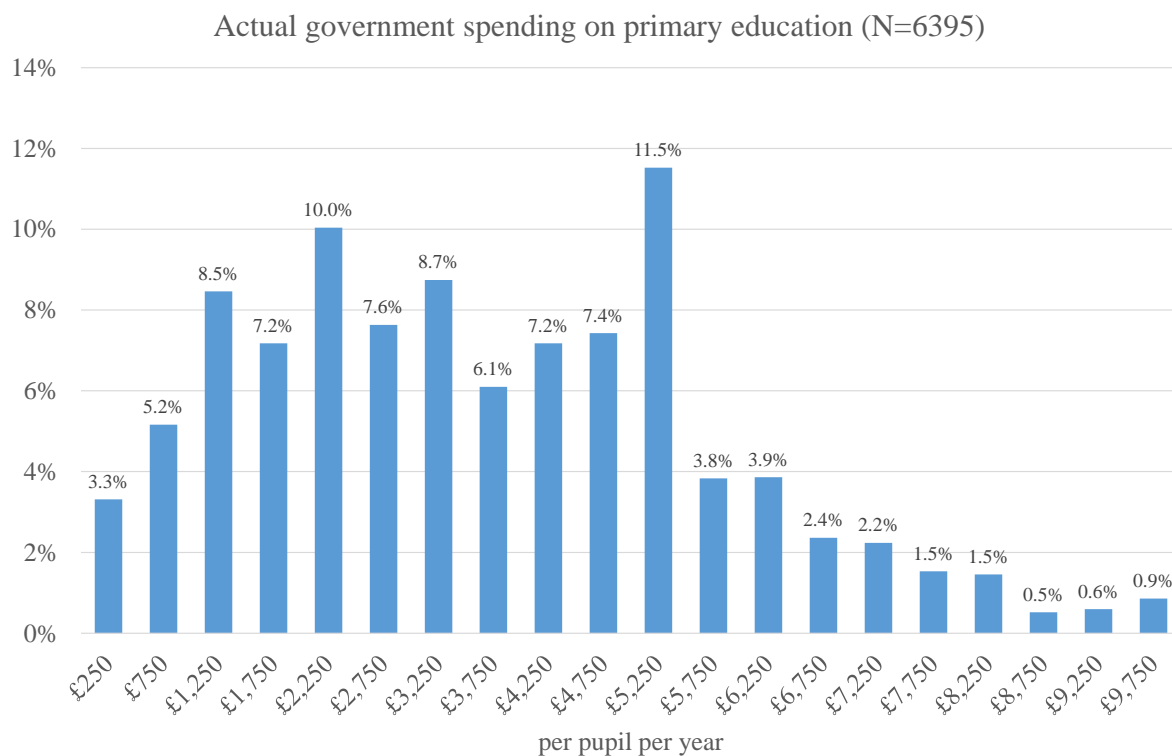


Figure 118 Perceived government spending on primary education.

Interviewees were informed that the government spends £4500 per pupil per year on primary education (Sibieta 2015). There is a correlation of 0.37 between perceived actual and desired spending.

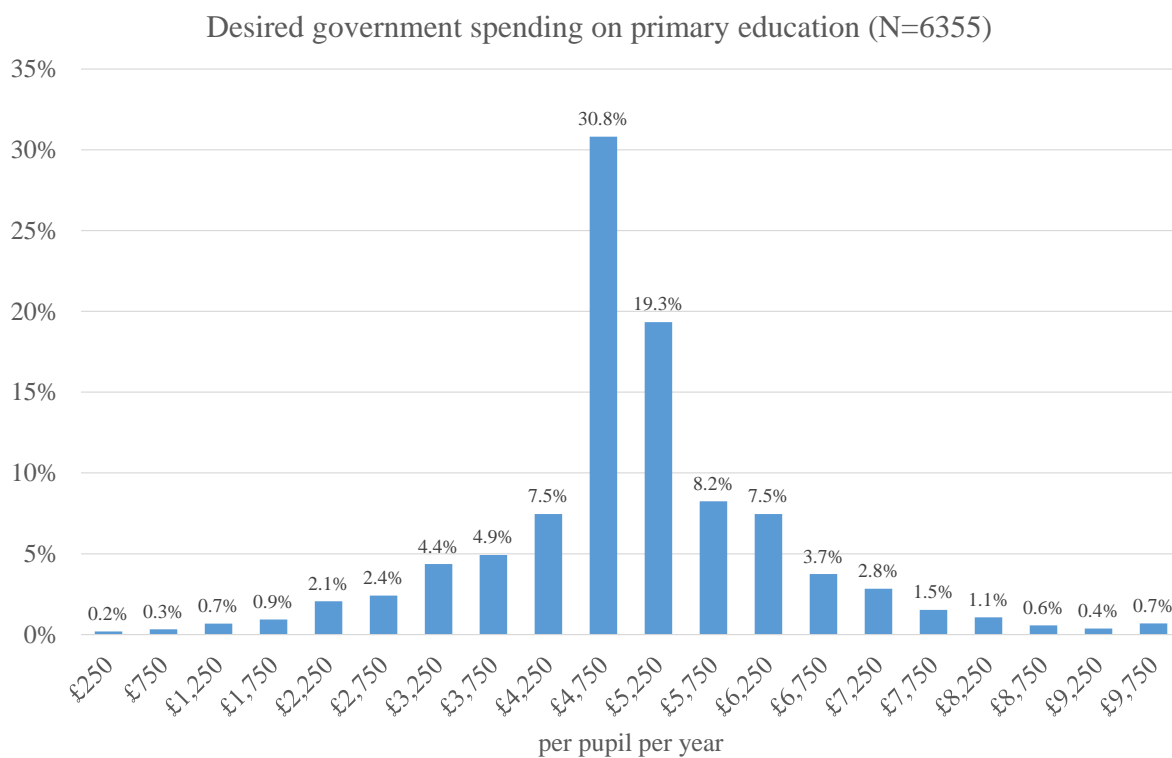


Figure 119 Desired government spending on primary education.

7.3. Secondary education (Q62, Q65, Q68)

Q62. According to some estimates, 60,000 pupils from disadvantaged backgrounds, who showed great promise at the end of primary school, fail to do well at the GCSEs and do not continue to higher education. What should the government do about these clever but poor kids? (N=6508)

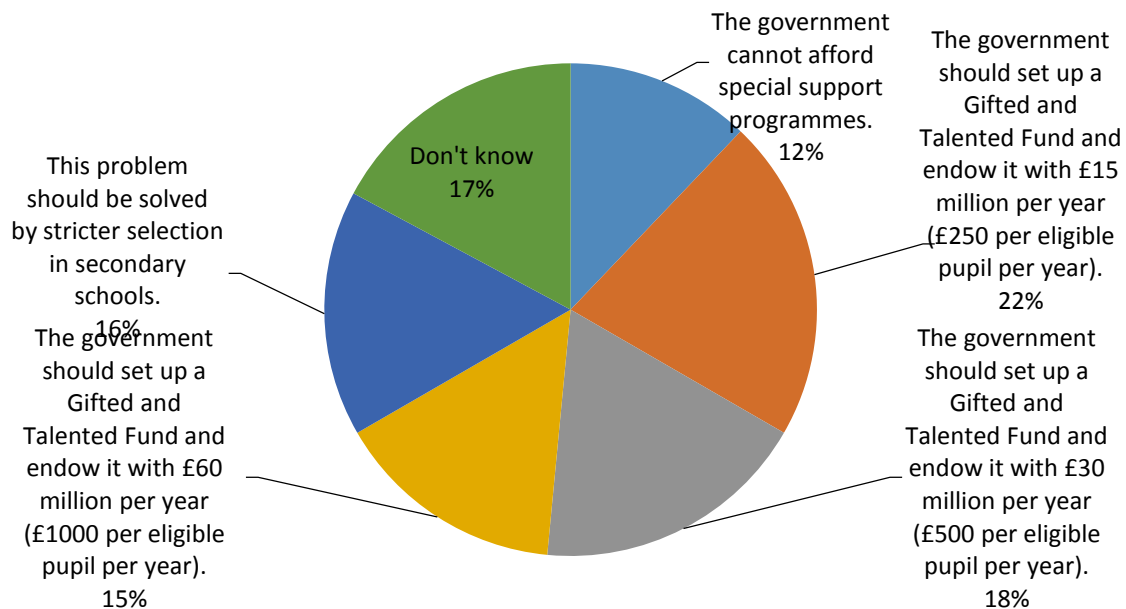


Figure 120 Support for disadvantaged pupils in secondary education.

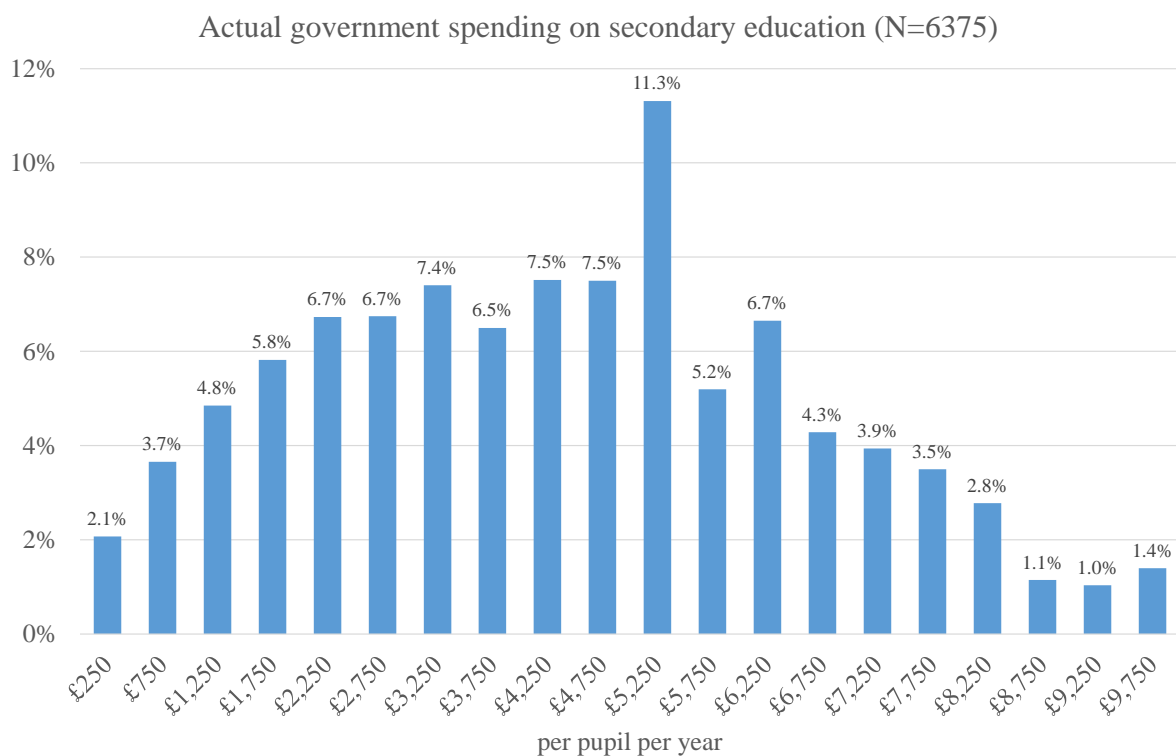


Figure 121 Perceived government spending on secondary education.

Respondents were told the government spends £6000 per pupil per year on secondary education (Sibieta 2015). The correlation between perceived actual and desired spending is 0.28.

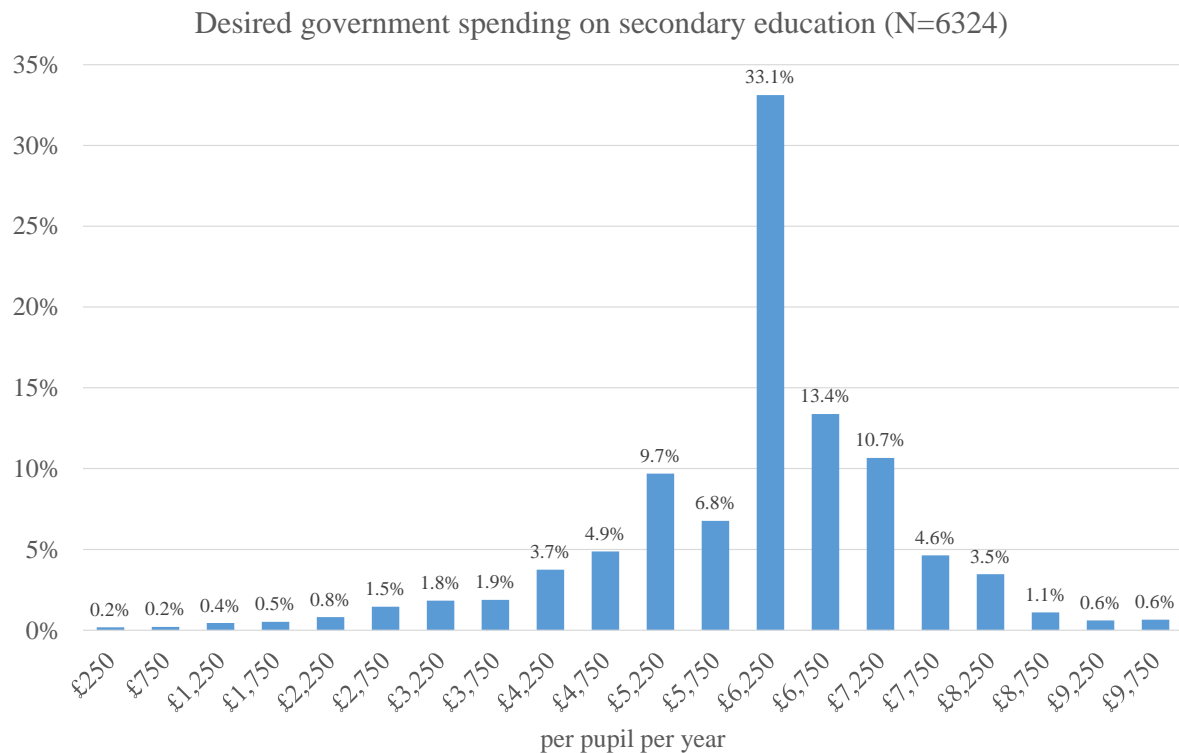


Figure 122 Desired government spending on secondary education.

7.4. Higher education (Q63, Q66, Q69)

Q63. At the moment, students pay up to £9,000 per year in university fees for undergraduate courses. (N=6508)

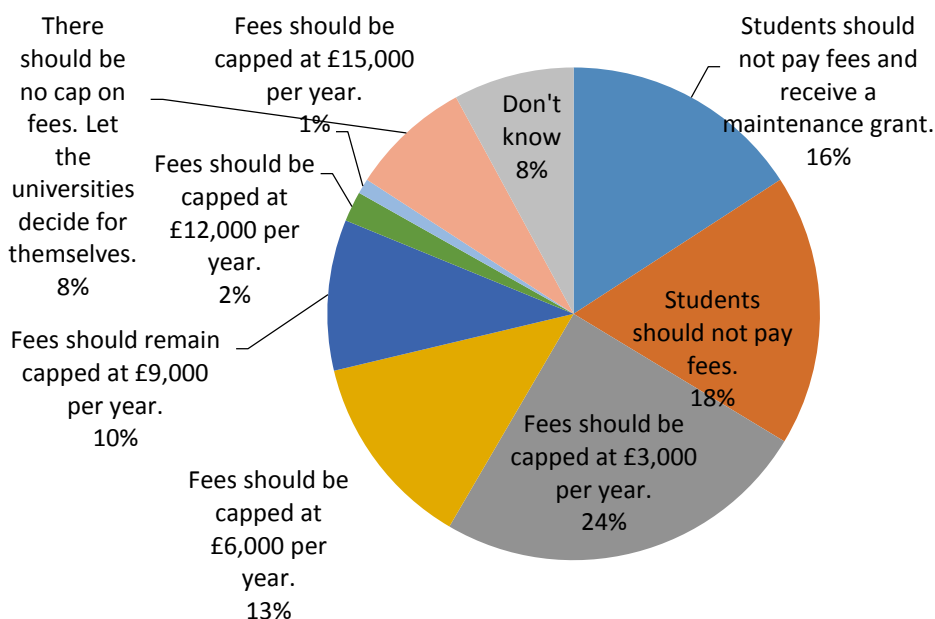


Figure 123 University fees

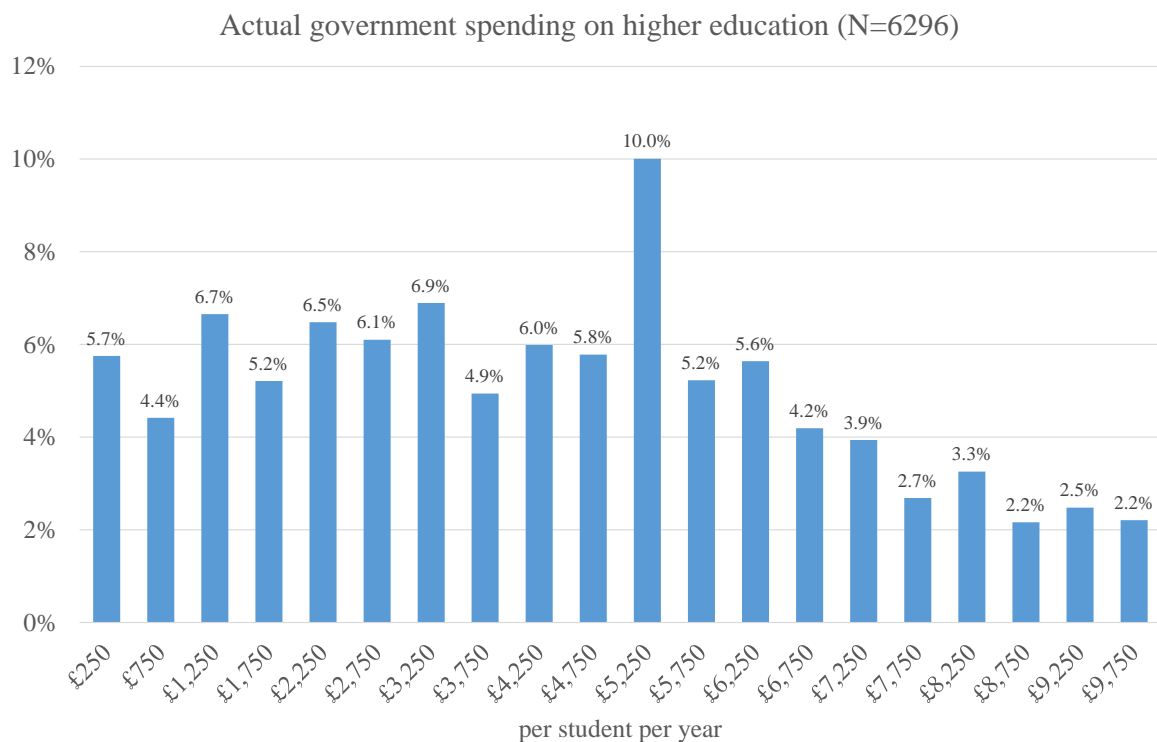


Figure 124 Actual government spending on higher education.

We then told the people in the survey that the government spends £6300 per student per year on higher education (BIS 2014). The correlation between perceived actual and desired spending is 0.21.

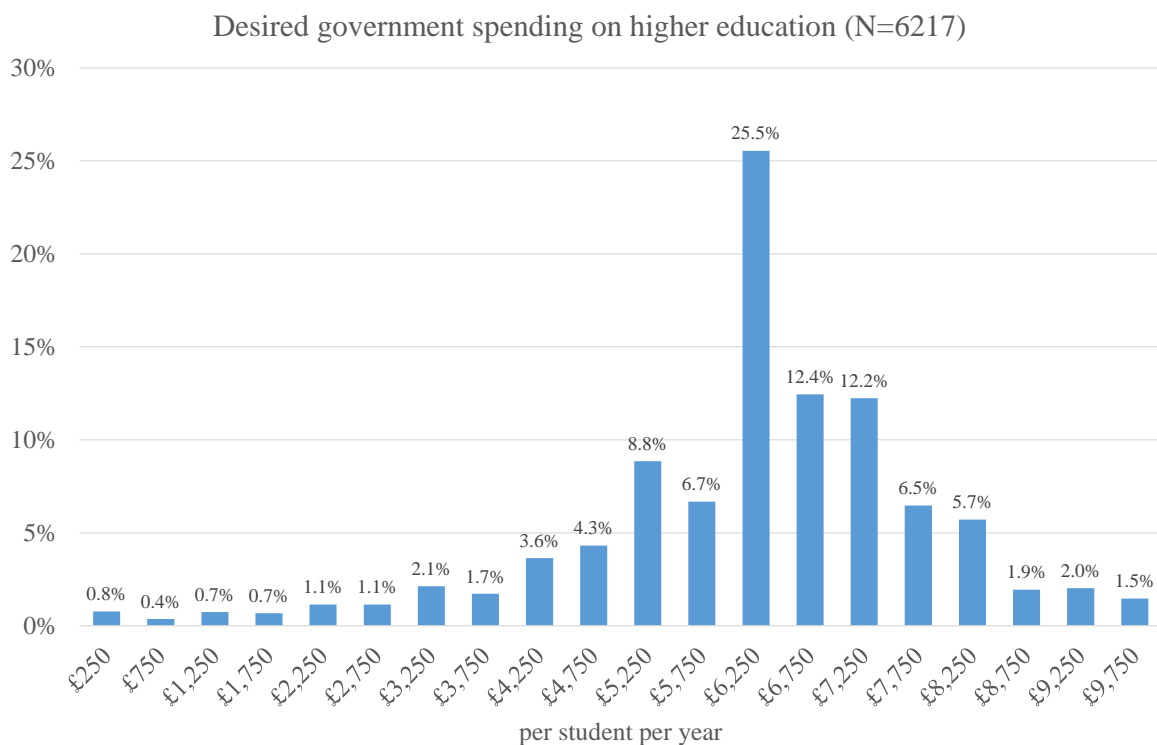


Figure 125 Desired government spending on higher education.

7.5. Responsibility towards children (Q70; N=6424)

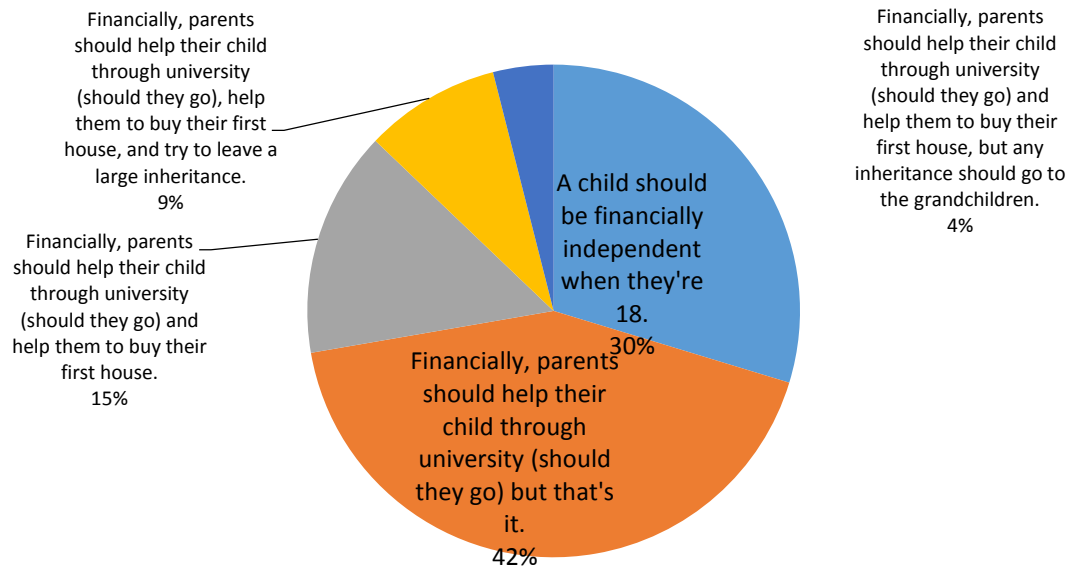


Figure 126 Financial duties towards one's children.

8. Results: Climate change

The questions about climate change were posed to every other respondent. Half of these respondents were shown a picture of a polar bear on a small ice float, the other half a picture of people enjoying themselves on a sunny beach.

8.1. Knowledge of climate change (Q71, Q72, Q73, Q74, Q75, Q76, Q77, Q78)

Q71. Climate scientists believe that the increase of atmospheric carbon dioxide associated with the burning of fossil fuels will reduce photosynthesis by plants. (No, they don't; N=7640)

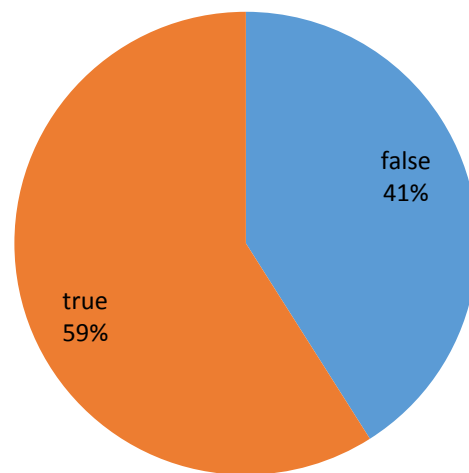


Figure 127 Climate change reduces photosynthesis.

Q72. Climate scientists believe that human-caused global warming will increase the risk of skin cancer in human beings. (No, they don't; N=7639)

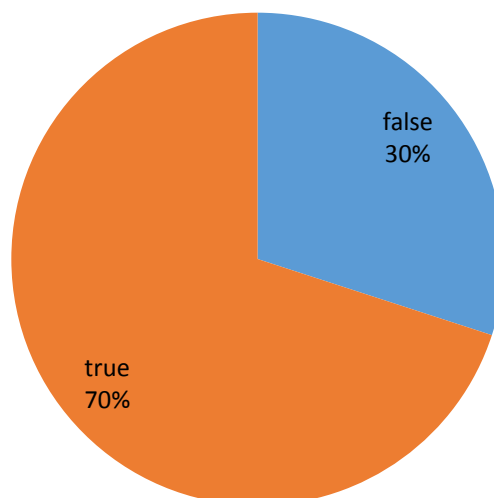


Figure 128 Climate change increases skin cancer.

Q73. Climate scientists believe that human-caused global warming will results in flooding of many coastal regions. (Yes, they do; N=7638)

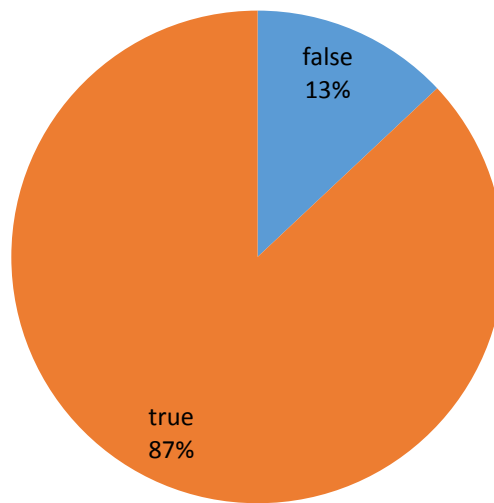


Figure 129 Climate change results in coastal flooding.

Q74. Climate scientists believe that if the North Pole icecap melted as a result of human-caused global warming, global sea levels would rise. (No, they don't; North Pole ice floats on water; N=7638)

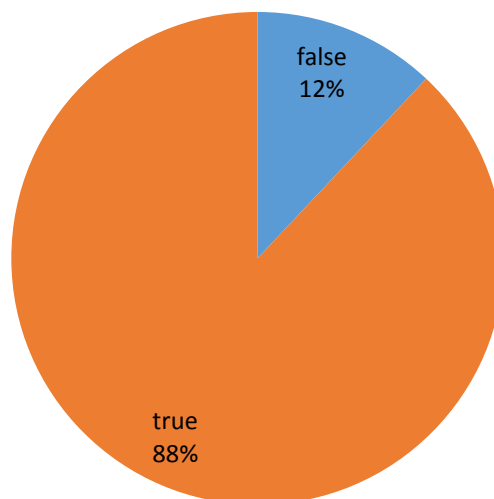


Figure 130 Melting of the ice on the North Pole leads to sea level rise.

Q75. Climate scientists believe that human-caused global warming has increased the number and severity of hurricanes around the world. (No, they don't; they believe that hurricane severity may increase in the future, but there is no solid evidence for past change, while the number of hurricanes is not affected by climate change; N=7638)

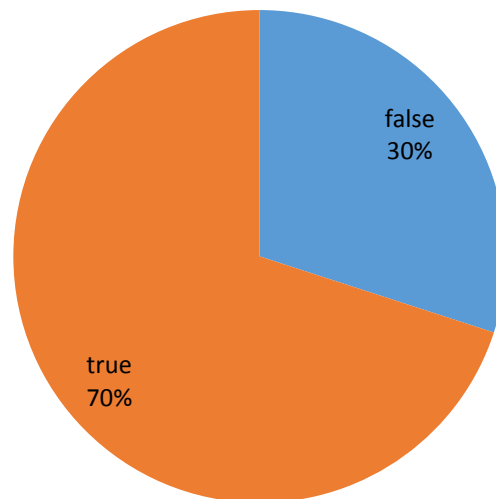


Figure 131 Climate change has increased hurricane frequency and intensity.

Q76. Climate scientists believe that nuclear power generation contributes to global warming. (No, they don't; N=7638)

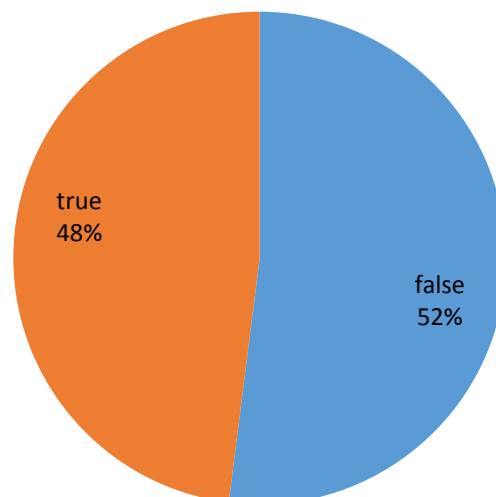


Figure 132 Nuclear power contributes to climate change.

Q77. Climate scientists believe that there will be positive as well as negative effects from human-caused global warming. (Yes, they do; N=7637)

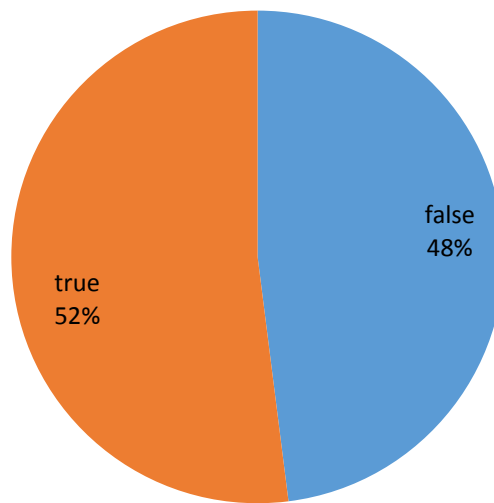


Figure 133 Climate change has both positive and negative impacts.

Q78. Climate scientists believe that globally average surface air temperatures were higher for the first decade of the twenty-first century (2000-2009) than for the last decade of the twentieth century (1990-1999). (Yes, they do; N=7637)

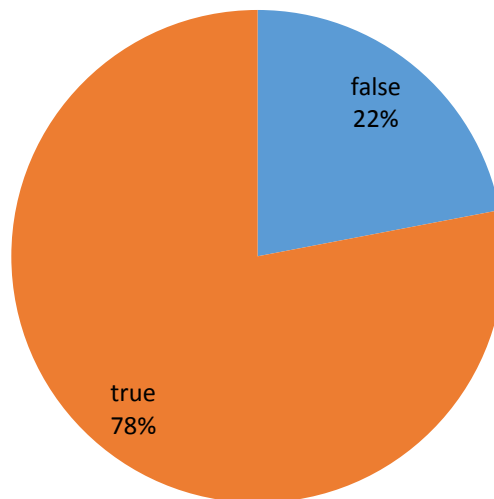


Figure 134 The first decade of the 21st century was warmer than the last decade of the 20th century.

These questions, except Q77, were taken from Kahan (2015). The climate literacy score equals the number of correct answers to the eight questions above.

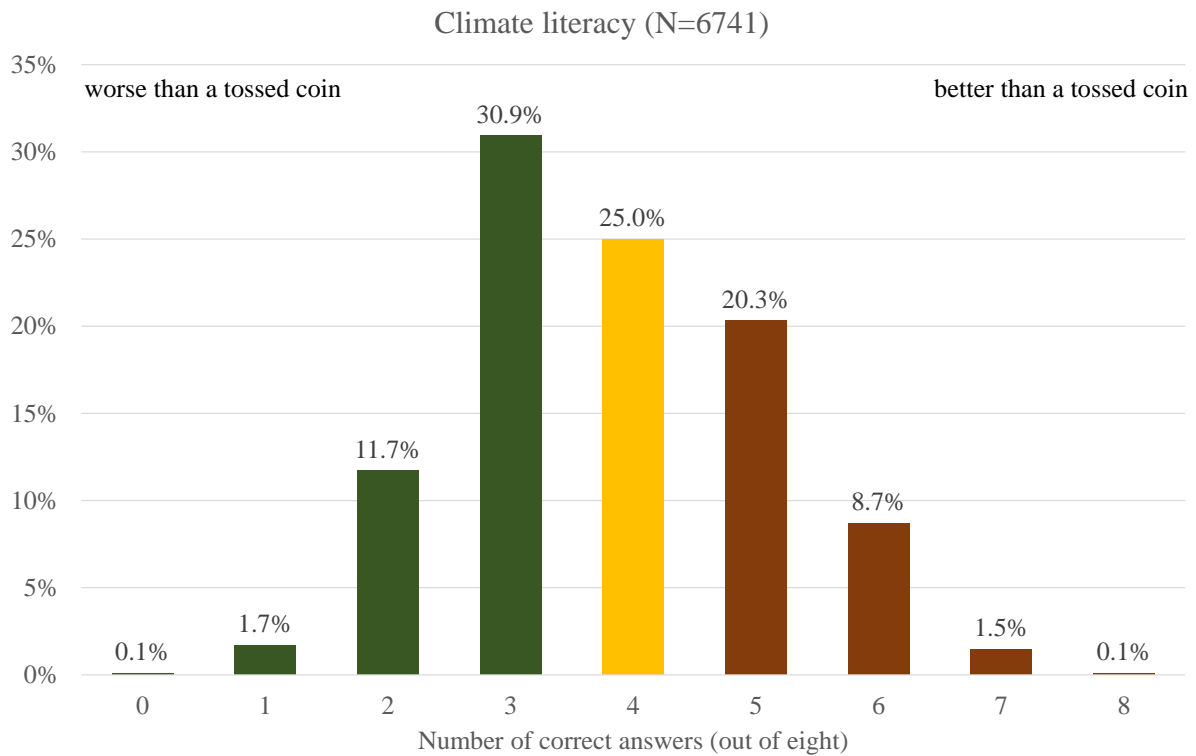


Figure 135 Climate literacy score.

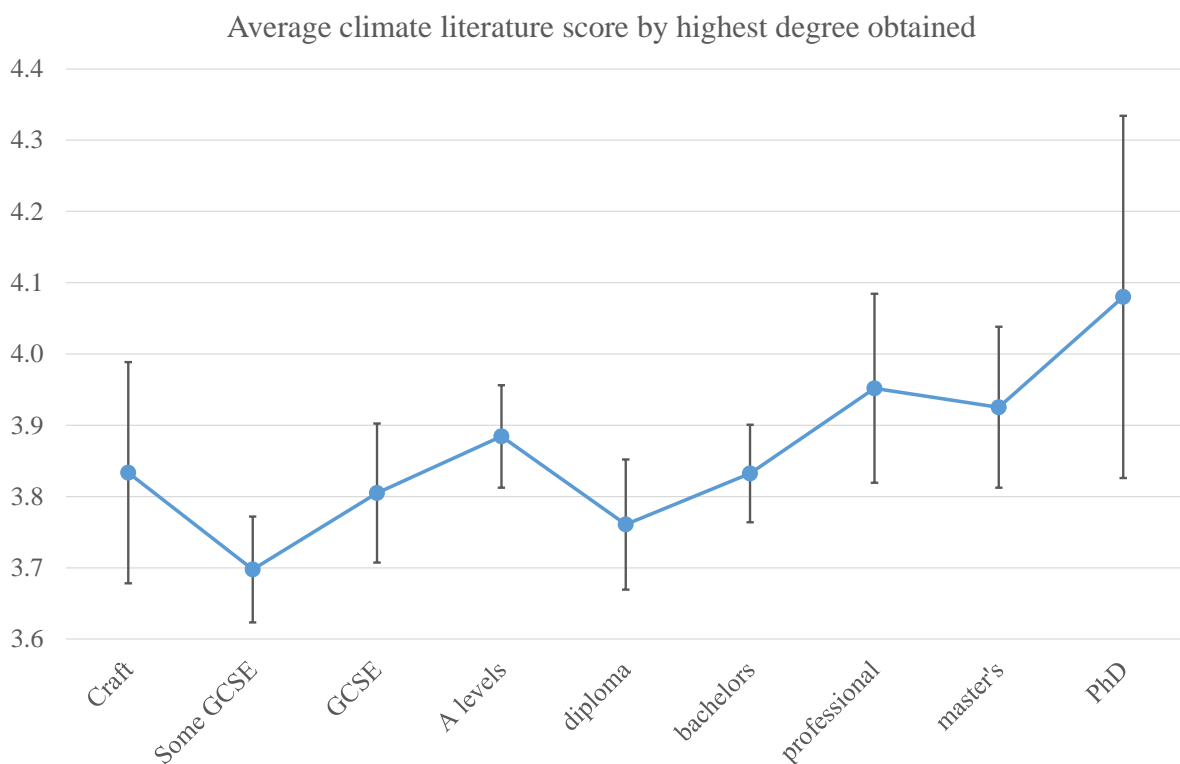


Figure 136 Climate literacy score by education.

8.2. Concern about climate change (Q79, Q80, Q81, Q82, Q83, Q84)

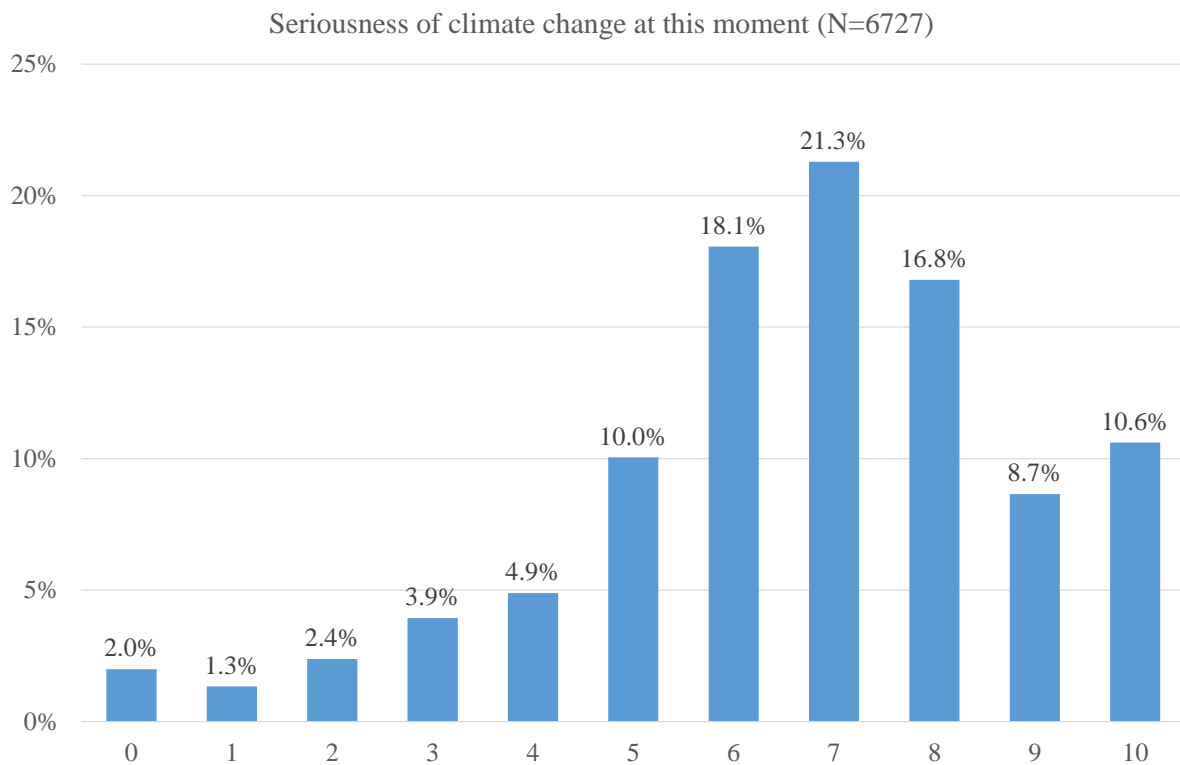


Figure 137 Concern about climate change now.

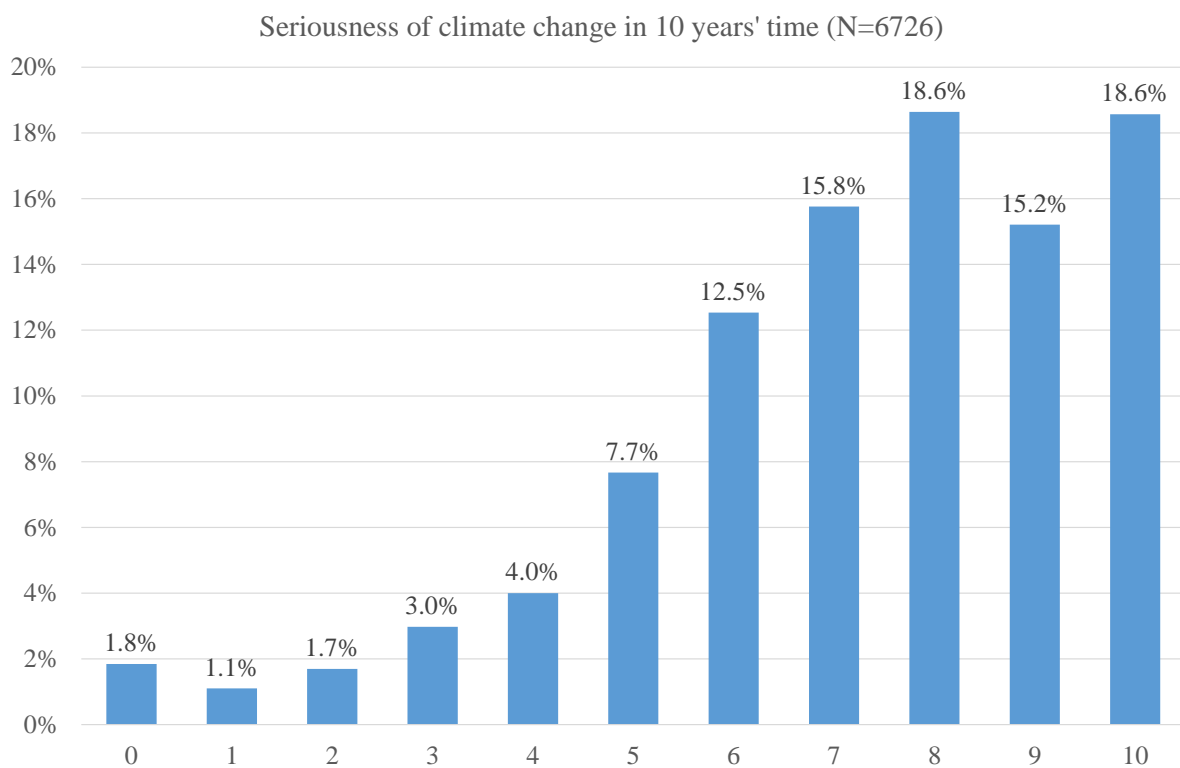


Figure 138 Concern about climate change in a decade.

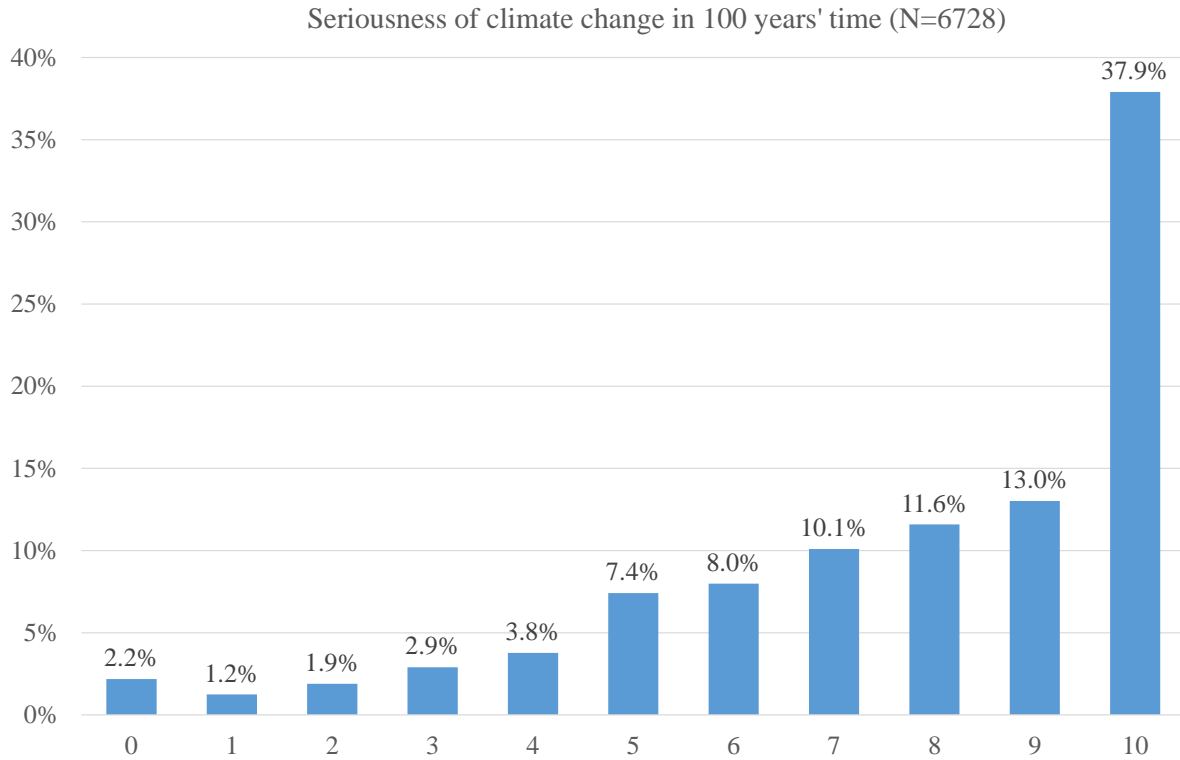


Figure 139 Concern about climate change in a century.

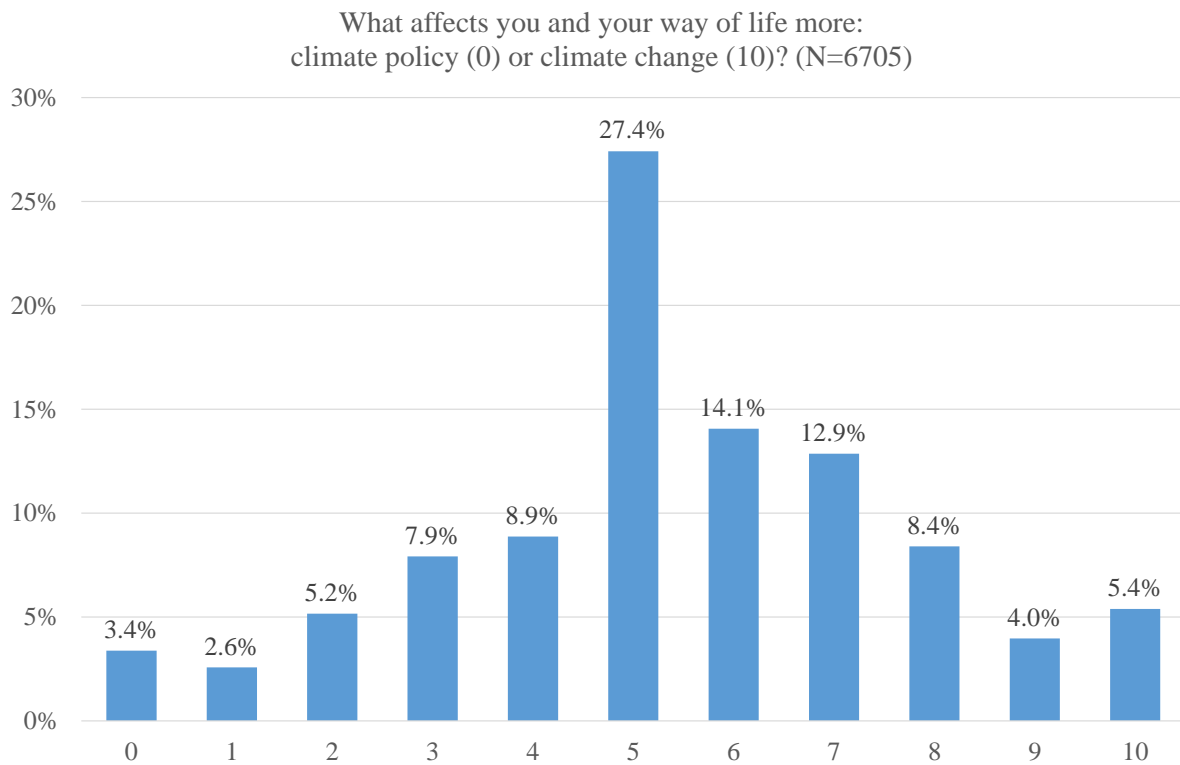


Figure 140 Impact of climate change and policy on self.

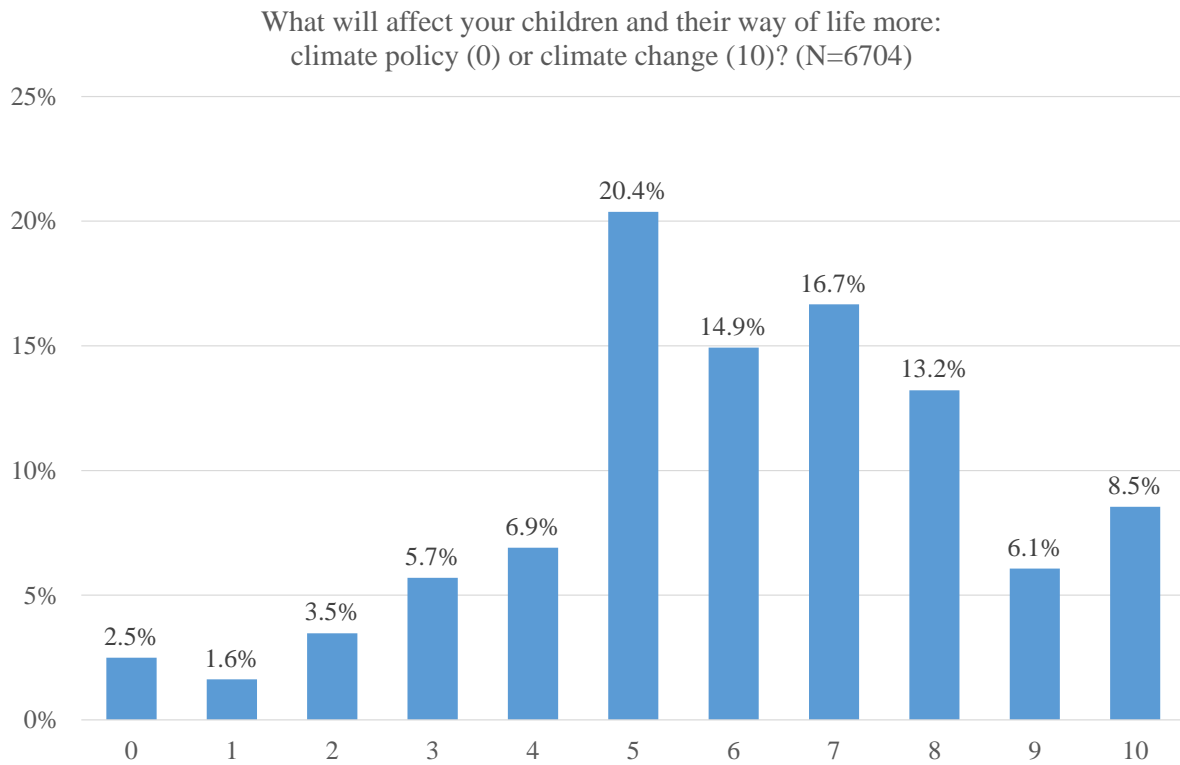


Figure 141 Impact of climate change and policy on children.

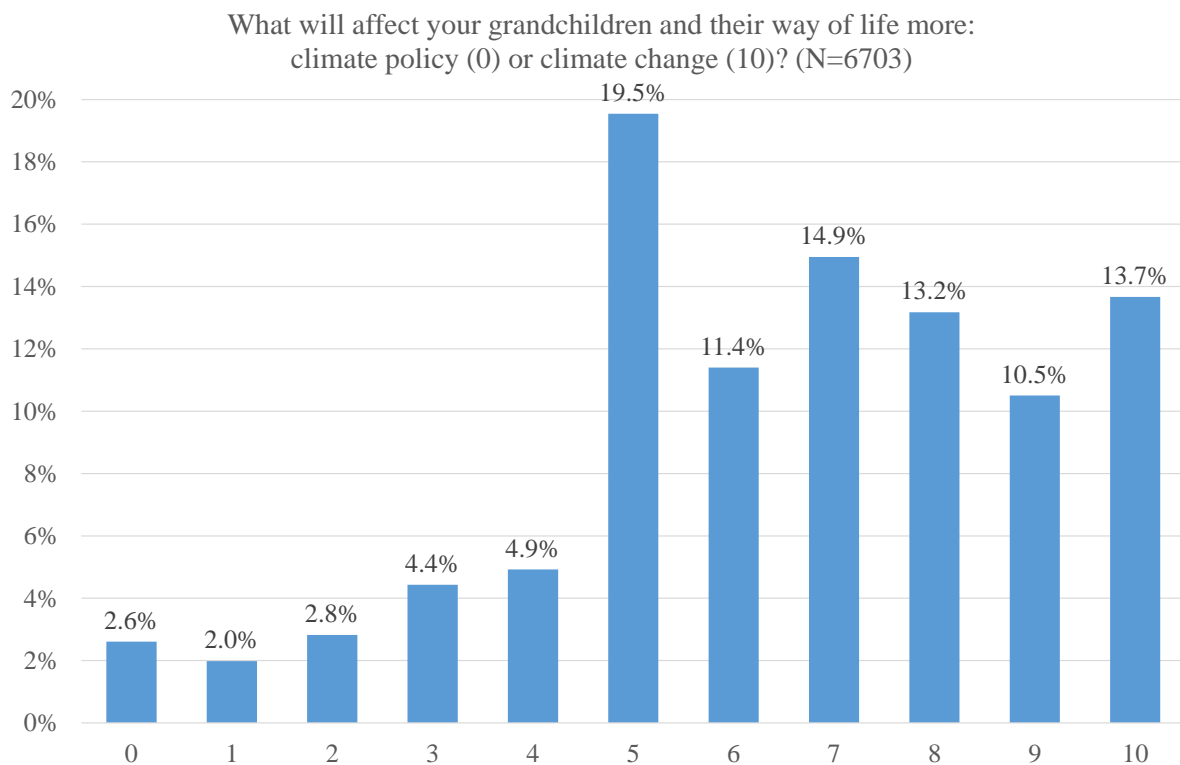


Figure 142 Impact of climate change and policy on grandchildren.

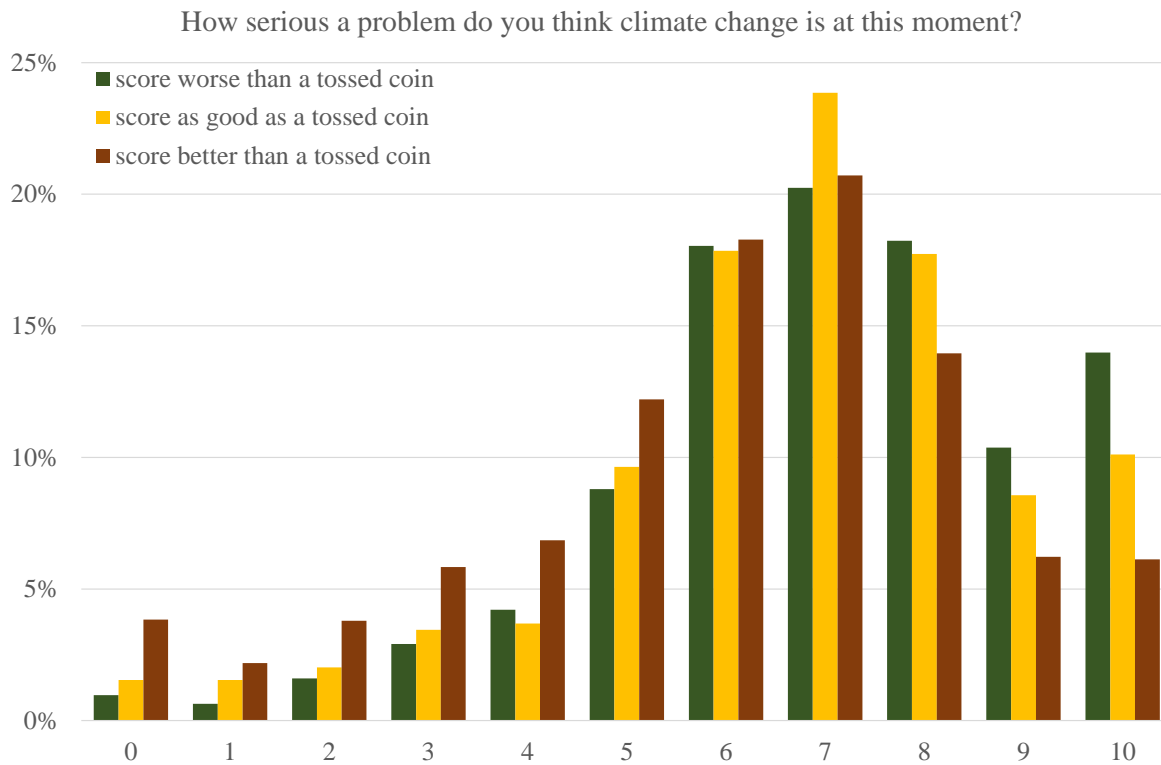


Figure 143 Concern about climate change now by level of knowledge.

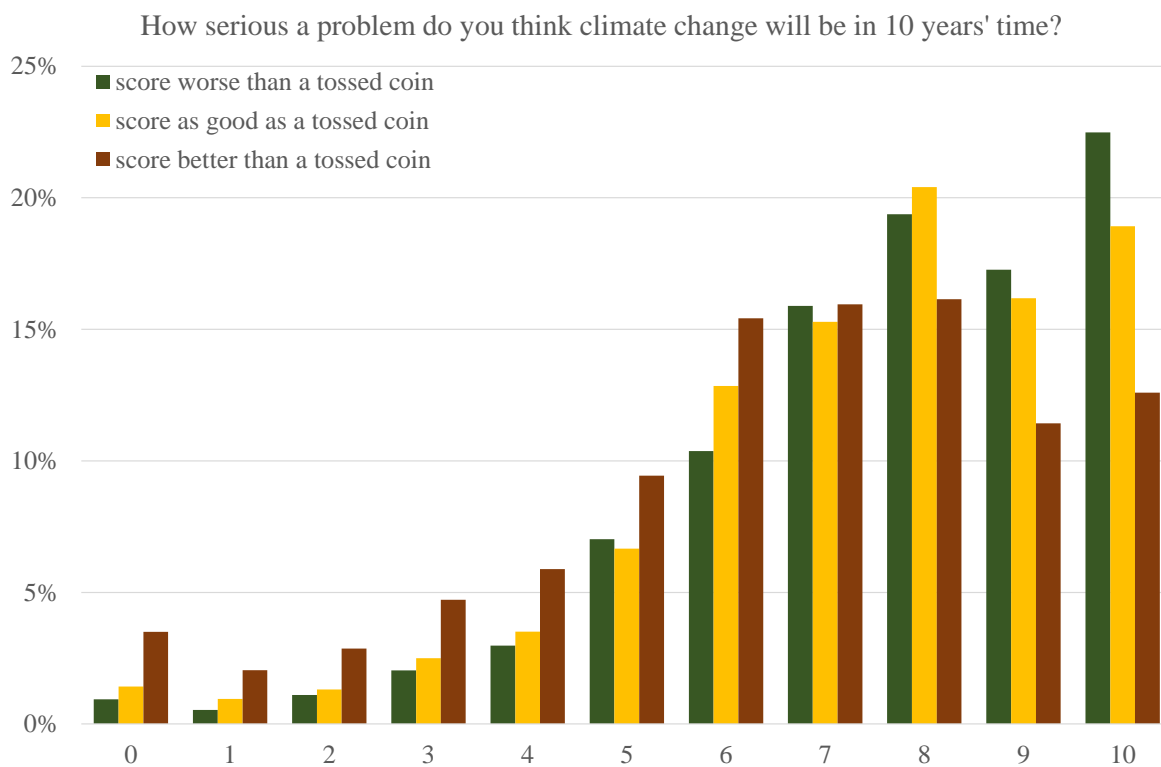


Figure 144 Concern about climate change in a decade by level of knowledge.

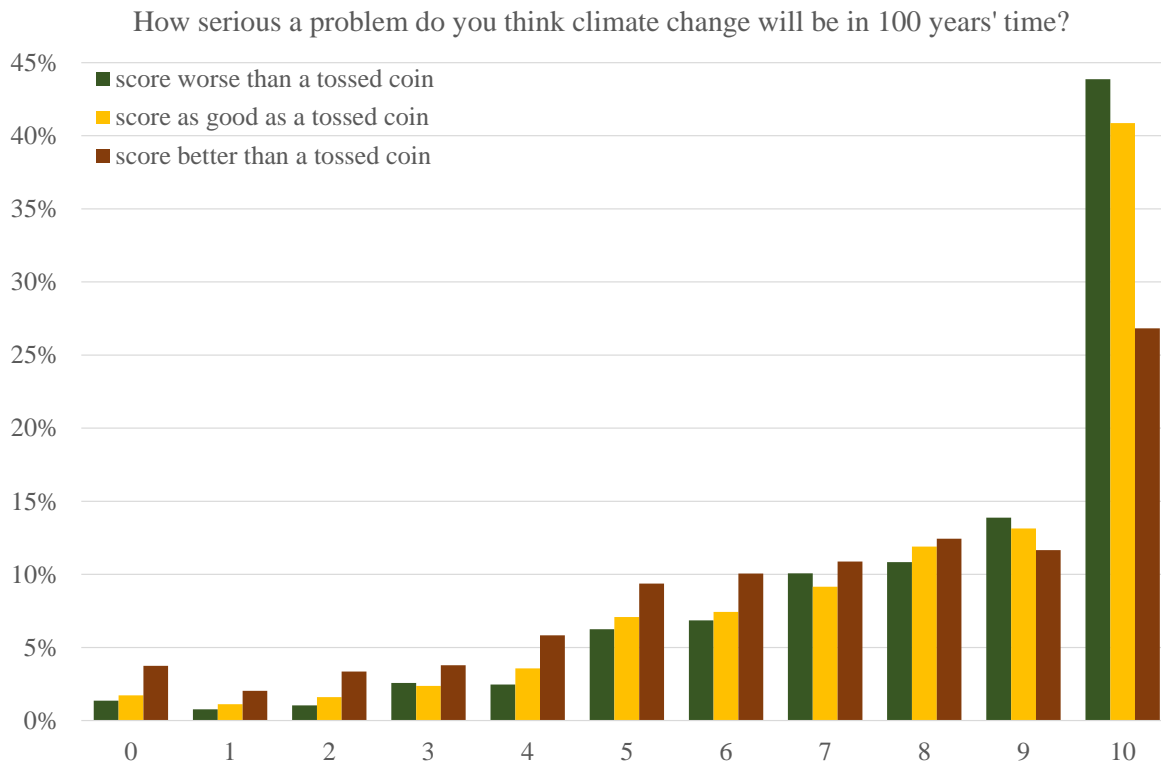


Figure 145 Concern about climate change in a century by level of knowledge.

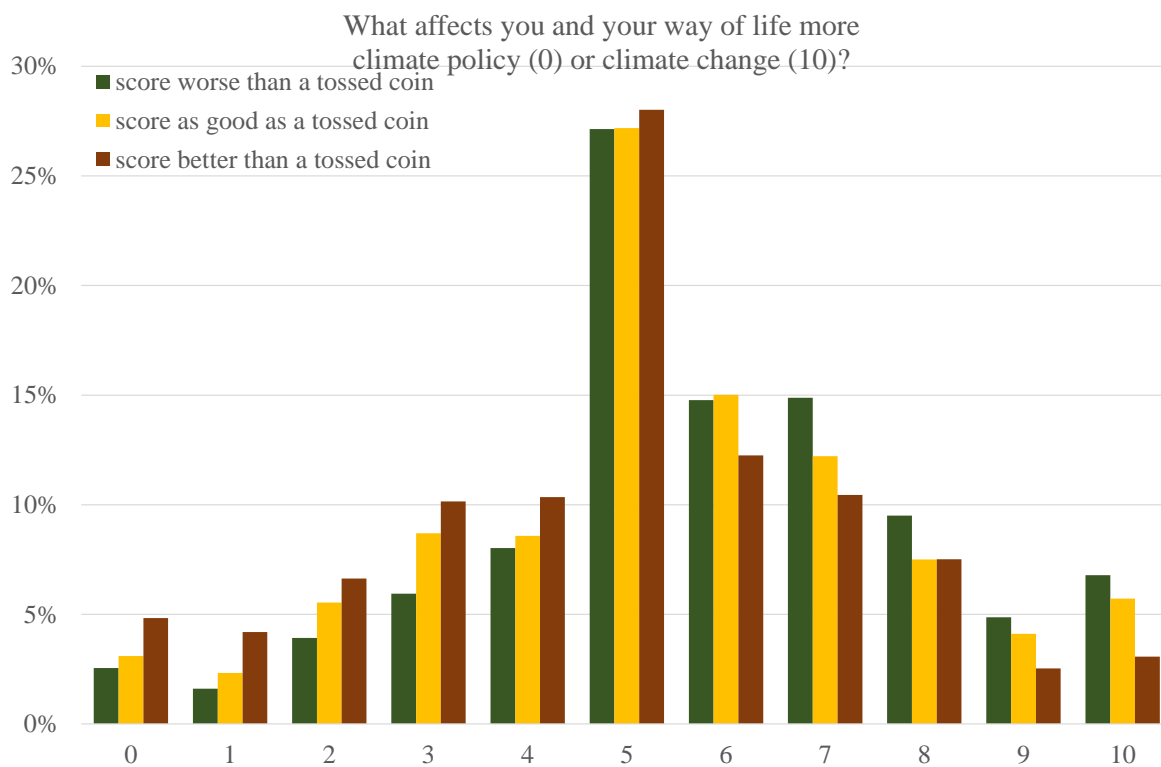


Figure 146 Impact of climate change and policy on self by level of knowledge.

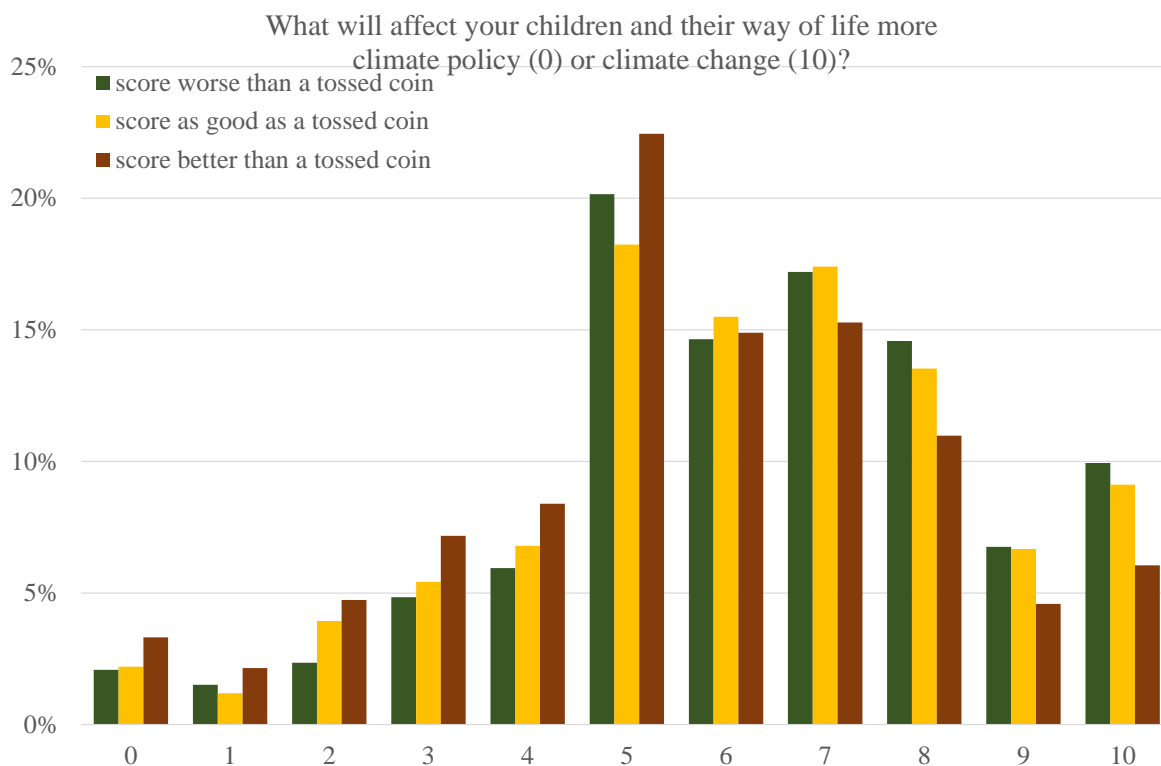


Figure 147 Impact of climate change and policy on children by level of knowledge.

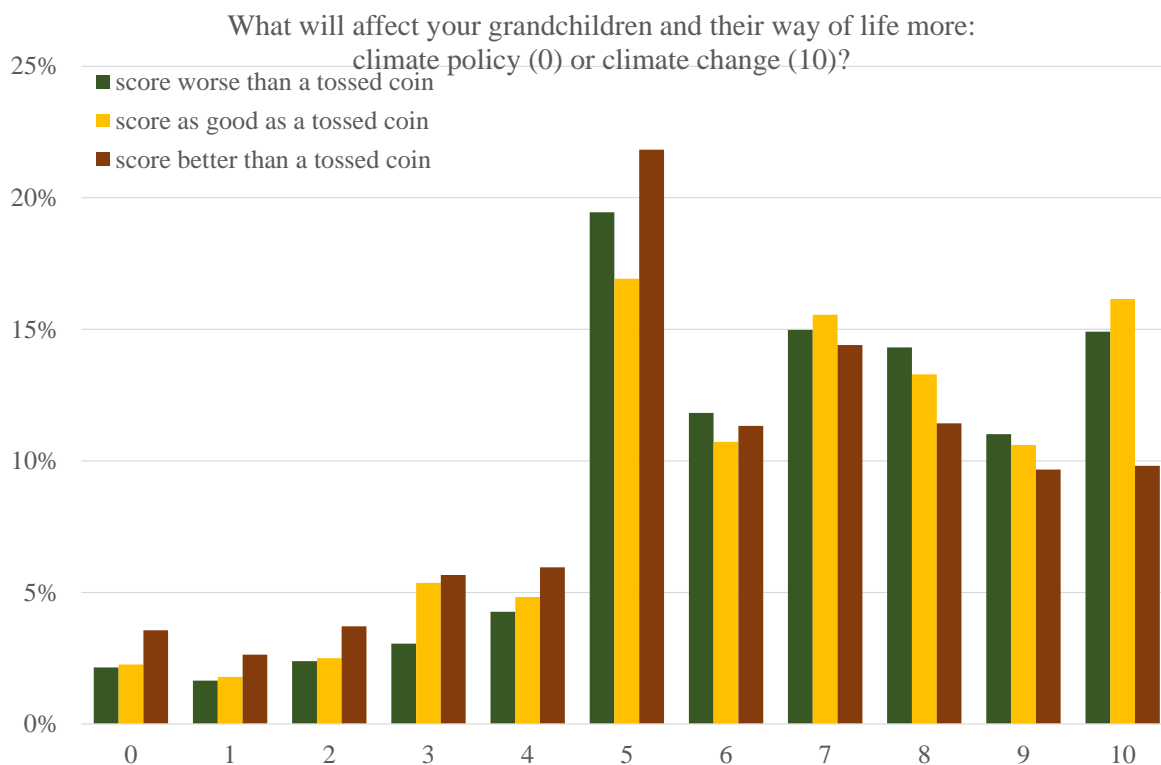


Figure 148 Impact of climate change and policy on grandchildren by level of knowledge.

8.3. Climate policy (Q85, Q86, Q87, Q88)

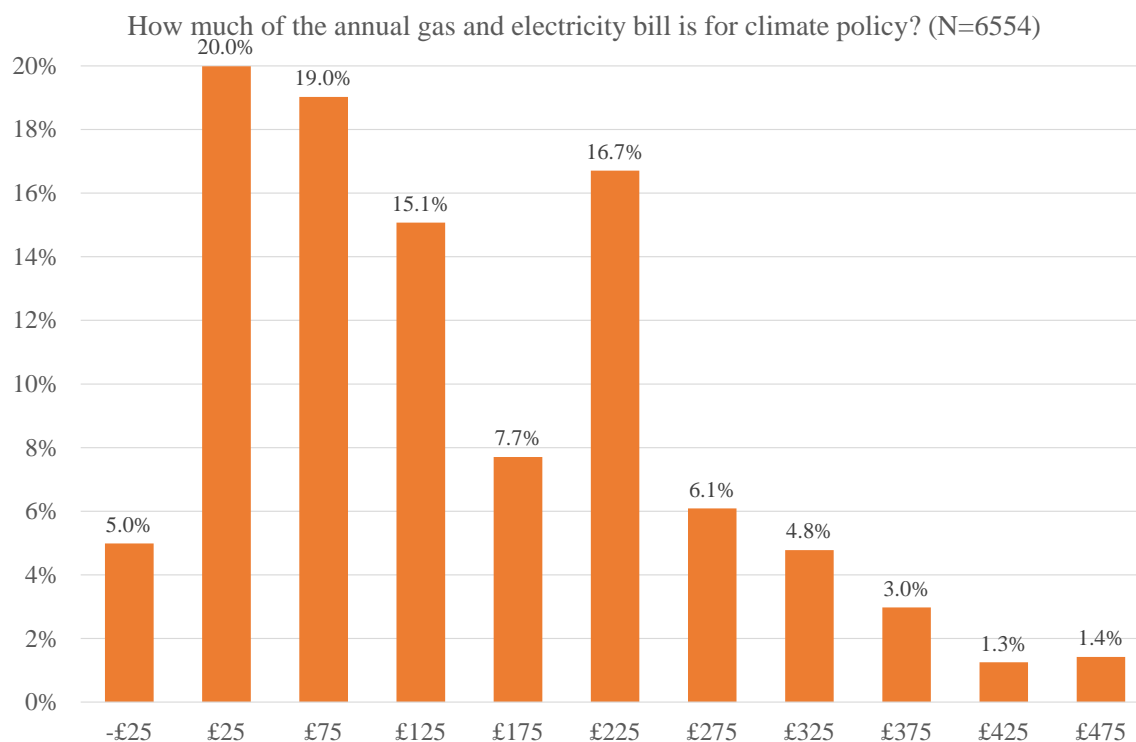


Figure 149 Perceived actual effect of climate policy on utility bill.

Respondents were informed that climate policy adds £89 to the dual fuel bill of the average household (DECC 2014). There is a correlation of 0.40 between the perceived actual price effect of climate policy and the desired price effect.

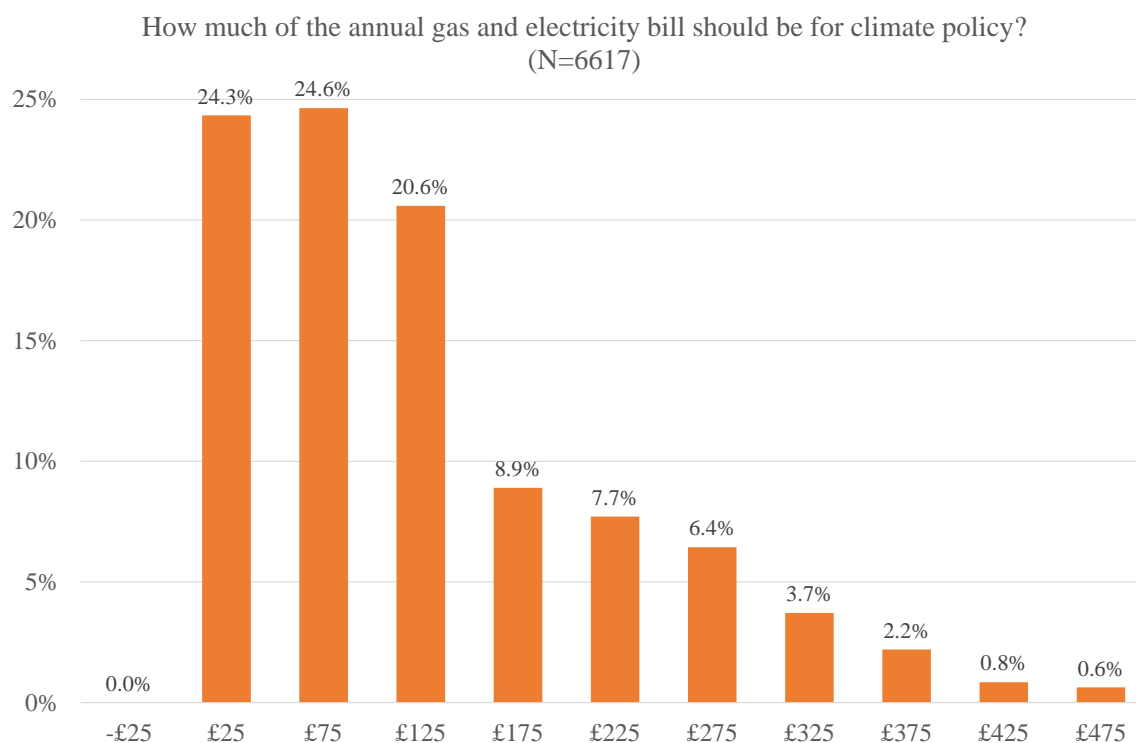


Figure 150 Desired effect of climate policy on utility bill.

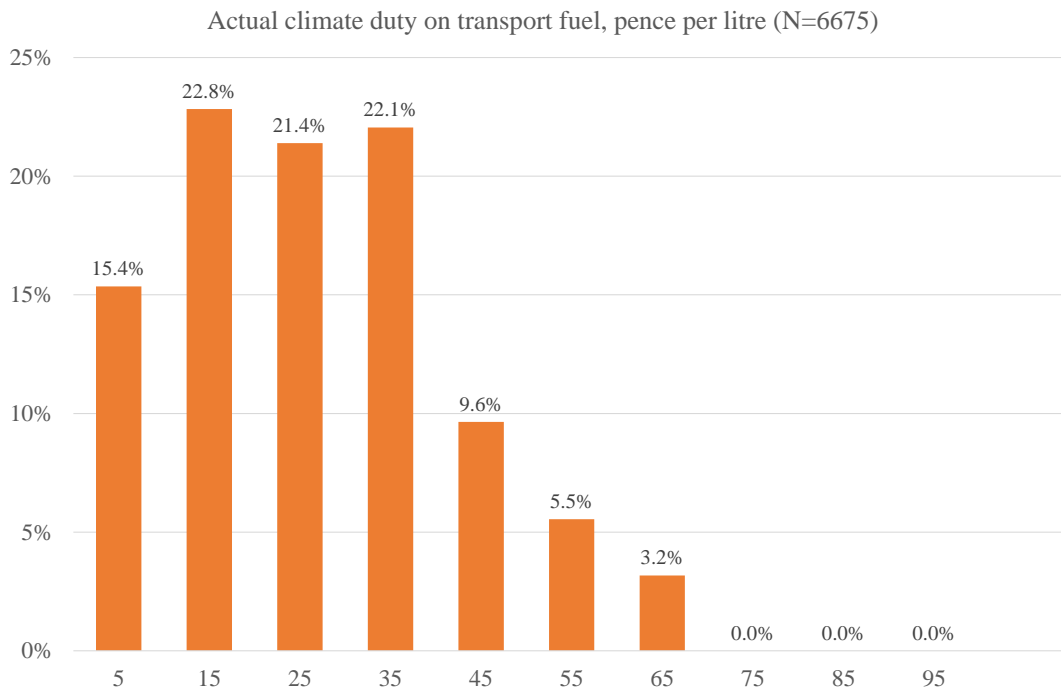


Figure 151 Perceived actual climate duty on transport fuel.

We informed respondents that the actual climate duty on transport fuel is 3 pence per litre. In fact, it is zero.⁷ There is a correlation of 0.30 between the perceived actual and the desired climate duty.

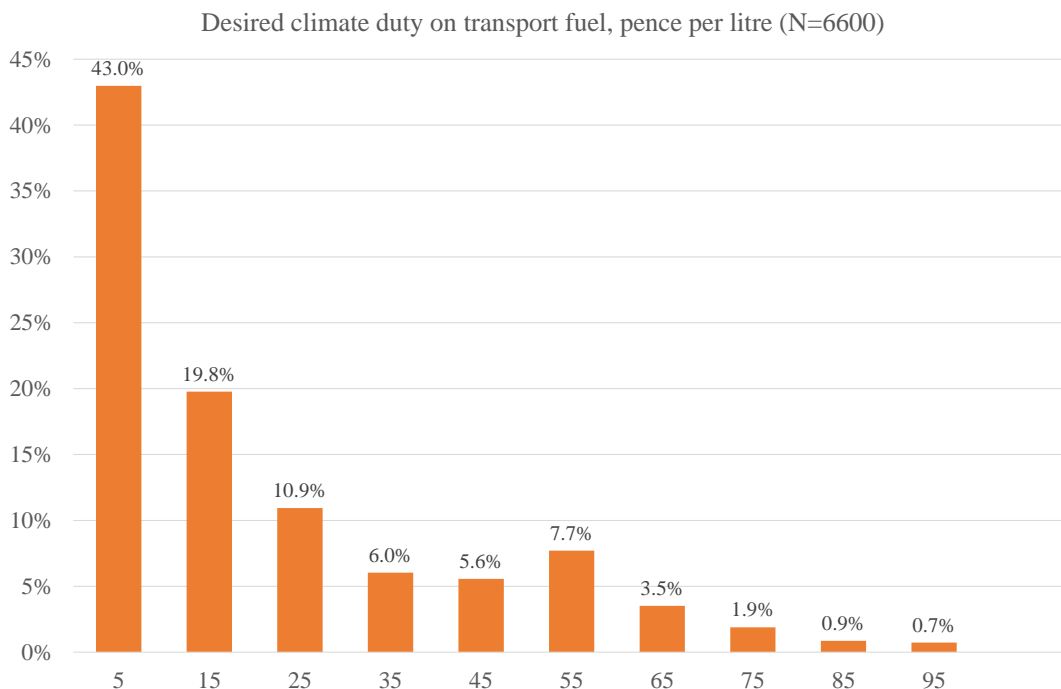


Figure 152 Desired climate duty on transport fuel.

⁷ Fuel duty rates can be found here: <https://www.gov.uk/guidance/fuel-duty#rates>. Transport fuel is excluded from the Climate Change Levy <https://www.gov.uk/green-taxes-and-reliefs/climate-change-levy>.

9. Results: Government expenditure (Q89, Q90)

Respondents were asked how the government actually spend money over ten policy domains. The question was asked in shares of spending because few grasp the scale of government spending. Figure 153 shows the 5th, 25th, 50th, 75th and 95th percentiles of the responses in each category.

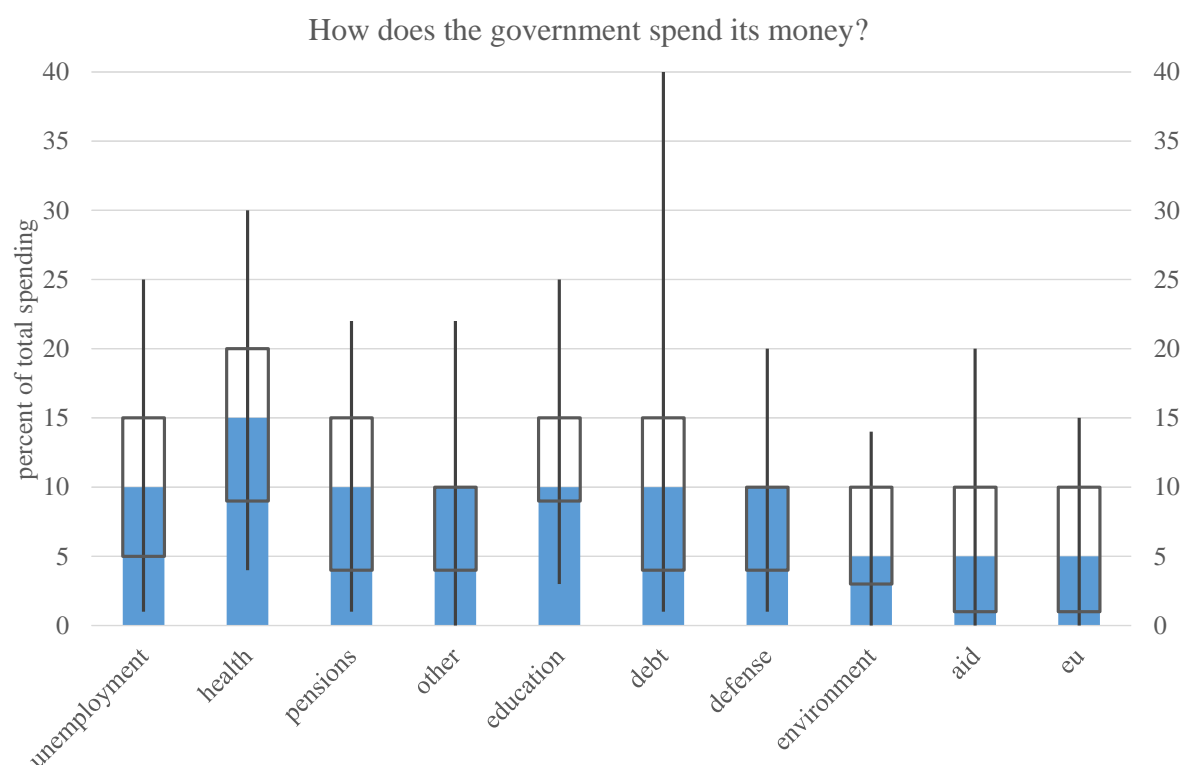


Figure 153 Perceived allocation of the government budget.

Respondents were informed about spending levels in 2014⁸ and asked how they thought the government should spend the money. Figure 154 shows the response. As many simply confirmed actual spending as desired spending – thus saving time at the end of a long survey – Figure 155 shows the responses for those who took half a minute or longer to reply. The correlation between the perceived actual spending and the desired spending is low, varying from -0.05 for unemployment benefits to 0.07 for education.

⁸ Public Expenditure Statistical Analysis 2014 <https://www.gov.uk/government/collections/public-expenditure-statistical-analyses-pesa>

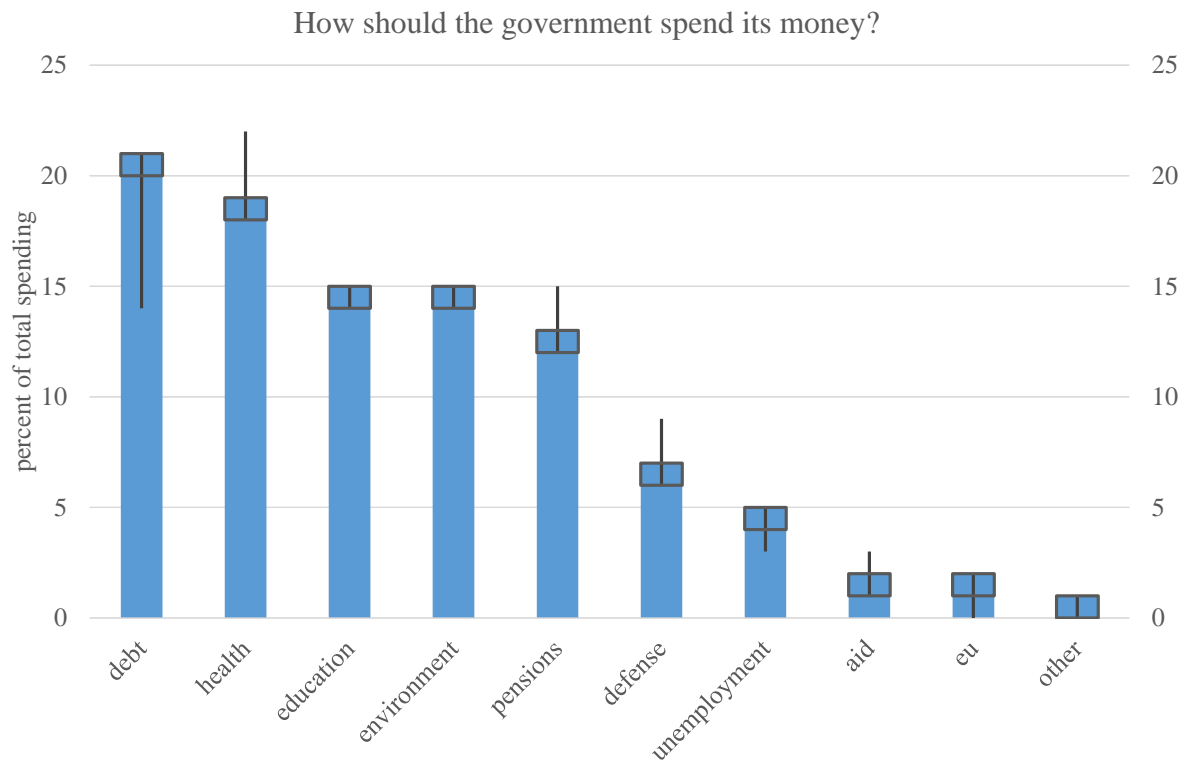


Figure 154 Desired allocation of the government budget.

The graphs display the 5th, 25th, 50th, 75th and 95th percentiles.

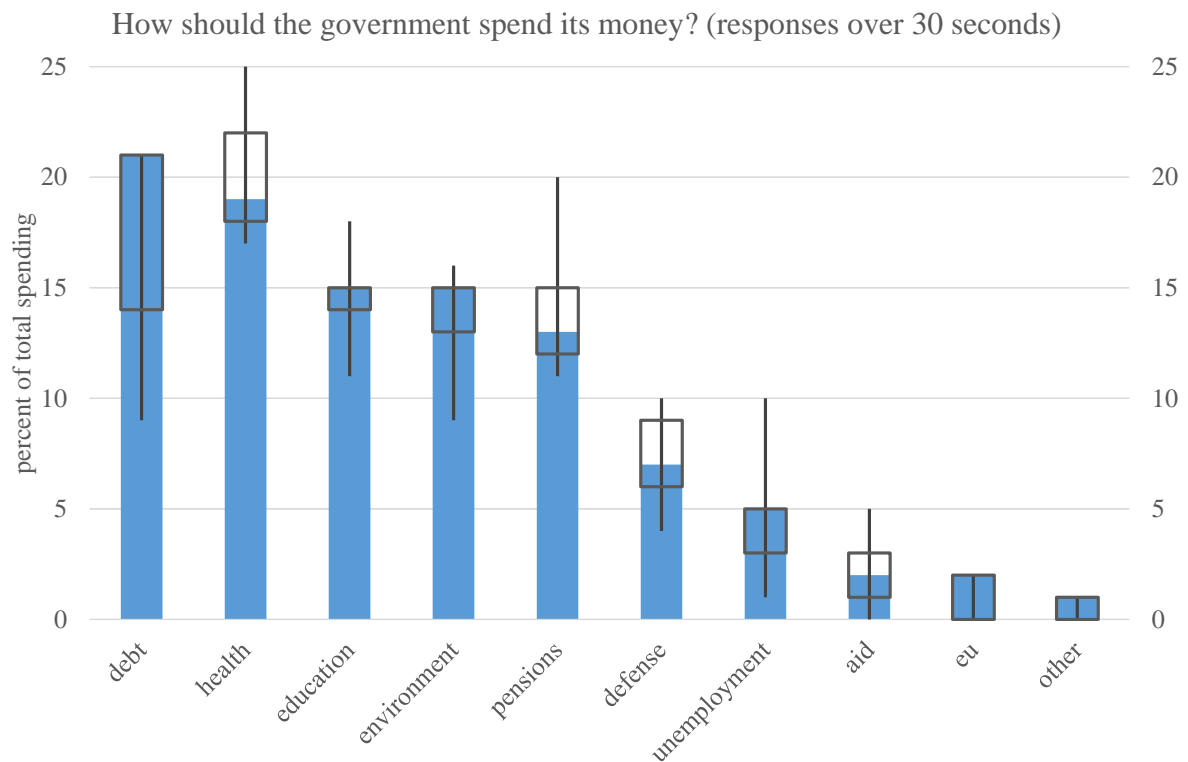


Figure 155 Desired allocation of the government budget, for respondents who took half a minute or more to answer.

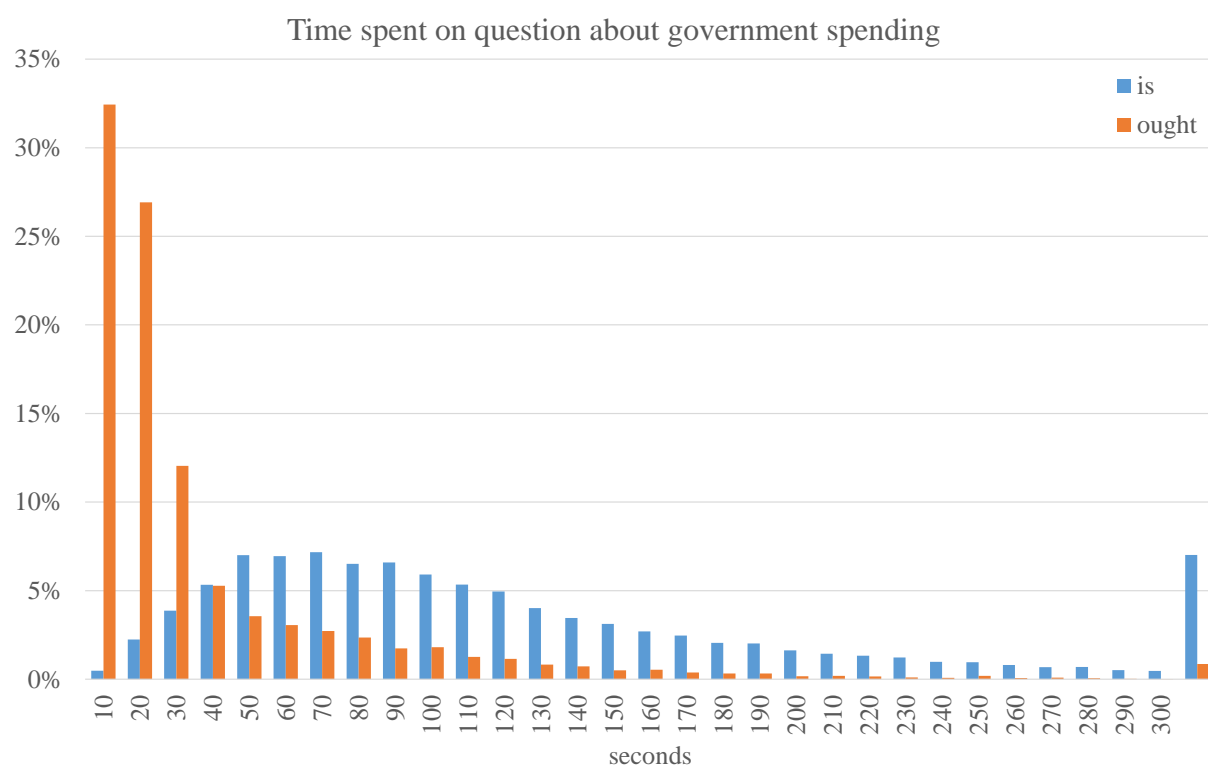


Figure 156 Time taken to answer questions about the allocation of the government budget.

10. Conclusion

We here present a survey of some 12,000 UK residents, roughly representative of the population, as well as descriptive statistics of the findings. The next step will be to explore relationships between the variables.

Acknowledgements

Many people helped us to design the survey. The contributions of Mark Fisher, Seanalee Flaherty, Bjorn Hartig, Bri Hillmer, Bret Kershner, Mehmet Kutluay, Annemie Maertens, Michael Naef, Monika Novackova, Vikram Pathania, Dimitra Petropoulou, Jacques Pezzier, Pedro Rosa Dias and ZhenKun Wang stand out. We are grateful to all those who suffered through our pre-tests, and those who took the final survey. We are grateful to the School of Business, Management and Economics of the University of Sussex for financial support.

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Appendix: Sussex survey on attitudes and government policy

Introduction

In this survey, we will ask some questions about you, and how you view things. We will also ask you what you think about UK policies on health, education, pensions, or climate.

By answering these questions, you will help researchers at the University of Sussex to understand what people know and think about public policy and its various domains.

This survey will take 25-30 minutes.

Sensitive questions have “prefer not to answer” option. By clicking “next”, you assent to taking this survey. Your responses will be kept confidential.

About you: sex and age

*Q1 Are you**

- ☐ male
- ☐ female
- ☐ other
- ☐ prefer not to say

Hidden Value: school

Value: populates with a randomly generated number between 0 and 1

Validation: Must be numeric

Logic: Show/hide trigger exists.

*Q2 How old are you?**

- ☐ 24 or younger
- ☐ 25-34
- ☐ 35-44
- ☐ 45-54
- ☐ 55-64
- ☐ 65-74
- ☐ 75 or older

Hidden Value: svo

Value: populates with a randomly generated number between 1 and 8

*Q3 Are you**

- ☐ left-handed
- ☐ right-handed

Hidden Value: domain

Value: populates with a randomly generated number between 1 and 6

*Q4 What is the first letter of your surname?**

- ☐ A
- ☐ B
- ☐ C
- ☐ D
- ☐ E
- ☐ F
- ☐ G
- ☐ H
- ☐ I
- ☐ J
- ☐ K
- ☐ L
- ☐ M
- ☐ N
- ☐ O
- ☐ P
- ☐ Q
- ☐ R
- ☐ S
- ☐ T
- ☐ U
- ☐ V
- ☐ W
- ☐ X
- ☐ Y
- ☐ Z

Hidden Value: s-age

Value: Populates with the **length of time** since the survey taker started the current page

About you: birthday and family when growing up

*Q5 In what month were you born?**

- ☐ January
- ☐ February
- ☐ March
- ☐ April
- ☐ May
- ☐ June
- ☐ July
- ☐ August
- ☐ September
- ☐ October
- ☐ November
- ☐ December

Hidden Value: env

Value: populates with a randomly generated number between 0 and 1

*Q6 On what day in the month were you born?**

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11
- ☐ 12
- ☐ 13
- ☐ 14
- ☐ 15
- ☐ 16
- ☐ 17

- ☐ 18
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- ☐ 27
- ☐ 28
- ☐ 29
- ☐ 30
- ☐ 31

Hidden Value: nhs

Value: populates with a randomly generated number between 0 and 1

Validation: Min = 0 Max = 10 Must be numeric

*Q7 How many other children were there in the household you grew up in?**

Children older than me: _____

Children younger than me: _____

Hidden Value: s-siblings

Value: Populates with the **length of time** since the survey taker started the current page

About you: ethnicity and religion

Logic: Show/hide trigger exists.

*Q8 What race/ethnicity are you?**

- ☐ White British / Irish
- ☐ White other
- ☐ Asian or Asian-British
- ☐ Black or Black-British
- ☐ Na'vi
- ☐ Mixed
- ☐ Other

☐ Prefer not to answer

Logic: Hidden unless: Question "What race/ethnicity are you?" is one of the following answers ("White other", "Asian or Asian-British", "Black or Black-British", "Mixed")

Q9 How long have you been living in the UK?

- ☐ All my life
- ☐ More than 10 years (but not all my life)
- ☐ Between 5 and 10 years
- ☐ Between 1 and 5 years
- ☐ Less than 1 year

Hidden Value: pension

Value: populates with a randomly generated number between 0 and 1

*Q10 What religion are you?**

- ☐ Christian
- ☐ Muslim
- ☐ Hindu
- ☐ Sikh
- ☐ Buddhist
- ☐ Jewish
- ☐ Jedi
- ☐ Other
- ☐ Agnostic / Atheist
- ☐ None
- ☐ Prefer not to answer

Hidden Value: s-ethnic

Value: Populates with the **length of time** since the survey taker started the current page

About you: family

Validation: Must be numeric

Logic: Show/hide trigger exists.

*Q11 How many children do you have?**

Please include step- and adoptive children.

- ☐ 0
- ☐ 1
- ☐ 2

- ☐ 3
☐ 4
☐ 5 or more

Hidden Value: prime

Value: populates with a randomly generated number between 0 and 1

Logic: Hidden unless: Question "How many children do you have?" is one of the following answers ("1")

*Q12 How old is (s)he?**

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐
12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐
24 ☐ 25 ☐ 26 or older

Logic: Hidden unless: Question "How many children do you have?" is one of the following answers ("2")

*Q12 How old are they?**

Oldest / Youngest

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐
12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐
24 ☐ 25 ☐ 26 or older

Logic: Hidden unless: Question "How many children do you have?" is one of the following answers ("3")

*Q12 How old are they?**

Oldest / Middle/ Youngest

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐
12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐
24 ☐ 25 ☐ 26 or older

Logic: Hidden unless: Question "How many children do you have?" is one of the following answers ("4","5 or more")

*Q12 How old are they?**

Oldest / Youngest

- ☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐
12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐
24 ☐ 25 ☐ 26 or older

Validation: Min = 0 Max = 50 Must be numeric

Logic: Hidden unless: Question "How many children do you have?" is one of the following answers ("1","2","3","4","5 or more")

*Q13 How many grandchildren do you have?**

Hidden Value: s-children

Value: Populates with the **length of time** since the survey taker started the current page

About you: Education and work

*Q13 What is the highest degree you obtained?**

- ☐ Craft or occupational certificate
- ☐ Some GCSEs (or O level, CSE equivalent)
- ☐ Five or more GCSE A*-C grades (or O level, CSE equivalent)
- ☐ A Level
- ☐ Diploma, Certificate of Higher Education
- ☐ Bachelor's degree
- ☐ Professional qualifications, e.g., accountancy, law, medical
- ☐ Master's degree, Post-graduate Diploma
- ☐ PhD, DPhil
- ☐ Prefer not to say

Logic: Show/hide trigger exists.

*Q14 What is your occupation?**

- ☐ Manager, Director, Senior Official
- ☐ Professional
- ☐ Technical
- ☐ Administrative, Secretarial
- ☐ Skilled trade
- ☐ Carer
- ☐ Sales, Customer services
- ☐ Machine operator
- ☐ Other
- ☐ Student
- ☐ Homemaker
- ☐ Unemployed
- ☐ Retired

Logic: Hidden unless: Question "What is your occupation?" is one of the following answers ("Manager, Director, Senior

Official", "Professional", "Technical", "Administrative, Secretarial", "Skilled trade", "Carer", "Sales, Customer services", "Machine operator", "Other")

*Q15 In which sector do you work?**

- ☐ Agriculture, forestry, fishing
- ☐ Mining, quarrying
- ☐ Manufacturing
- ☐ Energy
- ☐ Water
- ☐ Wholesale and retail trade, repair
- ☐ Accommodation, restaurant, catering
- ☐ Transport, storage
- ☐ Financial and insurance services
- ☐ Information and communication technology
- ☐ Real estate
- ☐ Professional, scientific and technical services
- ☐ Administrative and support services
- ☐ Public administration and defense
- ☐ Education
- ☐ Health and social work
- ☐ Arts, entertainment, recreation
- ☐ Other

Hidden Value: s-degree

Value: Populates with the **length of time** since the survey taker started the current page

Attitudes

We will now ask some questions about your views on things.

Page entry logic: This page will show when: prime is exactly equal to "1"

Values

Q16 Patience is a virtue.

- ☐ strongly disagree ☐ moderately disagree ☐ slightly disagree ☐ neutral ☐
slightly agree ☐ moderately agree ☐ strongly agree ☐ don't know

Q17 Gambling is bad.

- ☐ strongly disagree ☐ moderately disagree ☐ slightly disagree ☐ neutral ☐
slightly agree ☐ moderately agree ☐ strongly agree ☐ don't know

Q18 We should help people who are worse off than us.

☐ strongly disagree ☐ moderately disagree ☐ slightly disagree ☐ neutral ☐
slightly agree ☐ moderately agree ☐ strongly agree ☐ don't know

Hidden Value: s-prime

Value: Populates with the **length of time** since the survey taker started the current page

An investment

After Tanaka et al. AER 2010 and Voors et al., AER 2012. Note that three questions allows us to estimate a three-parameter discount function, with a discount rate, present bias, and a degree of hyperbolicity.

*Q19 Would you rather have**

	today	£1000 in a year's time
£250 today	<input type="radio"/>	<input type="radio"/>
£500 today	<input type="radio"/>	<input type="radio"/>
£750 today	<input type="radio"/>	<input type="radio"/>
£850 today	<input type="radio"/>	<input type="radio"/>
£900 today	<input type="radio"/>	<input type="radio"/>
£950 today	<input type="radio"/>	<input type="radio"/>
£975 today	<input type="radio"/>	<input type="radio"/>
£990 today	<input type="radio"/>	<input type="radio"/>

*Q20 Would you rather have**

	today	£1000 in five years' time
£10 today	<input type="radio"/>	<input type="radio"/>

£30 today	<input type="radio"/>	<input type="radio"/>
£250 today	<input type="radio"/>	<input type="radio"/>
£450 today	<input type="radio"/>	<input type="radio"/>
£600 today	<input type="radio"/>	<input type="radio"/>
£750 today	<input type="radio"/>	<input type="radio"/>
£875 today	<input type="radio"/>	<input type="radio"/>
£950 today	<input type="radio"/>	<input type="radio"/>

Hidden Value: s-time0

Value: Populates with the **length of time** since the survey taker started the current page

Prospects

after Cornea and Gruener, 2002, JPubE

Q21 Compared with your parents when they were about your age, are you better or worse in your income and standard of living generally?

☐ much better off ☐ better off ☐ about equal ☐ worse off ☐ much worse off ☐ don't know

Q22 Compared with you, do you think that your children, when they reach your age, will be better or worse in their income and standard of living generally?

☐ much better off ☐ better off ☐ about equal ☐ worse off ☐ much worse off ☐ don't know

Hidden Value: s-cornea

Value: Populates with the **length of time** since the survey taker started the current page

Another investment

*Q23 Would you rather have**

	in a year from now	£1000 in a two years' time
--	--------------------	----------------------------

£250 in a year from now	()	()
£500 in a year from now	()	()
£750 in a year from now	()	()
£850 in a year from now	()	()
£900 in a year from now	()	()
£950 in a year from now	()	()
£975 in a year from now	()	()
£990 in a year from now	()	()

*Q24 Would you rather have**

	in a year from now	£1000 in six years' time
£5 in a year from now	()	()
£30 in a year from now	()	()
£250 in a year from now	()	()

£450 in a year from now	()	()
£600 in a year from now	()	()
£750 in a year from now	()	()
£875 in a year from now	()	()
£950 in a year from now	()	()

Hidden Value: s-time

Value: Populates with the **length of time** since the survey taker started the current page

A quiz

Frederick, JEP, 2005

Validation: Must be numeric

*Q25 A bat and a ball cost £5.50 in total. The bat costs £5.00 more than the ball. How much does the ball cost?**

Validation: Must be numeric

*Q26 If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets?**

Validation: Must be numeric

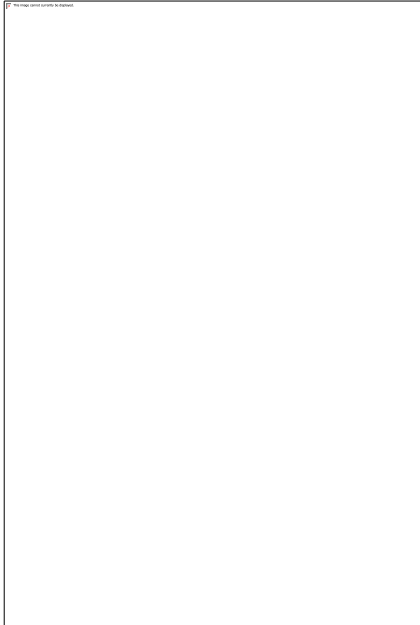
*Q27 In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take for the patch to cover half of the lake?**

Hidden Value: s-numeracy

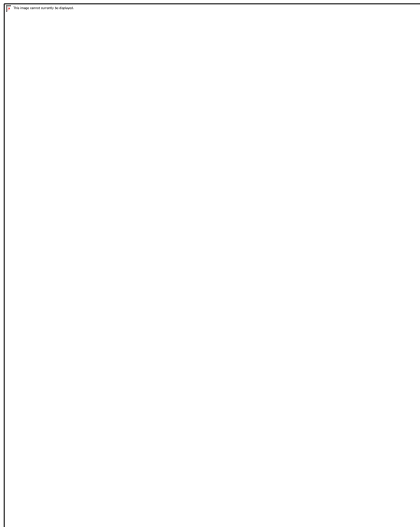
Value: Populates with the **length of time** since the survey taker started the current page

A prize draw

Page entry logic: This page will show when: svo is exactly equal to "1"



Page entry logic: This page will show when: svo is exactly equal to "2"



Page entry logic: This page will show when: svo is exactly equal to "3"



Page entry logic: This page will show when: svo is exactly equal to "4"



Page entry logic: This page will show when: svo is exactly equal to "5"



Page entry logic: This page will show when: svo is exactly equal to "6"



Page entry logic: This page will show when: svo is exactly equal to "7"



Page entry logic: This page will show when: svo is exactly equal to "8"



Page entry logic: This page will show when: svo is less than "5"

*Q28 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £50 £100 ☐ £55 £98 ☐ £60 £96 ☐ £65 £94 ☐ £70 £92 ☐ £75 £89 ☐
£80 £87 ☐ £85 £85

*Q28 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £50 £100 ☐ £55 £88 ☐ £60 £76 ☐ £65 £64 ☐ £70 £52 ☐ £75 £39 ☐
£80 £27 ☐ £85 £15

*Q28 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £100 £50 ☐ £98 £55 ☐ £96 £60 ☐ £93 £65 ☐ £91 £70 ☐ £89 £75 ☐
£87 £80 ☐ £85 £85

*Q28 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £85 £15 ☐ £85 £25 ☐ £85 £35 ☐ £85 £45 ☐ £85 £55 ☐ £85 £65 ☐
£85 £75 ☐ £85 £85

*Q28 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £50 £100 ☐ £60 £90 ☐ £70 £80 ☐ £80 £70 ☐ £90 £60 ☐ £100 £50

*Q28 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £85 £15 ☐ £88 £22 ☐ £91 £29 ☐ £94 £36 ☐ £97 £43 ☐ £100 £50

Hidden Value: s-svofem

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: svo is greater than "4"

Replace "Anne" with "John".

Hidden Value: s-svomale

Value: Populates with the **length of time** since the survey taker started the current page

Another quiz

Lusardi and Mitchell, JEL, 2014

Quiz score action:

Quiz Type: Tally

*Q29 Suppose you had £100 in a savings account and the interest rate was 2 percent per year. After 5 years, how much do you think you would have in the account if you left the money to grow:**

☐ more than £102 ☐ exactly £102 ☐ less than £102 ☐ do not know

*Q30 Imagine that the interest rate on your savings account was 1 percent per year and inflation was 2 percent per year. After 1 year, would you be able to buy:**

☐ more than today with the money in this account ☐ exactly the same as today with the money in this account ☐ less than today with the money in this account ☐ do not know

*Q31 Do you think that the following statement is true or false? "Buying a single company share usually provides a safer return than a mix of shares."**

☐ true ☐ false ☐ do not know

Hidden Value: s-finlit

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: (svo is less than "5" AND Question "" is greater than "4.3")

Another prize draw

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £50 £100 ☐ £60 £94 ☐ £70 £88 ☐ £80 £82 ☐ £90 £76 ☐ £100 £70

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £90 £100 ☐ £92 £98 ☐ £94 £96 ☐ £96 £94 ☐ £98 £92 ☐ £100 £90

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £70 £100 ☐ £76 £90 ☐ £82 £80 ☐ £88 £70 ☐ £94 £60 ☐ £100 £50

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £70 £100 ☐ £76 £98 ☐ £82 £96 ☐ £88 £94 ☐ £94 £92 ☐ £100 £90

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £70 £100 ☐ £76 £94 ☐ £82 £88 ☐ £88 £82 ☐ £94 £76 ☐ £100 £70

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £50 £100 ☐ £60 £98 ☐ £70 £96 ☐ £80 £94 ☐ £90 £92 ☐ £100 £90

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £90 £100 ☐ £92 £94 ☐ £94 £88 ☐ £96 £82 ☐ £98 £76 ☐ £100 £70

*Q32 Which prizes do you prefer?**

Your prize is on top, Anne's at the bottom.

☐ £90 £100 ☐ £92 £90 ☐ £94 £80 ☐ £96 £70 ☐ £98 £60 ☐ £100 £50

Hidden Value: s-svofem2

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: (svo is greater than "4" AND Question "" is greater than "4.3")

Replace "Anne" with "John"

Hidden Value: s-svomal2

Value: Populates with the **length of time** since the survey taker started the current page

An allocation

after Fehr, Naef & Schmidt, AER, 2006, although in their case the respondent is one of the three subjects. Second question was added to distinguish between Creedy and Bergson-Samuelson preferences.

*Q33 [1/2] Consider the yearly income of Mary, Beth and Cathy in three alternative situations. Which situation do you think is best?**

☐ Mary earns £60,000, Beth £44,000 and Cathy £33,000

☐ Mary earns £58,000, Beth £44,000 and Cathy £34,000

☐ Mary earns £56,000, Beth £44,000 and Cathy £35,000

☐ Mary earns £54,000, Beth £44,000 and Cathy £36,000

☐ Mary earns £52,000, Beth £44,000 and Cathy £37,000

*Q33 [2/2] Consider the yearly income of Mark, Ben and Charles in three alternative situations. Which situation do you think is best?**

☐ Mark earns £60,000, Ben £44,000 and Charles £33,000

☐ Mark earns £58,000, Ben £44,000 and Charles £34,000

☐ Mark earns £56,000, Ben £44,000 and Charles £35,000

☐ Mark earns £54,000, Ben £44,000 and Charles £36,000

☐ Mark earns £52,000, Ben £44,000 and Charles £37,000

Hidden Value: s-alloc

Value: Populates with the **length of time** since the survey taker started the current page

Political orientation

British Social Attitudes, 2013

*Q34 Government should redistribute income from the better off to those who are less well off.**

☐ strongly disagree ☐ disagree ☐ neutral ☐ agree ☐ strongly agree

*Q35 Ordinary working people do not get their fair share of the nation's wealth.**

☐ strongly disagree ☐ disagree ☐ neutral ☐ agree ☐ strongly agree

Q36 How important is hard work for getting ahead in life?

☐ essential ☐ very important ☐ fairly important ☐ not very important ☐ not important at all

Hidden Value: s-polorient

Value: Populates with the **length of time** since the survey taker started the current page

Another allocation

*Q37 [1/2] Consider the yearly income of Joan, Janet and Jane in three alternative situations. Which situation do you think is best?**

☐ Joan earns £33,000, Janet £23,000 and Jane £16,000

☐ Joan earns £31,000, Janet £23,000 and Jane £17,000

☐ Joan earns £29,000, Janet £23,000 and Jane £18,000

☐ Joan earns £27,000, Janet £23,000 and Jane £19,000

☐ Joan earns £25,000, Janet £23,000 and Jane £20,000

*Q37 [2/2] Consider the yearly income of Jack, Jon and James in three alternative situations. Which situation do you think is best?**

☐ Jack earns £33,000, Jon £23,000 and James £16,000

☐ Jack earns £31,000, Jon £23,000 and James £17,000

☐ Jack earns £29,000, Jon £23,000 and James £18,000

☐ Jack earns £27,000, Jon £23,000 and James £19,000

☐ Jack earns £25,000, Jon £23,000 and James £20,000

Hidden Value: s-allocation

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "2") OR domain is exactly equal to "3")

Health

Logic: Hidden unless: nhs is exactly equal to "1"



Logic: Hidden unless: nhs is exactly equal to "0"



We will now ask you some questions about health and health care.

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "2") OR domain is exactly equal to "3")

Your health

*Q38 How is your health in general? Would you say it was**

☐ very good ☐ good ☐ fair ☐ bad ☐ very bad ☐ prefer not to answer

Logic: Show/hide trigger exists.

*Q39 Have you ever smoked?**

☐ yes ☐ no

Logic: Hidden unless: Question "Have you ever smoked?" is one of the following answers ("yes")

*Q40 Do you smoke at all nowadays?**

☐ yes ☐ no

Logic: Show/hide trigger exists.

*Q41 Do you ever drink alcohol?**

☐ yes ☐ no

Logic: Hidden unless: Question "Do you ever drink alcohol?" is one of the following answers ("no")

*Q42 Have you always been a non-drinker or did you stop drinking for some reason?**

☐ always a non-drinker ☐ used to drink but stopped

Logic: Hidden unless: Question "Do you ever drink alcohol?" is one of the following answers ("yes")

*Q43 How often have you had an alcoholic drink of any kind during the last 12 months?**

☐ Almost every day ☐ Three or four days a week ☐ Once or twice a week ☐ Once or twice a month ☐ Once every couple of months ☐ Once or twice a year ☐ Not at all in the last 12 months

Hidden Value: s-health

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "2") OR domain is exactly equal to "3")

Your health

*Q44. How often have you had physical exercise of any kind during the last 12 months?**

☐ almost every day ☐ three or four days a week ☐ once or twice a week ☐ once or twice a month ☐ once every couple of months ☐ once or twice a year ☐ not at all in the last 12 months ☐ prefer not to say

Validation: Must be numeric

*Q45. How tall are you without shoes?**

Validation: Must be numeric

*Q46. How much do you weigh without clothes and shoes?**

Hidden Value: s-bmi

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "2") OR domain is exactly equal to "3")

The National Health Service

Logic: Show/hide trigger exists.

*Q47. The demands on the National Health Service are increasing as the population grows and ages. How should this be paid for?**

Click all that apply.

- ☐ The NHS should save money on administrative costs to increase spending on patients.
- ☐ An increase in spending on the NHS should be financed from an increase in general taxation.
- ☐ The NHS should save money by outsourcing more services to the private sector.
- ☐ Patients should pay when they go see their GP.
- ☐ Patients should pay for inappropriate use of A&E (e.g., alcohol-related accidents).
- ☐ Prescription charges should be raised.
- ☐ GPs should open more hours to save money on A&E.

Logic: Hidden unless: Question "The demands on the National Health Service are increasing as the population grows and ages. How should this be paid for?" is one of the following answers ("An increase in spending on the NHS should be financed from an increase in general taxation.")

Q48. How much would you want to see spend extra on the NHS?

The NHS is paid from general taxation. A 1% increase of the basic rate of income tax would raise £4.5 billion per year.

- ☐ £3 billion per year.
- ☐ £8 billion per year
- ☐ £12 billion per year.
- ☐ £20 billion per year.

Hidden Value: s-nhs

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "2") OR domain is exactly equal to "3")

The National Health Service

Validation: Min = 0 Max = 4000

*Q49. [1/3] How much do you think the National Health Services spends per person per year?**

0 _____ [] _____ 4000

Validation: Min = 0 Max = 5000

*Q49. [2/3] How much do you think the National Health Services spends per person per year?**

0 _____ [] _____ 5000

Validation: Min = 0 Max = 6000

Q49. [3/3] How much do you think the National Health Services spends per person per year?*

0 _____ [_] _____ 6000

Hidden Value: s-nhs

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "2") OR domain is exactly equal to "3")

The National Health Service

Validation: Min = 0 Max = 4000

Q50. [1/3] In fact, the National Health Service spends £1950 per person per year. How much do you think the NHS should spend?*

0 _____ [_] _____ 4000

Validation: Min = 0 Max = 5000

Q50. [2/3] In fact, the National Health Service spends £1950 per person per year. How much do you think the NHS should spend?*

0 _____ [_] _____ 5000

Validation: Min = 0 Max = 6000

Q50. [3/3] In fact, the National Health Service spends £1950 per person per year. How much do you think the NHS should spend?*

0 _____ [_] _____ 6000

Hidden Value: s-nhsbudget

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "4") OR domain is exactly equal to "5")

Pensions

Logic: Hidden unless: pension is exactly equal to "0"



Logic: Hidden unless: pension is exactly equal to "1"



We will now ask you some questions about your financial position and pension.

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "4") OR domain is exactly equal to "5")

Your pension

*Q51. I expect my main source of income when retired to be**

- ☐ State pension
- ☐ Occupational pension
- ☐ Personal pension
- ☐ Other savings or investments
- ☐ Inheritance
- ☐ Other
- ☐ Don't know

*Q52. Who should mainly be responsible for ensuring people have enough money to live on in retirement?**

- ☐ Mainly the government
- ☐ Mainly a person's employer

() Mainly a person themselves and their family

() Don't know

Validation: Min = 0 Must be numeric

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("24 or younger", "25-34", "35-44", "45-54", "55-64")

*Q53. At age 65 what do you think you will need personally as an gross income per year to ensure your current standard of living?**
please answer in today's prices

Hidden Value: s-pensionatt

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "4") OR domain is exactly equal to "5")

Your pension

Validation: Min = 0 Must be numeric

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("24 or younger", "25-34", "35-44", "45-54", "55-64")

*Q54. At age 65 what is your best estimate of what your own gross income per year will be?**
please answer in today's prices

Validation: Min = 0 Max = 500

*Q55. [1/3] How much state pension does the average pensioner receive per week?**
0 _____ [] _____ 500

Validation: Min = 0 Max = 600

*Q55. [2/3] How much state pension does the average pensioner receive per week?**
0 _____ [] _____ 600

Validation: Min = 0 Max = 400

*Q55. [3/3] How much state pension does the average pensioner receive per week?**
0 _____ [] _____ 400

Hidden Value: s-pensionval

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "4") OR domain is exactly equal to "5")

Your pension

Validation: Min = 0 Max = 500

*Q56. [1/3] Actually, the average pensioner gets £105 per week from the state pension. How much do you think it should be?**

0 _____ [] _____ 500

Validation: Min = 0 Max = 400

*Q56. [2/3] Actually, the average pensioner gets £105 per week from the state pension. How much do you think it should be?**

0 _____ [] _____ 400

Validation: Min = 0 Max = 600

*Q56. [3/3] Actually, the average pensioner gets £105 per week from the state pension. How much do you think it should be?**

0 _____ [] _____ 600

At the moment, women receive the state pension from 63 onwards and men from 65 onwards. As of 2018, men and women will receive the State Pension at 65. The pensionable age will go up to 66 by 2020, to 67 by 2028, and to 68 by 2046. What do you think of this?

Q57. The State Pension is paid from general taxation. A 1% increase of the basic rate of income tax would raise £4,500 million per year.

☐ People should get the state pension two years later. This would save HM Treasury about £18,000 million per year.

☐ People should get the state pension one year later. This would save HM Treasury about £9,000 million per year.

☐ This is fine as it is.

☐ People should get the state pension one year earlier. This would cost HM Treasury about £9,000 million per year.

☐ People should get the state pension two years earlier. This would cost HM Treasury about £18,000 million per year.

Hidden Value: s-statepension

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "4") OR domain is exactly equal to "5")

Bequests

Q58. What is the largest bequest you think you may receive any time in the future?

☐ £0

- ☐ less than £10,000
- ☐ between £10,000 and £20,000
- ☐ between £20,000 and £50,000
- ☐ between £50,000 and £100,000
- ☐ between £100,000 and £500,000
- ☐ between £500,000 and £1,000,000
- ☐ more than £1,000,000

Hidden Value: s-bequest

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "1" OR domain is exactly equal to "4") OR domain is exactly equal to "5")

Life expectancy

Validation: Min = 0 Max = 100

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("24 or younger")

*Q59. What are the chances that you will live to the ages listed below? (0=I'll never live to see this age; 100=I'll sure live this long)**

25 years 0 _____ [] _____ 100

35 years 0 _____ [] _____ 100

45 years 0 _____ [] _____ 100

55 years 0 _____ [] _____ 100

65 years 0 _____ [] _____ 100

75 years 0 _____ [] _____ 100

85 years 0 _____ [] _____ 100

95 years 0 _____ [] _____ 100

Validation: Min = 0 Max = 100

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("25-34")

*Q59. What are the chances that you will live to the ages listed below? (0=I'll never live to see this age; 100=I'll sure live this long)**

35 years 0 _____ [] _____ 100

45 years 0 _____ [] _____ 100

55 years 0 _____ [] _____ 100

65 years 0 _____ [] _____ 100

75 years 0 _____ [] _____ 100

85 years 0 _____ [] _____ 100

95 years 0 _____ [] _____ 100

Validation: Min = 0 Max = 100

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("35-44")

*Q59. What are the chances that you will live to the ages listed below? (0=I'll never live to see this age; 100=I'll sure live this long)**

45 years 0 _____ [] _____ 100

55 years 0 _____ [] _____ 100

65 years 0 _____ [] _____ 100

75 years 0 _____ [] _____ 100

85 years 0 _____ [] _____ 100

95 years 0 _____ [] _____ 100

Validation: Min = 0 Max = 100

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("45-54")

*Q59. What are the chances that you will live to the ages listed below? (0=I'll never live to see this age; 100=I'll sure live this long)**

55 years 0 _____ [] _____ 100

65 years 0 _____ [] _____ 100

75 years 0 _____ [] _____ 100

85 years 0 _____ [] _____ 100

95 years 0 _____ [] _____ 100

Validation: Min = 0 Max = 100

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("55-64")

Q59. What are the chances that you will live to the ages listed below? (0=I'll never live to see this age; 100=I'll sure live this long)*

65 years 0 _____ [] _____ 100

75 years 0 _____ [] _____ 100

85 years 0 _____ [] _____ 100

95 years 0 _____ [] _____ 100

Validation: Min = 0 Max = 100

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("65-74")

Q59. What are the chances that you will live to the ages listed below? (0=I'll never live to see this age; 100=I'll sure live this long)*

75 years 0 _____ [] _____ 100

85 years 0 _____ [] _____ 100

95 years 0 _____ [] _____ 100

Validation: Min = 0 Max = 100

Logic: Hidden unless: Question "How old are you?" is one of the following answers ("75 or older")

Q59. What are the chances that you will live to the ages listed below? (0=I'll never live to see this age; 100=I'll sure live this long)*

85 years 0 _____ [] _____ 100

95 years 0 _____ [] _____ 100

Hidden Value: s-lifeexp

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "2" OR domain is exactly equal to "4") OR domain is exactly equal to "6")

Education

Logic: Hidden unless: school is exactly equal to "0"



Logic: Hidden unless: school is exactly equal to "1"



We will now ask some questions about education.

Page entry logic: This page will show when: ((domain is exactly equal to "2" OR domain is exactly equal to "4") OR domain is exactly equal to "6")

Education

*Q60. At the moment, 3 and 4 year-olds get 15 hours of free child care per week.**

This subsidy is paid from general taxation. A 1% increase of the basic rate of income tax would raise £4,500 million per year.

- ☐ This should be reduced to 0 hours, saving HM Treasury £350 million per year.
- ☐ This should be reduced to 8 hours and limited to 4 year-olds, saving HM Treasury £260 million per year.
- ☐ This should be reduced to 8 hours, saving HM Treasury £175 million per year.
- ☐ This is fine as it is.

- () This should be increased to 30 hours, costing HM Treasury £350 million per year.
- () This should be increased to 30 hours and extended to 2 year-olds, costing HM Treasury £700 million per year.

*Q61. In primary state schools, the average class size is 26 pupils.**

State schools are financed from general taxation. A 1% increase of the basic rate of income tax would raise £4,500 million per year.

- () This should be reduced to 22 pupils, costing HM Treasury of £4,900 million per year.
- () This should be reduced to 24 pupils, costing HM Treasury £2,300 million per year.
- () This is fine as it is.
- () This should be increased to 28 pupils, saving HM Treasury £1,900 million per year.
- () This should be increased to 30 pupils, saving HM Treasury £3,600 million per year.

Hidden Value: s-education1

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "2" OR domain is exactly equal to "4") OR domain is exactly equal to "6")

Education

*Q62. According to some estimates, 60,000 pupils from disadvantaged backgrounds, who showed great promise at the end of primary school, fail to do well at the GCSEs and do not continue to higher education. What should the government do about these clever but poor kids?**

State schools are financed from general taxation. A 1% increase of the basic rate of income tax would raise £4,500 million per year.

- () The government cannot afford special support programmes.
- () The government should set up a Gifted and Talented Fund and endow it with £15 million per year (£250 per eligible pupil per year).
- () The government should set up a Gifted and Talented Fund and endow it with £30 million per year (£500 per eligible pupil per year).
- () The government should set up a Gifted and Talented Fund and endow it with £60 million per year (£1000 per eligible pupil per year).
- () This problem should be solved by stricter selection in secondary schools.
- () Don't know

*Q63. At the moment, students pay up to £9,000 per year in university fees for undergraduate courses.**

- () Students should not pay fees and receive a maintenance grant.
- () Students should not pay fees.
- () Fees should be capped at £3,000 per year.
- () Fees should be capped at £6,000 per year.

- ☐ Fees should remain capped at £9,000 per year.
- ☐ Fees should be capped at £12,000 per year.
- ☐ Fees should be capped at £15,000 per year.
- ☐ There should be no cap on fees. Let the universities decide for themselves.
- ☐ Don't know

Hidden Value: s-education2

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "2" OR domain is exactly equal to "4") OR domain is exactly equal to "6")

Education spending

Validation: Min = 0 Max = 10000

*Q64. How much do you think the government spends, per pupil per year, on primary education?**

0 _____ [_] _____ 10000

Validation: Min = 0 Max = 10000

*Q65. How much do you think the government spends, per pupil per year, on secondary education?**

0 _____ [_] _____ 10000

Validation: Min = 0 Max = 10000

*Q66. How much do you think the government spends, per student per year, on higher education?**

0 _____ [_] _____ 10000

Hidden Value: s-educspend

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "2" OR domain is exactly equal to "4") OR domain is exactly equal to "6")

Education budget

Validation: Min = 0 Max = 10000

*Q67. Actually, in primary education, the governments spends some £4500 per pupil per year. How much do you think the government should spend?**

0 _____ [_] _____ 10000

Validation: Min = 0 Max = 10000

*Q68. Actually, in secondary education, the governments spends some £6000 per pupil per year. How much do you think the government should spend?**

0 _____ [] _____ 10000

Validation: Min = 0 Max = 10000

*Q69. Actually, in higher education, the governments spends some £6300 per student per year. How much do you think the government should spend?**

0 _____ [] _____ 10000

Hidden Value: s-educbudget

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "2" OR domain is exactly equal to "4") OR domain is exactly equal to "6")

Responsibility towards children

Q70. Which of the following statements do you agree with most?

- ☐ A child should be financially independent when they're 18.
- ☐ Financially, parents should help their child through university (should they go) but that's it.
- ☐ Financially, parents should help their child through university (should they go) and help them to buy their first house.
- ☐ Financially, parents should help their child through university (should they go), help them to buy their first house, and try to leave a large inheritance.
- ☐ Financially, parents should help their child through university (should they go) and help them to buy their first house, but any inheritance should go to the grandchildren.

Hidden Value: s-respkids

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "3" OR domain is exactly equal to "5") OR domain is exactly equal to "6")

Environment

Logic: Hidden unless: env is exactly equal to "0"



Logic: Hidden unless: env is exactly equal to "1"



We will now ask you some questions about the environment and climate change.

Page entry logic: This page will show when: ((domain is exactly equal to "3" OR domain is exactly equal to "5") OR domain is exactly equal to "6")

Climate change

Kahan, 2015

*Q71. Climate scientists believe that the increase of atmospheric carbon dioxide associated with the burning of fossil fuels will reduce photosynthesis by plants.**

☐ false ☐ true

*Q72. Climate scientists believe that human-caused global warming will increase the risk of skin cancer in human beings.**

☐ false ☐ true

Q73. Climate scientists believe that human-caused global warming will results in flooding of many coastal regions.*

☐ false ☐ true

Q74. Climate scientists believe that if the North Pole icecap melted as a result of human-caused global warming, global sea levels would rise.*

☐ false ☐ true

Q75. Climate scientists believe that human-caused global warming has increased the number and severity of hurricanes around the world.*

☐ false ☐ true

Q76. Climate scientists believe that nuclear power generation contributes to global warming.*

☐ false ☐ true

Q77. Climate scientists believe that there will be positive as well as negative effects from human-caused global warming.*

☐ false ☐ true

Q78. Climate scientists believe that globally average surface air temperatures were higher for the first decade of the twenty-first century (2000-2009) than for the last decade of the twentieth century (1990-1999).*

☐ false ☐ true

Hidden Value: s-climknow

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "3" OR domain is exactly equal to "5") OR domain is exactly equal to "6")

Climate impacts

Validation: Min = 0 Max = 10

Q79. How serious a problem do you think climate change is at this moment?*

0 _____ [] _____ 10

Validation: Min = 0 Max = 10

Q80. How serious a problem do you think climate change will be in 10 years' time?*

0 _____ [] _____ 10

Validation: Min = 0 Max = 10

Q81. How serious a problem do you think climate change will be in 100 years' time?*

0 _____ [] _____ 10

Hidden Value: s-climcare

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "3" OR domain is exactly equal to "5") OR domain is exactly equal to "6")

Climate change and policy

Validation: Min = 0 Max = 10

*Q82. Which affects you and your way of life more, climate change or policies to reduce greenhouse gas emissions?**

0 _____ [] _____ 10

Validation: Min = 0 Max = 10

*Q83. Which will affect your children and their way of life more, climate change or policies to reduced greenhouse gas emissions?**

0 _____ [] _____ 10

Validation: Min = 0 Max = 10

*Q84. Which will affect your grandchildren and their way of life more, climate change or policies to reduce greenhouse gas emissions?**

0 _____ [] _____ 10

Hidden Value: s-climpol

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "3" OR domain is exactly equal to "5") OR domain is exactly equal to "6")

UK climate policy

Validation: Min = -50 Max = 500

*Q85. The average household pays £1,369 per year for gas and electricity. Government intervention has raised the price to encourage people to use less and so reduce greenhouse house gas emissions. How much of that £1,369 is for climate policy?**

-50 _____ [] _____ 500

Validation: Min = 0 Max = 60

*Q86. On every litre of petrol, there is a duty of 61 pence. The duty for diesel is 71 pence per litre. The duty is partly a fuel duty for financing road building and maintenance, and partly a carbon duty for encouraging people to drive less so that less carbon dioxide is emitted. The carbon duty is the same for petrol and diesel. How big do you think it is?**

0 _____ [] _____ 60

Hidden Value: s-climspend

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: ((domain is exactly equal to "3" OR domain is exactly equal to "5") OR domain is exactly equal to "6")

Climate policy

Validation: Min = 0 Max = 500

*Q87. Actually, climate policy adds about £89 per year to the gas and electricity bill of the average household. How much do you think climate policy should add to this bill?**

0 _____ [] _____ 500

Validation: Min = 0 Max = 100

*Q88. Actually, the carbon duty is 3 pence per litre. How high do you think it should be?**

0 _____ [] _____ 100

Hidden Value: s-climbudget

Value: Populates with the **length of time** since the survey taker started the current page

Government spending

We will now ask some questions about government spending.

Government expenditures

Validation: Min = 0 Max = 100 Must be numeric

*Q89. The government spends about £686 billion per year. How do you think this is spend? Please answer in percent - that is, pence in the pound - of total government spending.**

_____ Debt interest payments

_____ National Health Service

_____ Education

_____ Environmental protection (e.g., waste, nature)

_____ Pensions

_____ Defence

_____ Unemployment and social security (e.g., disability, family benefits)

_____ Foreign aid

_____ EU transfers (net)

_____ Other (e.g., transport, police, housing)

Hidden Value: s-govspend

Value: Populates with the **length of time** since the survey taker started the current page

Government expenditures

Validation: Min = 0 Max = 100 Must be numeric

Q90. In fact, current government spending is as shown below. How much do you think we should spend? Please answer in percent - that is, pence in the pound - of total government spending.

Note that if you spend more than 7% on interest payments and debt reduction, the national debt will fall; and if you spend less than 7%, the national debt will rise.

_____ Unemployment and social security (e.g., disability, family benefits)

_____ National Health Service

_____ Pensions

_____ Other (e.g., transport, police, housing)

_____ Education

_____ Debt interest payments and debt reduction

_____ Defence

_____ Environmental protection (e.g., waste, nature)

_____ Foreign aid

_____ EU transfers

Hidden Value: s-govbudget

Value: Populates with the **length of time** since the survey taker started the current page

About you

Finally, we will ask some more questions about you. Recall that all your answers will be kept strictly confidential.

About you: income

*Q91. What is your household income (before tax)?**

- () Less than £11,000
- () £11,000 to £16,000
- () £16,000 to £20,000
- () £20,000 to £26,000
- () £26,000 to £32,000
- () £32,000 to £39,000
- () £39,000 to £48,000
- () £48,000 to £60,000
- () £60,000 to £81,000
- () £81,000 to £100,000
- () £100,000 or more

() prefer not to say

Hidden Value: s-income

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: Question "What is your household income (before tax)?" is one of the following answers ("£26,000 to £32,000", "£32,000 to £39,000", "£39,000 to £48,000", "prefer not to say")

A lottery

After Tanaka, Camerer & Nguyen, AER, 2010. Note that with one lottery question, we can only estimate risk aversion. If we also want to estimate ambiguity aversion, a bias towards certain outcomes, and risk amplification, we should add more questions.

There are two lotteries, decided by the throw of a dice.

[1/2] In Lottery 1, you'll either win £1,000 or £2,000. You'll win £1,000 if the dice falls on 1, 2, or 3. You'll win £2,000 if the dice falls on 4, 5, or 6.

[2/2] In Lottery 1, you'll either win £1,000 or £2,000. You'll win £1,000 if the dice falls on 1, 3, or 5. You'll win £2,000 if the dice falls on 2, 4, or 6.

In Lottery 2, you'll either win £600 or a larger amount, given below. You'll win £600 if the dice falls on 1, 2, 3, 4, or 5. You'll win the larger amount if the dice falls on 6.

*Q92. Which lottery do you prefer?**

	Lottery 1: £1,000 or £2,000	Lottery 2: £600 or larger amount
Larger amount: £6,000	()	()
Larger amount: £6,600	()	()
Larger amount: £7,200	()	()
Larger amount: £7,800	()	()
Larger amount: £8,400	()	()
Larger amount: £9,000	()	()

Larger amount: £9,600	()	()
Larger amount: £10,200	()	()
Larger amount: £10,800	()	()
Larger amount: £11,400	()	()
Larger amount: £12,000	()	()

Hidden Value: s-risk

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: Question "What is your household income (before tax)?" is one of the following answers ("£48,000 to £60,000", "£60,000 to £81,000", "£81,000 to £100,000", "£100,000 or more")

A lottery

After Tanaka, Camerer & Nguyen, AER, 2010. Note that with one lottery question, we can only estimate risk aversion. If we also want to estimate ambiguity aversion, a bias towards certain outcomes, and risk amplification, we should add more questions.

There are two lotteries, decided by the throw of a dice.

[1/2] In Lottery 1, you'll either win £2,000 or £4,000. You'll win £2,000 if the dice falls on 1, 2, or 3. You'll win £4,000 if the dice falls on 4, 5, or 6.

[2/2] In Lottery 1, you'll either win £2,000 or £4,000. You'll win £2,000 if the dice falls on 1, 3, or 5. You'll win £4,000 if the dice falls on 2, 4, or 6.

In Lottery 2, you'll either win £1,200 or a larger amount, given below. You'll win £1,200 if the dice falls on 1, 2, 3, 4, or 5. You'll win the larger amount if the dice falls on 6.

*Q92. Which lottery do you prefer?**

	Lottery 1: £2,000 or £4,000	Lottery 2: £1,200 or larger amount
Larger amount: £12,000	()	()
Larger amount: £13,200	()	()

Larger amount: £14,400	()	()
Larger amount: £15,600	()	()
Larger amount: £16,800	()	()
Larger amount: £18,000	()	()
Larger amount: £19,200	()	()
Larger amount: £20,400	()	()
Larger amount: £21,600	()	()
Larger amount: £22,800	()	()
Larger amount: £24,000	()	()

Hidden Value: s-risk

Value: Populates with the **length of time** since the survey taker started the current page

Page entry logic: This page will show when: Question "What is your household income (before tax)?" is one of the following answers ("Less than £11,000", "£11,000 to £16,000", "£16,000 to £20,000", "£20,000 to £26,000")

A lottery

After Tanaka, Camerer & Nguyen, AER, 2010. Note that with one lottery question, we can only estimate risk aversion. If we also want to estimate ambiguity aversion, a bias towards certain outcomes, and risk amplification, we should add more questions.

There are two lotteries, decided by the throw of a dice.

[1/2] In Lottery 1, you'll either win £500 or £1,000. You'll win £500 if the dice falls on 1, 2, or 3. You'll win £1,000 if the dice falls on 4, 5, or 6.

[2/2] In Lottery 1, you'll either win £500 or £1,000. You'll win £500 if the dice falls on 1, 3, or 5. You'll win £1,000 if the dice falls on 2, 4, or 6.

In Lottery 2, you'll either win £300 or a larger amount, given below. You'll win £300 if the dice falls on 1, 2, 3, 4, or 5. You'll win the larger amount if the dice falls on 6.

Q92. Which lottery do you prefer?*

	Lottery 1: £500 or £1,000	Lottery 2: £300 or larger amount
Larger amount: £3,000	()	()
Larger amount: £3,300	()	()
Larger amount: £3,600	()	()
Larger amount: £3,900	()	()
Larger amount: £4,200	()	()
Larger amount: £4,500	()	()
Larger amount: £4,800	()	()
Larger amount: £5,100	()	()
Larger amount: £5,400	()	()
Larger amount: £5,700	()	()
Larger amount: £6,000	()	()

Hidden Value: s-risk

Value: Populates with the **length of time** since the survey taker started the current page

Your house

Q93. How much would you get for your house if you would sell it now?*

() I don't own a house () less than £100,000 () between £100,000 and £200,000 () between £200,000 and £300,000 () between £300,000 and £400,000 () between £400,000 and £500,000 () between £500,000 and £750,000 () between £750,000 and £1,000,000 () more than £1,000,000 () prefer not to answer

*Q94. How high is your mortgage?**

☐ I don't have a mortgage ☐ less than £50,000 ☐ between £50,000 and £100,000 ☐ between £100,000 and £150,000 ☐ between £150,000 and £200,000 ☐ between £200,000 and £250,000 ☐ between £250,000 and £350,000 ☐ between £350,000 and £500,000 ☐ more than £500,000 ☐ prefer not to answer

Hidden Value: s-house

Value: Populates with the **length of time** since the survey taker started the current page

Assets and loans

*Q95. What is the value of your assets?**

Savings ☐ I don't have any ☐ less than £5,000 ☐ between £5,000 and £10,000 ☐ between £10,000 and £20,000 ☐ between £20,000 and £50,000 ☐ between £50,000 and £100,000 ☐ between £100,000 and £500,000 ☐ more than £500,000 ☐ prefer not to answer

Stocks, shares and bonds ☐ I don't have any ☐ less than £5,000 ☐ between £5,000 and £10,000 ☐ between £10,000 and £20,000 ☐ between £20,000 and £50,000 ☐ between £50,000 and £100,000 ☐ between £100,000 and £500,000 ☐ more than £500,000 ☐ prefer not to answer

Other (excluding house) ☐ I don't have any ☐ less than £5,000 ☐ between £5,000 and £10,000 ☐ between £10,000 and £20,000 ☐ between £20,000 and £50,000 ☐ between £50,000 and £100,000 ☐ between £100,000 and £500,000 ☐ more than £500,000 ☐ prefer not to answer

*Q96. How much debt do you have?**

Student loans ☐ I don't have any ☐ less than £1,000 ☐ between £1,000 and £5,000 ☐ between £5,000 and £10,000 ☐ between £10,000 and £25,000 ☐ between £25,000 and £50,000 ☐ between £50,000 and £100,000 ☐ more than £100,000 ☐ prefer not to answer

Credit card arrears ☐ I don't have any ☐ less than £1,000 ☐ between £1,000 and £5,000 ☐ between £5,000 and £10,000 ☐ between £10,000 and £25,000 ☐ between £25,000 and £50,000 ☐ between £50,000 and £100,000 ☐ more than £100,000 ☐ prefer not to answer

Personal loans ☐ I don't have any ☐ less than £1,000 ☐ between £1,000 and £5,000 ☐ between £5,000 and £10,000 ☐ between £10,000 and £25,000 ☐ between £25,000 and £50,000 ☐ between £50,000 and £100,000 ☐ more than £100,000 ☐ prefer not to answer

Other (excluding mortgage) ☐ I don't have any ☐ less than £1,000 ☐ between £1,000 and £5,000 ☐ between £5,000 and £10,000 ☐ between £10,000 and £25,000 ☐ between £25,000 and £50,000 ☐ between £50,000 and £100,000 ☐ more than £100,000 ☐ prefer not to answer

Hidden Value: s-asset

Value: Populates with the **length of time** since the survey taker started the current page

Thank you!

Validation: %s format expected

That was the final question. Please press "submit" to finish the survey.

If you want to see the results, please leave your email.

Thank You!

Thank you for taking our survey. Your response is very important to us.

You can click [here](#) to see the answers so far.

This survey was designed by [Peter Dolton](#) and [Richard Tol](#) of the [University of Sussex](#).

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