

Changing trust in the UK government during the COVID-19 pandemic: influences of country, generation and previous voting behaviour

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Abstract

This paper compares self-reported trust in the British Conservative government and an evaluation of the government's handling of the COVID-19 pandemic, over three time-points between May 2020 – February 2021, for two birth cohort studies, representing 'baby boomers' (sixty-something's) and 'Generation X' (fifty-something's). Our two outcomes are examined in the context of socio-demographic status, living arrangements, labour market position, social contact, expressions of loneliness, vaccine hesitancy, political attachment to the Conservative party and country of residence (England, Wales and Scotland) using regression models which condition on prior trust scores. In the early waves political attachment has a strong relationship with trust until the negative influence of vaccine hesitancy is included in the final wave model for both cohorts. For Generation X a country difference persists for people living in Scotland (vs. England and Wales). Amongst baby boomers, women are more positive than men and graduates are more negative in their expression of trust in government, but these differences are not found for Generation X. When it comes to the government's handling of the pandemic the cohorts are similar in two key respects: the positive influence of political attachment to the Conservatives and negative association of graduate status. Vaccine hesitancy results in a negative influence amongst baby boomers but not for Generation X. In conclusion, trust in government and the government's handling of the pandemic are not independent of political orientation or graduate status. Sex, vaccine reluctance and country of residence nuance our conclusions and warrant further investigation.

Keywords

COVID-19; Trust; Voting; Country differences; Longitudinal web survey.

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Introduction and motivation for study

In June 2023 the UK government began its independent public inquiry to examine the UK's response to and impact of the COVID-19 pandemic, and to learn lessons for the futureⁱ. Principally, this paper examines how trust in the British government and an assessment of how the government handled the pandemic was influenced by country of residence (England, Wales and Scotland)ⁱⁱ and prior political attachment to the Conservative party for two generations of adults born in 1958 and 1970 who belong to the 'baby boomers' and 'Generation X' respectively. Data was collected on three separate occasions: May 2020, September – October 2020, and February – March 2021. In our investigation of the impact of country of residence and political attachment on our outcomes we take account of several individual level variables including biological sex, graduate status, social class, employment status (including those furloughed), living alone or with others, expressions of loneliness, the degree of social contact and a measure of vaccine hesitancy. Our previous research included two younger generations, one born in England in 1989/90 (Next Steps) and the other covering births across the UK in 2000/2 (The Millennium Cohort Study), (Parsons & Wiggins, 2022). The principal reason for reducing the generational coverage of our investigation was largely pragmatic, as there was no available data on the voting behaviour for the younger generations. Focusing on two cohorts aged 50 years and above drives the policy relevance of the research given their heightened risk of being infected or dying from COVID-19 (ONS, 2022) next to their 'old-old' counterparts (the frail elderly aged 85 and above). The expansion of the research to examine country differences also adds valuable insights into what impact where a person lives has on their trust in government and any evaluation of the government's handling of the pandemic. Following devolution, the administrations of Wales and Scotland were at liberty to develop their own policy interpretation as to how to respond to the challenges of the pandemic (Tatlow et al., 2020), and notable differences emerged from the main UK Governments interpretation that was implemented in England as the pandemic progressed.

A further point of departure for considering our previous results and those reported here resides not only in policy intervention but in context. The pace of changing policy interventions and events make it difficult to pinpoint precise influences on our outcomes during any wave although it is likely that expressions of trust will vary on any specific measurement occasion as an individual's exposure to and experience of COVID-19 varies along with their behavioural responses to government interventions and their exposure to the influence of the media build-up in different ways. To recap, wave 1 covered most of May 2020, wave 2 took place between mid-September to mid-October 2020 and wave 3 ran from February to mid-March 2021. During the fieldwork stretching from May 2020 to March 2021 there were three national lockdowns as well as the introduction of a tier system of restrictions (see Institute for Government (2021) and The Health Foundation COVID-19 policy tracker (2021)), which also varied by country and region, creating a more complex and uneven playing field which could all impact on possible period effects. During wave 1 the UK overtook Italy with over 29k deaths for coronavirus (by 5th May 2020), there were mixed messages for instance 'stay alert, follow the rules' and the PM stressed that we were to be driven by the science ($R < 1$ where R is the average number of secondary infections produced by a single infected person). In May 2020, the PM's key adviser, Dominic Cummings breached the lockdown rules. As reported in the Daily Mail, 'What planet are they on?' (25th May 2020) coinciding with the end of the first wave of data collection. In mid-June, Nielsen, Oxford Reuter's Institute remarked "I have never in 10 years of research in this area seen a drop in trust like we have seen for the UK government in the course of six weeks" (14th June, Guardian) and House of Commons Public Accounts Committee suggested that "care homes had been thrown to the wolves" against which in July that year the Treasury tweeted "grab a drink, raise a glass, pubs are reopening their doors"

(subsequently withdrawn) and the public were incentivised to “eat out to help out” against a background of rising cases. The period running up to the second wave of data collection has been described as the ‘reckless summer’ which may well explain a ‘dip’ in trust scores in government as reported for England, Wales and Scotland combined (Parsons & Wiggins, 2022). In the run-up to the third wave of data collection, England entered a third national lockdown (6th January 2021), and plans were announced for a return to school for primary and secondary school children. Perhaps when combined with a gradual easing of restrictions upon social gatherings during the Christmas period (23rd to 27th December 2020) and knowledge that Covid-19 vaccines were being approved and plans prepared for rolling out vaccine were being prepared (Department of Health and Social Care, 2021) the majority of the public began to feel that things were being managed effectively resulting in a rise in trust scores for government (Parsons & Wiggins, 2020)ⁱⁱⁱ. In the countrywide analyses that follow we will examine the extent to which these UK-wide movements in trust vary.

In the next section we provide some further background about the conceptualization and measurement of trust alongside the policy context for this investigation followed by a brief resume of the theoretical and empirical reasons for selecting individual-level explanatory variables and potential influences on expressions of trust in government and assessments of the government’s handling of the pandemic.

Background

According to the Oxford dictionary, trust denotes a firm belief in the honesty, veracity, justice and strength of a person or thing. In everyday conversation and political dialogue, use of the term is typically taken for granted. The following quote from a (relatively) recent speech made by John Major (former UK prime minister) captures the spirit of this our research, “Trust matters. It matters to our parliament. It matters to our country. It matters for the long-term protection and well-being of democracy.” (The Institute for Government, 10th February 2022). It is certainly the case that trust, and fairness are now central to government thinking (GOV.UK, 2022)^{iv}. Recent findings from survey research carried out by UCL’s Constitution Unit suggest that the health of democracy, including trust in politicians, matters as much as crime and immigration (Renwick, Lauderdale, Russell & Cleaver, 2023).

Trust has been operationalised in survey research in many ways, with its origins lying in a 3-item scale developed by Rosenberg (1956) that has been included in the US General Social Survey (GSS) since the early 1970s. The 3-item scale taps into a belief about having ‘faith in people’ and attitudes towards ‘human nature’ building upon the underlying concept of misanthropy (a dislike of humankind, see Smith (1997)) and is presented as follows:

- Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?
- Do you think that most people would try to take advantage of you if they got a chance, or would they try to be fair?
- Would you say that most of the time people try to be helpful, or that they are mostly looking out for themselves?

In the UK, recent applications to capture trust during the pandemic have included a combination of Likert ratings with varying focus and follow-on filter questions. For example, a King’s College Survey with Ipsos MORI (17-20 July 2020, n= 2237), Duffy (2020) ask “To what extent, if at all, do you trust... the government’s advice on when it’s safe to return to work, school, or leisure activities (a great deal/a fair amount/not very much/not at all / don’t know).

Respondents who trust the government's advice 'a great deal' or 'a fair amount' were asked "how stressful did they find coronavirus". Using an online questionnaire for a sample of over 9K aged 20 and above, Enria et al., (2021) applied five questions to focus on the relationship between trust in the UK government's COVID-19 response and perceptions of transparency. For example, "do you think that the government tells you the whole truth about coronavirus and COVID-19? (always/mostly/sometimes/almost never/never/don't know)". If other than always, respondents were given an open text opportunity to expand upon what they thought the government was not being truthful about^v.

Against this background, 'trust in government' in the CLS COVID-19 Web Survey was measured on an 11-point visual analogue scale where assessments are based on a subjective positioning of trust where 0 indicates no trust at all and 10 represents complete trust. Use of a visual analogue scale to assess a person's trust in government is obviously easy to administer but wholly subjective with regard to the respondents' own interpretation of the meaning of the concept 'trust in government'. Interestingly, a similar approach has been adopted by the OECD (2023) to gain an international perspective on trust in government using the question "in this country do you have trust in national government? (yes/no/don't know)". Their latest findings for 2022 indicate that less than 40% of UK respondents answered 'yes' compared to over 77% of survey participants living in Switzerland, Luxembourg and Finland. Interestingly, the UK percentage was higher than the US at 31%. The decision to analyse country differences in the responses on trust in government and the government's handling of the pandemic was taken on the basis that whilst residents in Scotland and Wales were de facto members of the UK government they were also subject to variations in policy intervention and management strategies for handling the pandemic which were specific to their own devolved governments.

Using the same sources of longitudinal data from the NCDS and BCS70 cohort studies Schoon and Cheng (2011) develop a lifetime learning model whereby individuals (aged 33 and 30 years respectively) who have accumulated more educational, socioeconomic, and motivational resources throughout their life course express higher levels of political trust in mid-life compared to those with fewer resources. The measurement of political trust consisted of a summative score based on seven attitude statements about government and institutions (see Wiggins & Bynner, 1993). Sample items include 'There is one law for the rich and one for the poor', 'Politicians are in politics for their own benefit' and 'No political party would benefit me' all measured on a 5-point Likert scale. Clearly, there are obvious differences in their conceptualisation of trust between a single global assessment of trust in government and one which conveys a distinct 'left-right' dimension to the meaning of trust. Schoon and Cheng draw attention to the important contributions to the literature from Inglehart (1997) and Putman (2008a) on social cohesion and political trust. The latter suggests that "political trust is based on values that are learned early in life and are transmitted from generation to generation". Our contention is that expressions of trust and evaluations of the government's performance will be influenced by attachment to the government of the day (Conservative) as measured by the strength of an individual's voting record for that political party over recent general elections that took place between 1997 – 2010. For further reading on the conceptualisation and measurement of trust see Zmerli and Newton (2011), Uslander (2012) and Lyon et al., (2012).

What follows is a brief theoretical guide to the inclusion of several influences that may begin to explain expressions of trust in government and an assessment of the government's handling of the pandemic together with a resume of our earlier findings based on this framework (Parsons & Wiggins, 2020, 2022).

In our analysis of wave one data (May 2020), women tended to be consistently more trusting of government than their male counterparts. Schoon and Cheng (2011) echo this finding in that (biological) sex (male-female) is significantly associated with political trust. Schoon and Cheng (2011) and Van Elsas (2015) provide convincing evidence for the association of social advantage and education and political trust. In addition, we include a labour market indicator which takes account of the continuity of employment (including furlough status) during the three waves of the web survey. Indeed, job security could be an important influence on our outcomes (HMRC, 2021a, 2021b). For example, Jiang et al., (2022) report that ‘people with high levels of trust in government felt more secure in their jobs, had higher employer loyalty and were more likely to go out of their way to help co-workers’. Putnam (2008b) provides a vivid description of ‘thick’ and ‘thin’ trust. The former as “trust embedded in personal relations that are strong, frequent, and wider networks”. A diminution or ‘thinning’ of trust may be captured in expressions of loneliness which may well have consequences for reports of trust in government. Groake et al. (2020) report that the implementation in the UK of lockdown policies resulted in expressions of loneliness for over a quarter of the sample respondents in a cross-sectional online survey from almost 2,000 UK adults collected between March 23rd and April 24th, 2020. For these reasons we include a measure of feelings of loneliness alongside reports of living alone or with others and reports of the degree of social contact.

The uptake of the vaccine has attracted a lot of attention in the recent literature arising from studies of the pandemic, policy papers and social media. The independent Scientific Pandemic Insights on Group Behaviour (SPI-B) report for March 2021 states in its executive summary (#3) “there is substantial variation in vaccine uptake as of 24 February 2021 by key sociodemographic factors” which provides support for our decision to include an indicator of vaccine hesitancy in our modelling alongside the various socio-economic factors mentioned above. Our intention here is not to explore the reasons for vaccine hesitancy but to emphasise the policy implications of any social inequalities in mistrust (Bajos et al., (2022)).

McIntyre and Roy (2021) emphasise that devolution has given lawmakers in Edinburgh and Cardiff (equally, Belfast) the authority to act independently when it comes to health policy (unlike defence and monetary policy). However, this may not always be perceived as a benefit by the public. In their news diary research Cushion et al., (2020) suggest that different lockdown rules in the four nations actually confused the public. It is not unreasonable to conjecture then that where someone lives may affect their experience of the pandemic and consequently their evaluation of government. For a detailed analysis of differences in policy interventions across the four nations see Tatlow et al., (2021). Following Devine (2022) we also hypothesised that individual expressions of trust in government and evaluation of government’s handling of the pandemic would be influenced by a person’s political orientation. In that those individuals who were more likely to have voted for the government of the day (Conservative Party) would be more inclined to be generous in their trust and assessment of the present government.

Early findings based on wave 1 data alone (May 2020) demonstrated fairly low levels of trust in the government compared to a measure of trust in others (signifying ‘other people around you’) across all generations, but also that the older generations (aged 62 (NCDS) and 50 years (BCS70)) exhibited higher average levels of trust in government compared to their younger counterparts (aged 20- and 30-something).

We were also able to show how reported levels of trust in government during the first lockdown in May 2020 had changed compared to how much trust they had just before the coronavirus outbreak in March 2020: ‘more than before’, ‘same/no change’ and ‘less than before’. The

majority of baby boomers and Generation X respondents reported no change in their level of trust in the Government (over 55%) from pre-pandemic to the early days of lockdown during May 2020. However, amongst those who had changed their level of trust in government, in both generations there were many more who reported a decrease in trust in government than an increase. This appeared to signal early doubt or the beginnings of a lack of confidence in government amongst a notable minority of respondents.

Conditional regression analyses for trust at wave 2 (September-October 2020) and wave 3 (February-March 2021) showed a strong consistent influence of prior trust scores on later trust in government scores, but surprisingly little consistent influence amongst the socio-economic variables and assessments of social contact, living alone and employment status measures included in the modelling (Parsons & Wiggins, 2022). The two consistent associations with trust in government were graduate status and an expression of hesitancy about having a COVID-19 vaccination. Amongst baby boomers, women tended to be more trusting of the government than men at each of the three waves of data collection. In the first two waves, feelings of loneliness mattered for both cohorts but in wave three the inclusion of vaccine status in the modelling weakened this association.

The assessment of the government's handling of the pandemic was only asked in the final wave of the web survey (wave 3) conducted during February and March 2021. Here prior trust scores had a consistent impact on the evaluation of the government's strategy for both cohorts (the correlation between a prior trust score and the government's handling of the pandemic varied between .49 and .62 by wave and cohort, see Appendix 4). As with trust in government, graduate status and vaccine reluctance had a negative influence on the outcome. Women were also more likely to remain more positive towards the Government than men amongst the baby boomers, but this finding did not hold for Generation X. As with the analyses of trust in government, living arrangements, employment status and feelings of loneliness exert little influence on the outcome. The one exception to this was that being employed or furloughed in Generation X was associated with a negative assessment of how the government has handled the pandemic.

There were not sufficient numbers of minority ethnic groups amongst 'baby boomers' and 'Generation X' to allow any in-depth analysis of ethnic differences in the analysis that follows. Interested readers are encouraged to read our two earlier papers (Parsons & Wiggins, 2020, 2022)) to gain further insight into minority ethnic differences in reporting for younger generations.

In sum our research questions are as follows:

Research questions

- (i) To provide evidence on the extent to which individual 'baby boomers' and members of 'Generation X' vary in (a) their expressions of trust in government and b) their assessments of the government's handling of the pandemic by country of residence (England, Wales and Scotland) and prior attachment to the (Conservative) government of the day during the COVID-19 pandemic from 2020 to 2021.
- (ii) To examine to what extent the influence of country of residence and political attachment alter the combined influence of individual socio-demographic characteristics, living arrangements, labour market position, social contact, expressions of loneliness, prior expressions of trust and vaccine hesitancy. In

particular, to examine our early conclusion that biological sex, graduate status, loneliness and vaccine hesitancy matter when it comes to expressions of trust in government and an assessment of how well the government handled the pandemic.

The following sections describe the source of our data, the pattern of response cooperation and the operationalisation of our explanatory variables for the analysis.

Data and Methods

The original web survey consisting of five nationally representative longitudinal surveys was designed to help researchers understand the economic, health and social consequences of the coronavirus outbreak, to give a unique insight into how people's experiences during the pandemic vary depending on their earlier lives, and to be able to track the impact into the future. Our current analysis focuses on two birth cohorts, the National Child Development Survey (NCDS) who were born in 1958, into the later part of the 'baby boomers' generation (Power & Elliott, 2006), and the 1970 British Cohort Study (BCS70) who are part of Generation X (Elliott & Shepherd, 2006). In addition to the Covid-19 web surveys, members of both studies have been followed up nine times since the birth survey. (For further details on both studies see www.cls.ucl.ac.uk.)

Our findings are based on data collected from over 14,000 people on three separate occasions during the COVID-19 pandemic, between 2 and 30 May 2020 (wave 1), 10 September – 16 October 2020 (wave 2) and 1 February – 21 March 2021 (wave 3).

Given the potential for biases arising due to differential sample attrition among cohort members, full use was made of all available data for respondents who participated in one or more waves of the data collection. We used a combination of multiple imputation methodology (Seaman et al., 2012, Mostafa & Wiggins, 2015, Mostafa et al., 2021)) and re-weighting to restore the sample representativeness for each cohort (Brown et al., 2021) and to maximise statistical power (Royston., 2009; Silverwood et al., 2021). Table 1 describes the pattern of response for each cohort.

Table 1: Response patterns for NCDS and BCS70 cohort members living in England, Scotland and Wales across three waves of data collection

Cohort/ Response Pattern (w1-w2-w3)	NCDS	BCS70
	Proportion (N)	Proportion (N)
111	.55 (4115)	.42 (2882)
110	.03 (209)	.05 (318)
101	.04 (299)	.06 (407)
011	.18 (1303)	.18 (1263)
100	.04 (295)	.06 (385)
010	.05 (395)	.09 (601)
001	.11 (827)	.14 (983)
Imputed sample size	7443	6836

Note: each pattern is defined by the presence/absence of a case in a particular Wave where '1' = participation and '0' = non-participation, e.g., the pattern 111 identifies individuals who co-operated in all three waves and so on. +all participants living in England Scotland and Wales.

NCDS = 'Baby Boomers'; BCS70 = 'Generation X'

What follows are the operational definitions of the key variables applied in our analysis. Country of residence and political attachment are added to the list of measures used in (Parsons & Wiggins, 2022).

Key Measures

Box 1 details the question wording for the two outcome measures, trust in government which is measured in each of the three waves of data collection, and how individuals judged the government's performance in terms of its' handling of the pandemic was only measured once in the third and final wave.

Box 1: Questions on trust and the government's handling of the pandemic

Levels of trust in government (waves 1, 2 and 3)

On a scale from 0-10 where 0 means you are 'not at all trusting' and 10 means you are 'extremely trusting', how trusting are you that British Governments, of any party, place the needs of the nation above the needs of their own political party?

Government strategy (wave 3 only)

On a scale from 0 to 10, where 0 means 'very badly' and 10 means 'very well', how well would you say the Government has been handling the Coronavirus crisis since the outbreak in March 2020?

Covariates

Box 2 provides details of the covariates included in the modelling. Biological sex and social class of origin were taken from the birth surveys and graduate status was taken from the latest available wave of data collection pre-pandemic (age 55 NCDS, age 46 BCS70). Voting behaviour, specifically records how many times a cohort member had voted Conservative in General Elections between 1997-2010. This information was taken from surveys with NCDS cohort members in 1999/2000, 2008 and 2013, for BCS70 from surveys in 1999/2000, 2004 and 2012. The other key additional variable used to enhance earlier analyses included country of residence during the pandemic (England, Scotland and Wales).

The other covariates included in the analyses were available in each of the three waves of the Covid survey, including employment (employed or furloughed v other economic activity groups), social position (non-manual v manual occupation background), living arrangements (living alone or not), social capital (social contact and feelings of loneliness). The advantage of asking the same questions for employment, living alone or not, social contact and feeling lonely in each wave means that we are able to construct count variables (0,1,2,3) to indicate the exposure to each state across each of the waves.

In the third and final wave all respondents were asked to report on their vaccine uptake or intentions to do so. Box 2 contains the full list of explanatory variables used in our analyses. A full set of marginal distributions for the explanatory variables described in box 2 can be found in Appendix 1; Appendix 2 lists the mean outcome scores across these variables.

Box 2: Explanatory variables used in regression modelling

All waves

Biological sex (sex)

Family social class (prof/manual)

Degree education and above (degree)

Country of residence (England, Wales or Scotland)

Loyalty to Conservatives (proportion of times voted Conservative between 1997 and 2010)

Wave 1

Employed/furloughed or not (empfurlough)

Living alone or not (live alone)

Low social contact or not (social contact)

Feeling of lonely or not (lonely)

Wave 2

Counts (0,1,2) based on reports of employed/furloughed, living alone, low social contact and feeling lonely in both waves.

Wave 3

Counts (0,1,2, 3) based on reports of employed/furloughed (empfur123), living alone (lone123), low social contact (scon123) and feeling lonely throughout all waves (alone123).
Unlikely to have a vaccine or undecided (vaccg)

Note: For NCDS members based on three general elections: 1997, 2005 and 2010, for BCS70 members based on four general elections: 1997, 2001, 2005 and 2010.

Analytical Strategy

We use a combination of descriptive statistics and regression modeling. Our principal analytical tool is least squares regression. Regression modelling is carried out for each wave of data collection. Essentially, wave 1 analyses of trust in government as the outcome is a cross-sectional analysis. All other models condition on prior trust scores, including the model for the government's handling of the pandemic (only measured in the final wave). All models include the pool of covariates detailed above, with the likelihood of taking up a vaccine only included in models for wave 3 outcomes.

All analyses were based on fully imputed data for respondents in each cohort who provided responses at one or more of the three waves of data collection and additionally weighted to restore sample representativeness as reported under 'data and methods' above.

For the prediction of trust in government we report the estimates for the best fitting model for each wave of analysis where country of residence and the proportion of occasions a cohort member has voted Conservative are included along with all covariates listed in Box 2 above. Modelling is conducted in distinct steps (not all shown in table 2 below). For each wave country of residence and voting attachment are entered in sequence together with their 2-way interaction. The analysis of wave 2 and 3 outcomes conditions on the previous trust scores which changes the nature of the interpretation of the findings over wave 1 to one of change in the outcome since the previous wave(s). These conditional regression models also allow for the accumulated count of reports of employment/furlough status, reports of living alone and social contact together with feelings of loneliness to reflect upon changing social and emotional circumstances upon the change in the outcome. Wave 3 models include vaccine hesitancy and corresponding 2-way interactions with each of the individual covariates.

The analysis of how the government handled the pandemic (only available for wave 3) was modelled with the same set of explanatory variables and subsequent interaction testing as outlined above.

In reporting our results, we begin with a graphical display of mean levels of trust in government for both cohorts across three data points by country of residence and a plot of average scores of the government's handling of the pandemic are given by for each cohort by country of residence in wave 3.

Results

Descriptive analysis

Table 2 provides the distribution of the analytical samples for the baby boomer (NCDS) and Generation X (BCS70) cohorts. For both cohorts the majority of respondents are resident in England (86%).

Table 2: Sample distribution by country and cohort membership

	NCDS	BCS70
England	.86 (6365)	.86 (5897)
Wales	.06 (408)	.05 (356)
Scotland	.08 (670)	.09 (583)
Sample sizes (N)	7443	6836

Note: NCDS = 'Baby Boomers'; BCS70 = 'Generation X'

The sample distribution of our other key variable namely, a proxy for loyalty to the government of the day (Conservative) is represented by the average proportion of times cohort members voted Conservative between 1997 and 2010 is shown in table 3 below. These proportions are quite low (around 25% overall) which decline steadily for each cohort by country (both in the same rank order; England followed by Wales and finally, Scotland). Generation X exhibits a lower average for each country when compared to the baby boomers.

Table 3: Average proportion of times cohort members voted conservative by country [95% CIs]

	NCDS	BCS70
All	.26 (.25-.27)	.23 (.22-.23)
England	.28 (.27-.29)	.24 (.23-.25)
Wales	.18 (.15-.22)	.16 (.13-.19)
Scotland	.14 (.11-.16)	.10 (.08-.12)
N	7443	6836

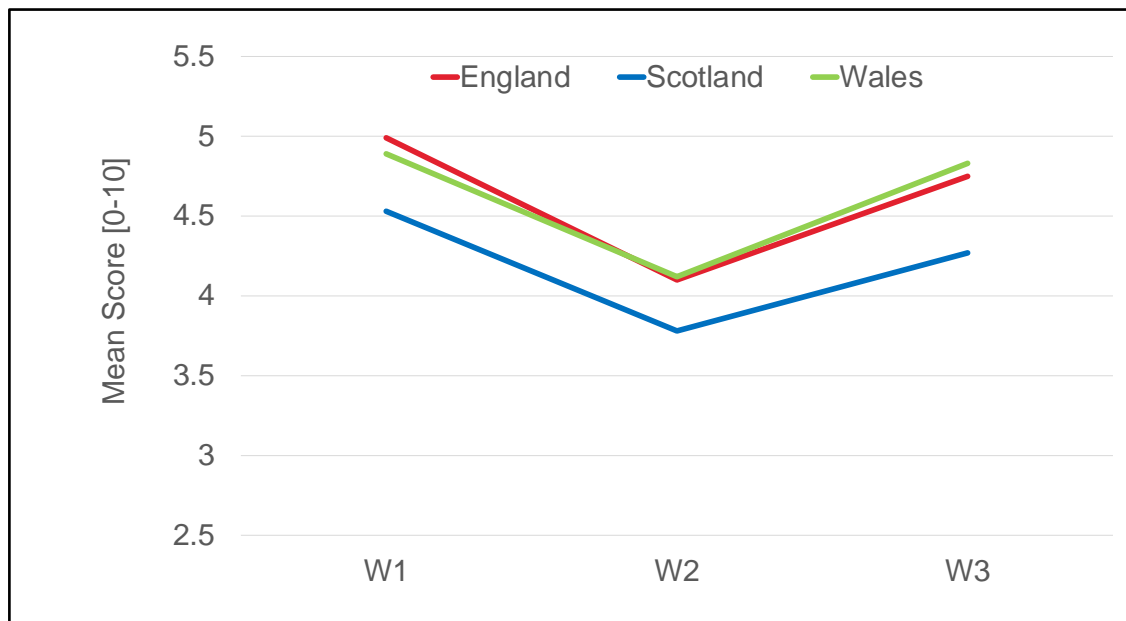
Note: NCDS = 'Baby Boomers'; BCS70 = 'Generation X'

Figures 1a and 1b provide average scores for trust in government across three waves of data collection comparing the three UK countries for each cohort. Appendix 1 contains mean values of trust in government and the government's handling of the pandemic for each explanatory variable by wave of data collection and cohort membership. For a closer inspection of any degree of overlap in the line graphs in figures 1a and 1b see Appendix 3 which contains the actual mean scores and 95 per cent confidence intervals for these items.

In Figures 1a and 1b both cohorts reveal a similar flat V-shape trend with the lowest average scores in trust for each country appearing in wave 2 recovering to wave 1 levels by wave 3 in

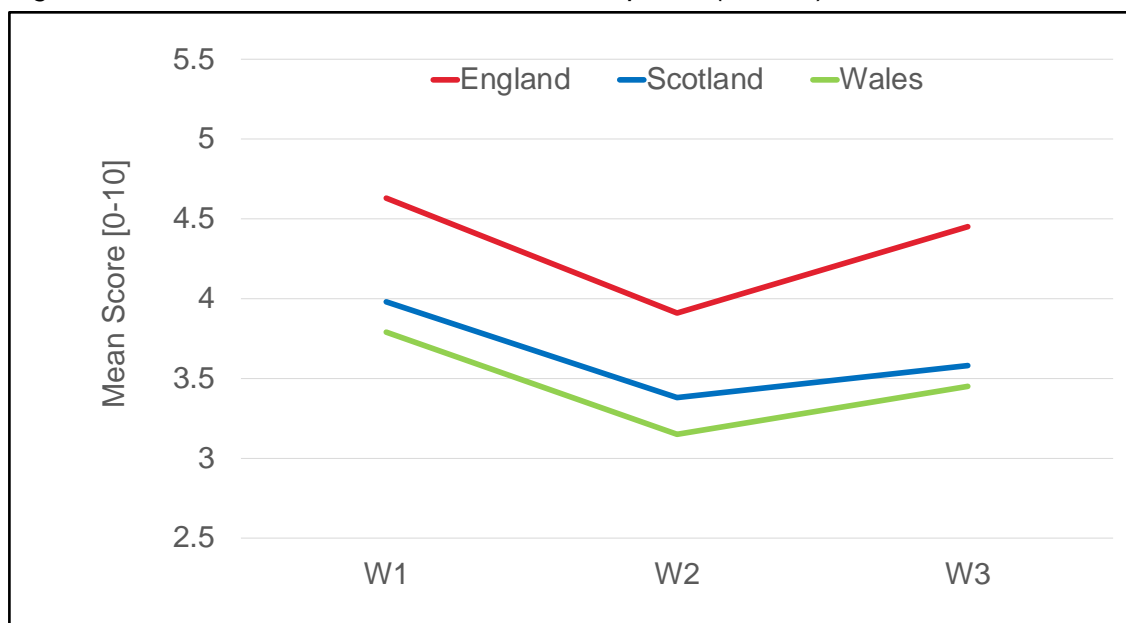
line with the all-country averages reported in Parsons & Wiggins, 2020. At each wave country wide differences between the cohorts are lower for Generation X by at least half a unit score. Whilst the lines across country are virtually parallel there are some interesting country-wide differences between the cohorts. The trend for the baby boomers (NCDS) is hardly different between England and Wales with residents in Scotland showing consistently lower trust scores whereas for Generation X (BCS70) the residents of Wales are much more like those in Scotland with English residents at least one unit above those living in Scotland and Wales in each wave.

Figure 1a: Trust in Government over three time points (NCDS)



Note: NCDS – no significant differences

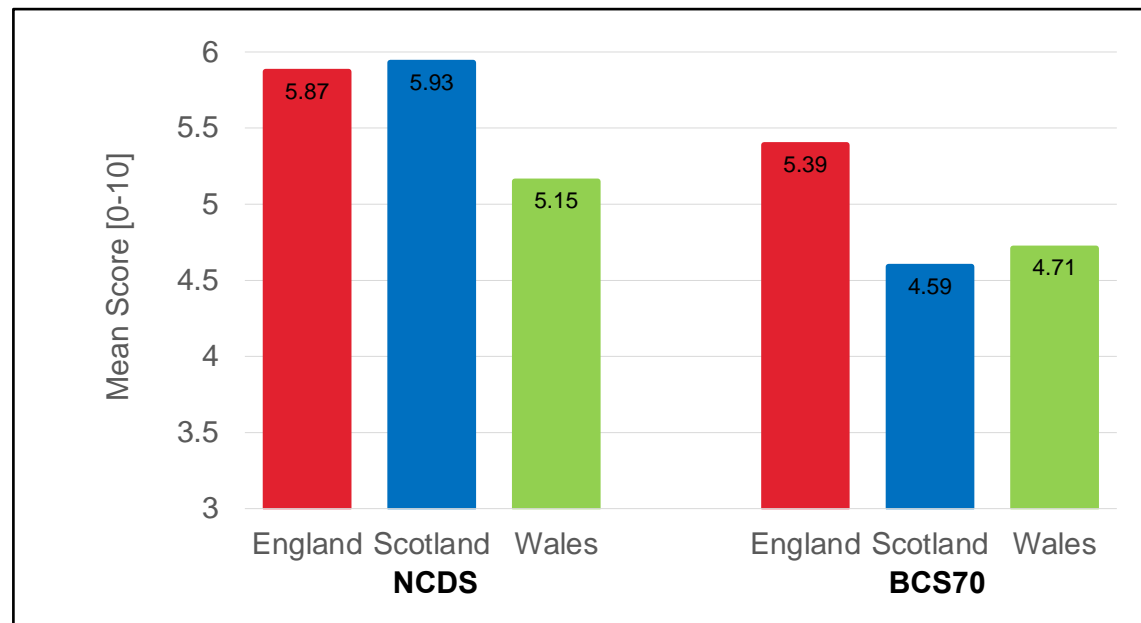
Figure 1b: Trust in Government over three time points (BCS70)



Note: BCS70 – Scotland significantly lower than England W1 & W3; Wales significantly lower than England W2 & W3

Turning to how well the Government had handled the pandemic, Figure 2 shows that average scores range between 5 and 6 points where the older baby boomers are marginally better disposed towards the government's handling of the pandemic in each country. In our previous paper (Parsons & Wiggins, 2022) we noted a marked difference between these two older cohorts (representing the over 50-year-olds) and their younger counterparts.

Figure 2: How well government handled the pandemic (wave 3 only)



Note: see Appendix 2 for 95% confidence intervals.

Regression Analyses

Following the stages of modelling described above the modelling results presented in table 4 progress across wave 1 – wave 2 – wave 3 for each cohort where the entries in the final columns labelled 'W3', (wave 3) represent our final models. The model fit (R-square values) for these models all range between 0.03 and 0.54 steadily improving as more information for each wave is included. A key focus of this investigation is to ascertain to what extent where a person lives and his/her political voting history impacts on our earlier findings (Parsons & Wiggins, 2022). Our initial models for wave 1 (not shown here) demonstrate a degree of evidence for country differences in the responses. Residents from Scotland and Wales exhibit a negative influence on trust in government where Scotland has an important influence for both cohorts whereas, for Wales less so (albeit statistically significant for Generation X). The inclusion of voting history in the next step weakens the strength of the influence of country difference and exhibits a strong association with trust in government in and of itself. The higher the voting score for Conservatives in the past the higher the trust in the (Conservative) government of the day. At this stage of modelling, we note a marked difference between the cohorts where Generation X retains statistical evidence for country differences as well as the voting. Turning our attention to later waves (2 and 3) which under our strategy implies allowing explanatory variables for social contact, feelings of loneliness, employment status and living alone to accumulate as well as conditioning on prior trust scores eliminates the statistical importance of being resident in Scotland for both cohorts where the history of voting Conservative remains influential alongside the positive association of the wave 1 trust score

and its wave 2 counterpart. The conditional regression analysis for the third wave which now includes a measure of vaccine reluctance for the first and only occasion together with two prior trust scores retains a non-significant influence of country difference for NCDS and now, for the first-time voting history. Unlike the previous wave (2) Scottish residency presents a statistically important and negative influence on the outcome for the younger cohort (BCS70). For both cohorts, vaccine reluctance exhibits a negative influence on trust in government along with the influence of prior trust scores. The negative impact of vaccine reluctance was less evident once two-way interactions of vaccine reluctance and remaining main effects were included in the model for Generation X (not shown here) although none of the interactions present a strong association with the outcome.

Amongst the remaining explanatory variables biological sex exhibits a consistent positive association for the older baby boomers but not so for Generation X. Similarly, graduate status matters for the baby boomers where we see a negative association degree attainment with trust which is not replicated amongst the Generation X members.

Finally, in table 5, we turn our attention to a cross-sectional analysis of the assessment of the government's handling of the pandemic which conditions upon prior trust scores in government.

The analysis of the assessment of the government's handling of the pandemic reveals relatively weak associations between country of residence and the outcome (albeit in a negative direction for Welsh and Scottish residents). For both cohorts we see a strong impact of voting histories. The less likely someone is to have voted Conservative in the past then the more likely they are to express a negative evaluation of the government's handling of the pandemic. Graduates demonstrate a uniform skepticism (negative association with government's handling of the pandemic) in both cohorts. Independently, the professional and managerial class are also more critical of government. In addition, there is also a strong association in the evaluation of the government's handling of the pandemic and prior trust scores which suggests a consistency in an individual's assessment of the government's performance and prior expressions of trust. So, the more an individual mistrusts the government the less likely they are to think that the government has handled the pandemic well. Beyond that the comparisons between the cohorts are more nuanced. As with the older baby boomer (NCDS) women's reports of trust in government they are positive in their evaluations unlike their younger counterparts in Generation X. Being employed or furloughed amongst Generation X produces a small yet significant negative association with the assessment of the government's handling of the pandemic. For the baby boomers (NCDS) the influence of vaccine reluctance is negatively related to the evaluation of the government's handling of the pandemic and whilst the direction of influence is negative for the younger cohort the association is non-significant.

Table 4: Trust in government by wave for NCDS and BCS70 cohort members

	NCDS			BCS70		
	W1	W2	W3	W1	W2	W3
Sex (female)	0.43*** [0.16,0.69]	0.08 [-0.13,0.28]	0.23** [0.04,0.42]	0.24 [-0.08,0.56]	-0.02 [-0.27,0.22]	0.12 [-0.06,0.30]
Social class (birth) (Prof/managerial)	0.05 [-0.26,0.36]	-0.09 [-0.32,0.13]	-0.02 [-0.24,0.20]	-0.10 [-0.39,0.20]	-0.10 [-0.31,0.12]	-0.12 [-0.30,0.06]
Education (Degree)	-0.30* [-0.63,0.03]	-0.19 [-0.46,0.07]	-0.25** [-0.45,-0.05]	-0.18 [-0.43,0.07]	-0.01 [-0.22,0.20]	-0.13 [-0.34,0.07]
Social Contact (low) {w1; w12; w123}	-0.11 [-0.73,0.51]	-0.01 [-0.31,0.28]	0.03 [-0.15,0.20]	-0.64** [-1.25,-0.03]	-0.04 [-0.28,0.20]	-0.05 [-0.22,0.12]
Feeling lonely (yes) {w1; w12; w123}	-0.63*** [-0.98,-0.28]	-0.17** [-0.32,-0.02]	-0.06 [-0.14,0.02]	-0.52*** [-0.87,-0.18]	-0.09 [-0.23,0.05]	-0.03 [-0.12,0.05]
Emp or Furloughed (yes) {w1; w12; w123}	-0.05 [-0.37,0.26]	-0.04 [-0.14,0.07]	-0.03 [-0.09,0.03]	0.26* [-0.02,0.54]	-0.04 [-0.15,0.08]	-0.04 [-0.11,0.02]
Living alone (yes) {w1; w12; w123}	-0.02 [-0.42,0.38]	-0.08 [-0.26,0.09]	-0.02 [-0.13,0.08]	-0.18 [-0.64,0.29]	-0.04 [-0.24,0.16]	-0.02 [-0.14,0.11]
<u>Country</u> (Ref: England)						
Wales	-0.02 [-0.69,0.65]	0.10 [-0.41,0.62]	0.09 [-0.34,0.53]	-0.76** [-1.45,-0.06]	-0.23 [-0.76,0.31]	-0.37 [-0.82,0.08]
Scotland	-0.27 [-0.67,0.14]	0.02 [-0.34,0.39]	-0.17 [-0.54,0.20]	-0.48** [-0.86,-0.09]	-0.10 [-0.45,0.26]	-0.38*** [-0.67,-0.10]
Vote Tory (prop: 0-1) {1997-2010}	1.49*** [1.05,1.94]	0.49*** [0.17,0.80]	0.05 [-0.23,0.33]	1.64*** [1.24,2.04]	0.50*** [0.15,0.85]	0.14 [-0.15,0.43]
Trust score wave 1		0.60*** [0.55,0.65]	0.41*** [0.32,0.49]		0.58*** [0.54,0.63]	0.38*** [0.30,0.47]
Trust score wave 2			0.54*** [0.43,0.64]			0.52*** [0.43,0.61]
Trust score wave 1##wave 2			-0.02** [-0.04,-0.00]			-0.01* [-0.03,0.00]
Vaccine Uptake (no, unlikely)			-0.71** [-1.25,-0.17]			-0.57** [-1.01,-0.13]

	NCDS			BCS70		
	W1	W2	W3	W1	W2	W3
_cons	5.09**** [4.76,5.42]	1.22**** [0.85,1.59]	1.04**** [0.64,1.44]	4.46**** [4.05,4.88]	1.29**** [0.86,1.72]	1.10**** [0.73,1.47]
N	7443	7443	7443	6836	6836	6836
pseudo R2	.03	.43	.52	.08	.41	.54

Note: 95% confidence intervals in brackets

* p < 0.1, ** p < 0.05, *** p < 0.01, **** p < 0.001

NCDS = 'Baby Boomers'

BCS70 = 'Generation X'

Table 5: Government handling of the pandemic in wave 3 by NCDS and BCS70 cohort membership.

	NCDS	BCS70
Sex (female)	0.28** [0.01,0.54]	0.00 [-0.25,0.25]
Social class (birth) (Prof/managerial)	-0.29** [-0.57,-0.01]	-0.23* [-0.47,0.01]
Education (Degree)	-0.79**** [-1.02,-0.55]	-0.57**** [-0.80,-0.34]
Social Contact (low) {w123}	0.14 [-0.14,0.41]	-0.01 [-0.24,0.22]
Feeling lonely (yes) {w123}	0.03 [-0.10,0.15]	0.07 [-0.05,0.19]
Emp or Furloughed (yes) {w123}	-0.06 [-0.14,0.01]	-0.08* [-0.16,0.01]
Living alone (yes) {w123}	0.04 [-0.10,0.17]	0.02 [-0.13,0.17]
Country (Ref: England)		
Wales	0.11 [-0.37,0.59]	-0.18 [-0.75,0.39]
Scotland	-0.31 [-0.88,0.25]	-0.12 [-0.53,0.29]
Vote Tory (prop: 0-1) {1997-2010}	0.84**** [0.50,1.18]	0.75**** [0.33,1.18]
Trust score wave 1	0.34**** [0.23,0.46]	0.42**** [0.31,0.53]
Trust score wave 2	0.50**** [0.33,0.67]	0.45**** [0.33,0.57]
Trust score wave 1##wave 2	-0.02** [-0.05,-0.00]	-0.02** [-0.04,-0.00]
Vaccine Uptake (no, unlikely)	-1.74**** [-2.66,-0.82]	-0.48 [-1.08,0.13]
_cons	2.65**** [1.99,3.32]	2.35**** [1.69,3.01]
N	7443	6836
pseudo R2	.33	.35

Note: 95% confidence intervals in brackets

* p < 0.1, ** p < 0.05, *** p < 0.01, **** p < 0.001

NCDS = 'Baby Boomers'; BCS70 = 'Generation X'

Discussion

Country of residence has a non-uniform relationship with trust in government and the assessment of the government's handling of the pandemic. There is limited evidence for country differences once we include accumulated reports of low social contact, feelings of loneliness, employment/furlough status and living alone. However, country of residence matters for trust in government for Generation X who live in Scotland once vaccine status is included in the final model. A person's degree of attachment to voting Conservative in the past matters for trust in government in the earlier stages of the pandemic (waves 1 and 2) but is less influential for trust in the latest wave of data collection once vaccine reluctance is taken into account along with prior trust scores. When it comes to the assessment of the government's handling of the pandemic both cohorts are more likely to express a positive view of a Conservative Government's strategy if they have been Tory voters between 1997 and 2010 (a period when the Labour party governed).

Amongst the 60-something baby boomer generation women are consistently more positive than their male counterparts in the expressions of trust and their assessment of the government's handling of the pandemic whereas this is not the case for the younger generation. This contrast may well support the observations of McDermott and Jones (2020) that whilst 'trust research tends to take for granted that sex affects trust -the results have been mixed' and that researchers should move away from male-female (sex) contrasts to one based on a non-sex distribution of feminine personality traits (not available in our data) to reveal greater trust in government amongst feminine personalities. Graduates in both cohorts being more negative in their assessment of the government's handling of the pandemic whereas older graduates are most likely to be negative about trust in government compared to those in Generation X for whom party political attachment matters less and being Scottish matters more. In broad terms the finding for the influence of degree status may well support the observation made by Goodwin (2023) that we are witnessing a rift between the graduate minority and the non-graduate majority.

In the case of the assessment of the government's handling of the pandemic there is evidence for a strong influence of both social and educational advantage, as both own graduate status and being from a professional or managerial family background exert a negative association upon the outcome. Beyond that it is fair to say that apart from some disquiet about the government's handling of the pandemic amongst Generation X who have continued to be employed/furloughed during the pandemic (small negative association) the main effects on our two outcomes suggest that feelings of loneliness, living alone and low social contact are outweighed by sex, degree status and social class. Possibly, these older cohorts are more stoical in their appraisals than the younger generations where Parsons & Wiggins, (2022) found some evidence to suggest that feelings of loneliness are important predictors of trust in government. From a policy perspective it is also important to distinguish that living with others is not necessarily a protective factor for feeling lonely. In wave 3 vaccine reluctance is another uniform negative influence on the outcomes and remains a challenge for future governments to understand hesitancy. People's willingness to be vaccinated or conform to the rules during the pandemic has more to do with the implementation of government strategy (Royal Society, 2020), and less to do with the science of discovering an effective vaccine.

A methodological challenge inherent in these analyses is the question of what determines trust in government. Wave 1 analysis suggests that the explanatory power of our selected variables is weak whereas once prior trust scores are included in the models for later waves, we see a strong and consistent influence of prior trust scores on current reports. This is reassuring in

that whilst individual assessments may vary over time at an aggregate level (as seen in Figures 1 & 2) people are typically consistent in their evaluations over time. However, by conditioning on prior scores it is possible that the contribution of time varying variables is masked by the initial influences upon trust in government and the government's handling of the pandemic. Examining the wave 1 analysis for the baby boomers (NCDS), feeling lonely has a negative influence on trust in government whereas being employed/furloughed shows a positive influence. These findings hold in the same way for Generation X (BCS70) as well as reporting having low levels of social contact. So, by conditioning on prior trust scores, we are subsuming some of these previous influences in the prediction. These observations present an argument for further exploration of the cohort data to developing a more nuanced approach to predicting trust based upon the rich store of antecedent data available in the longitudinal surveys that formed the sample source for this web survey. A potential framework for such an analysis can be found in Schoon & Cheng (2011) who argue that trust is largely 'fixed' in early adulthood.

A further direction for future work would be to rethink the operationalisation of trust in government as a concept. Firstly, from an empirical perspective trust in government has a strong relationship with the assessment of the government's handling of the pandemic (the correlation becomes stronger over time where r exceeds 0.60, Appendix 4). This resonates with our earlier work (Parsons & Wiggins, 2022) where we found in contrast that trust in government and compliance with social distancing were weakly correlated ($<.10$) and similarly, for trust in government and trust in others ($<.04$) suggesting that individuals are making their own decisions about their behaviour independently of trust in government. These findings chime with recent results from the Finnish longitudinal study (Kestilä-Kekkonen et al., 2022) where political competence was negatively associated with trust. Given the strong relationship between voting history and our outcomes it is plausible that assessments are akin to a political judgement which is in turn related to party loyalty. Trust as an operational measure cannot therefore be taken as independent of the strength of an individual's attachment to the government of the day. Secondly, therefore finer grained definitions of trust (distinguishing between government, health authorities and scientists) would permit a better understanding of the meaning of trust in government and the motivation to take up vaccinations (Lindholt et al., (2021).

As the memory of COVID-19 and lockdown fades it is tempting to ignore the continued global presence of the virus and the challenge to scientists and policy makers and resume business as normal. In common with Mark Honigsbaum's 2023 review of Schama (2023), "if we should draw any lesson from Covid it is that pandemics tend to be natural events that occur with regularity throughout history. Rather than seeking to blame foreigners, we should do better to recognise that epidemiologically speaking, the world is a single unit, one in which all our bodies and fates are intimately linked".

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ⁱ <https://covid-19.public-inquiry.uk>; committee chaired by Lady Heather Hallett, a former appeal court judge. Currently, attracting a vast amount of media attention, for example "[The Covid inquiry has revealed more than just a few bad apples](#)", Martin Kettle, 2nd November 2023.

ⁱⁱ Cohort members living outside of England, Wales and Scotland were excluded from the sample. Historically, the original NCDS cohort study only covered Great Britain and interviews with cohort members born in Northern Ireland in BCS70 were not followed up after the original birth sweep.

ⁱⁱⁱ For a nuanced account of the nature of government during the pandemic see Laura Kuenssberg's interviews on the BBC television series entitled 'state of chaos' (2023).

^{iv} Although the publication of Sue Gray's report on law-breaking parties across Westminster casts serious doubt upon this proposition see: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1078404/2022-05-

[25 FINAL FINDINGS OF SECOND PERMANENT SECRETARY INTO ALLEGED GATHERING S.pdf.](#)

^v The survey was distributed using Facebook's premium "Boost Post" feature which targeted 113,280 Facebook users aged 13-65 plus by 'daisy chaining' in order to share the survey's URL with friends and colleagues during April 2020.

Appendices

Appendix 1

Marginal distributions for explanatory variables (covariates) by cohort at wave 1

Explanatory variable (covariate)	Baby boomers	Generation X
Men	.55	.52
Women	.45	.48
Manual occupation background	.73	.51
Non-manual occupation background	.27	.49
None or lower qualification	.71	.67
Degree or higher qualification	.29	.33
Employed or furloughed		
0	.68	.50
1	.11	.02
2	.10	.02
3	.12	.45
Live alone		
0	.59	.71
1	.16	.10
2	.11	.08
3	.14	.10
Low social contact		
0	.78	.76
1	.13	.14
2	.06	.06
3	.03	.03
Feeling lonely		
0	.52	.47
1	.15	.16
2	.12	.13
3	.21	.24
Will / had vaccine	.98	.94
Will not vaccine	.02	.06
England	.86	.87
Wales	.06	.05
Scotland	.08	.07
Times voted Conservative		
0	.62	.65
1	.17	.13
2	.11	.09
3	.10	.06
4		.07

Appendix A2

Wave specific mean scores for trust in government by covariates for all waves across both cohorts.

Table A2.1: Trust in Government

	W1: Trust in Government		W2: Trust in Government		W3: Trust in Government	
covariate	NCDS	BCS70	NCDS	BCS70	NCDS	BCS70
men	4.79	4.46	3.97	3.81	4.53	4.24
women	5.14	4.63	4.21	3.85	4.94	4.44
manual	4.89	4.48	4.06	3.82	4.70	4.37
non-manual	5.10	4.60	4.13	3.85	4.74	4.30
low edu	5.00	4.56	4.16	3.85	4.84	4.40
degree+	4.81	4.50	3.87	3.80	4.40	4.20
Employed or furloughed						
0	4.94	4.38	4.08	3.75	4.74	4.29
1	4.96	4.73	4.12	4.00	4.69	4.44
2			3.99	3.92	4.72	4.64
3					4.56	4.36
Live alone						
0	4.98	4.60	4.18	3.91	4.81	4.42
1	4.83	4.28	3.97	3.72	4.71	4.24
2			3.82	3.50	4.55	4.17
3					4.43	3.94
Low social contact						
0	4.97	4.62	4.12	3.90	4.76	4.44
1	4.75	3.88	3.86	3.63	4.60	4.18
2			3.90	3.10	4.50	3.78
3					4.46	3.55
Feeling lonely						
0	5.17	4.78	4.36	4.11	4.98	4.64
1	4.52	4.14	3.98	3.73	4.80	4.34
2			3.47	3.37	4.49	4.16
3					4.10	3.82
Will / had vaccine	4.96	4.60	4.09	3.89	4.74	4.41
Will not vaccine	3.90	3.57	3.09	2.83	3.23	3.01
England	4.99	4.63	4.10	3.91	4.75	4.45
Wales	4.89	3.79	4.12	3.15	4.83	3.45
Scotland	4.53	3.98	3.78	3.38	4.27	3.58
Never vote tory	4.57	4.19	3.73	3.53	4.42	4.04
1 x tory	5.16	4.66	4.27	3.95	4.86	4.51
2 x tory	5.61	5.26	4.70	4.34	5.23	4.76
3 x tory	6.14	5.49	5.15	4.70	5.63	5.14
4 x tory		5.87		5.06		5.48

Wave specific mean scores for the government's handling of the pandemic by covariates for wave 3 across both cohorts.

Table A2.2: Government Handling of pandemic

	W3: Government Handling	
covariate	NCDS	BCS70
men	5.64	5.27
women	6.03	5.32
manual	5.89	5.41
non-manual	5.60	5.18
low edu	6.10	5.52
degree+	5.11	4.85
Employed or furloughed		
0	5.88	5.36
1	5.78	5.50
2	5.77	5.72
3	5.51	5.20
Live alone		
0	5.85	5.33
1	5.81	5.26
2	5.66	5.38
3	5.79	5.02
Low social contact		
0	5.79	5.36
1	5.92	5.23
2	5.82	4.96
3	5.86	4.66
Feeling lonely		
0	5.94	5.47
1	5.87	5.24
2	5.69	5.16
3	5.53	5.06
Will / had vaccine	5.85	5.36
Will not vaccine	3.50	4.22
England	5.87	5.39
Wales	5.93	4.59
Scotland	5.15	4.71
Never vote tory	5.39	4.92
1 x tory	6.19	5.57
2 x tory	6.64	5.95
3 x tory	6.87	6.30
4 x tory		6.56

Appendix A3

Overall Mean Outcome Scores [with 95 per cent confidence intervals] by wave for trust in government, trust in others, compliance, government's handling of the pandemic and attempts to reduce the spread of COVID-19 by cohort.

	Cohort					
	NCDS			BCS70		
	England	Scotland	Wales	England	Scotland	Wales
W1: Trust in Government	4.99 [4.83,5.15]	4.53 [4.13,4.93]	4.89 [4.19,5.60]	4.63 [4.45,4.82]	3.98 [3.60,4.37]	3.79 [3.13,4.46]
W2: Trust in Government	4.10 [3.96,4.25]	3.78 [3.39,4.17]	4.12 [3.46,4.78]	3.91 [3.77,4.05]	3.38 [2.98,3.78]	3.15 [2.61,3.70]
W3: Trust in Government	4.75 [4.61,4.89]	4.27 [3.88,4.64]	4.83 [4.13,5.53]	4.45 [4.31,4.59]	3.58 [3.24,3.92]	3.45 [2.86,4.04]
W3: How well Government Handled Pandemic	5.87 [5.72,6.02]	5.15 [4.61,5.70]	5.93 [5.28,6.57]	5.39 [5.23,5.54]	4.71 [4.29,5.13]	4.59 [3.92,5.26]

Appendix A4

Pairwise product moment correlations for key outcomes by cohort

	NCDS	BCS70
T-POL1 & T-POL2	.65	.63
T-POL1 & T-POL3	.63	.63
T-POL2 & T-POL3	.66	.67
T-POL1 & GOV HAND	.49	.52
T-POL2 & GOV HAND	.52	.52
T-POL3 & GOV HAND	.61	.62

Note: T-POL1: Trust in government W1; T-POL2: Trust in government W2; T-POL3: Trust in government W3; GOV HAND: Government handling of the pandemic W3