Social preferences and the value of life: Evidence fairness matters*

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Abstract

In an online survey we elicit and compare the value of statistical life (VSL) using a standard, but arguably selfishly framed, willingness-to-pay (WTP) for a reduction in the personal chances of death with an analogous social planner type question that is designed to engage better with people's social preferences. The latter yields a VSL that is double the former for COVID-19 policy interventions; and the difference does seem to arise because the social planner question engages better with people's social preferences. Standard figures may therefore underestimate the VSL that is appropriate for major policy interventions (e.g., over COVID-19).

Keywords: value per statistical life, externalities, prosocial behavior, fairness, natural disasters, COVID-19

JEL Codes: C23, C90, D61, D62, D63, D91, J17

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I INTRODUCTION

It is well known that people often reveal social preferences both inside and outside the laboratory. In this paper, we address a question that follows from this fact: does the standard stated preference method for eliciting the value of a statistical life (VSL) take adequate account of people's social preferences? The question arises because the standard stated preference method for eliciting VSL typically asks people how much they are willing to pay for an intervention that changes their personal chances of death (see OECD 2012). The willingness to pay (WTP) question is thus framed 'selfishly' in the sense that the person is asked to place a value on a change to their own chances of death. Framing is known to affect decision making (Tversky and Kahneman 1981) and so such a self-interested frame might plausibly fail to engage fully with people's social preferences, if they have them, with the result that the true VSL is underestimated. We assess, with a survey experiment in the US and the UK, whether this is the case in a particular instance: that of major policy interventions during the COVID-19 pandemic.

Our question is important because many decisions by individuals and policy makers involve putting a monetary value on a human life; for instance, in the design of policies to combat climate change and environmental degradation or the introduction of welfare policies such as comprehensive/universal health coverage. The selection of a VSL is particularly important when assessing major policy interventions, like those related to pandemics or other major events and calamities where a significant number of lives are at stake (e.g., earthquakes, natural disasters). This is because, with a large number of lives at stake, the choice of VSL is a critical influence in any cost-benefit evaluation of policy. For an illustration of this point in relation to COVID-19 policies, see Miles et al. 2020; Thunström et al. 2020; Alvarez et al. 2020; Robinson et al. 2021. To be clear, we are not disputing here the 'appropriateness' of estimating and applying a VSL in a cost-benefit analysis of such major policy interventions. Some people have doubted that this is the right way to approach

policy evaluation in these circumstances (e.g. see Kelman 1981; Kennedy 1981). This is not our concern. Likewise, there are a range of practical policy evaluation questions related to whether a measure of VSL per year of life should be derived from the VSL in order to take account of the age distribution of the deaths that are affected by any intervention and whether possible age/cohort – differences in VSLs should also be taken into account in such a fine-grained assessment (see Kniesner and Viscusi 2019). Again, these adjustments are not our concern here. Instead, we want to know whether the typical range of 'off the shelf estimates' of the VSL (e.g. see Viscusi and Aldy 2003; OECD 2012) that come from asking the standard 'selfishly' framed WTP question are the right ones to start with in major policy evaluations.

It is known from earlier discussions that social preferences can complicate the elicitation of VSLs through WTP questions (e.g., see Bergstrom 2006). For example, when individuals hold 'utilitarian' or 'altruistic' social preferences, the WTP question needs to make clear what the benefits and costs of any intervention are to others.[1] This is because individuals with these preferences weight their own and others' private or selfish utilities and so the WTP question needs to make clear how the intervention may affect not only that person's own but also other people's private/selfish utilities. This has led to the proposal that the WTP question be modified to something like 'how much are you willing to see everyone's taxes go up by in order to provide an increase in average life expectancy of x%?' (e.g., see Bergstrom 2006). In effect, this places the person in a position like that of a social planner making a judgement about the whole of society. This is because an individual with social preferences faces a choice which is analytically akin to that of a social planner. Of course, if the person only has self-interested or private preferences, they can also answer such a WTP question selfishly because they know from such a modified question what the likely or average individual private costs and benefits are.

[1] This earlier literature focused on the possible weakness of asking WTP questions that only referred to the possible benefits to others and not their costs in these circumstances as this would produce an inflated VSL.

We also note that although this proposal for making everyone's benefits and costs explicit in the WTP question was developed for 'utilitarian' or 'altruistic' social preferences, it could, in principle also engage with other kinds of social preference, like those, for instance, regarding fairness. This is important in part because people are known to be motivated by considerations of fairness (e.g., see Fehr and Schmidt 1999; Charness and Rabin 2002; Falk et al. 2003), and it is well known that COVID-19 deaths occurred predominantly among the old while income losses from behavioral interventions, like lockdowns designed to mitigate the loss of life, fell more on the young. Thus, these policy interventions have distributional implications that might engage with people's social preferences for fairness as well as any 'utilitarian' type ones.[2]

We follow the Bergstrom (2006) proposal of asking a social planner type question and use the COVID-19 pandemic as an appropriate case study. This is a major, global health crisis and our subjects would be familiar with possible behavioral interventions like lockdowns that reduce deaths but at a cost in terms of losses in average incomes rather than higher taxes because lockdown measures inhibit economic activity as well as transmission of the disease. We frame the question accordingly in these terms. Nevertheless, since such social planner questions are not commonly asked, we decided to elicit the implied VSL by using the Holt-Laury (H-L) technique. In effect, this helps the respondent by giving a concrete range of implied possible answers to choose between. With the H-L technique, subjects are asked to choose between a sequence of two options, where each option in the pair has a combination of 'lives lost' and 'average income losses'. One option in the pair offers a better

[2] This is important for another reason. The standard selfishly framed WTP could still be relevant to the calculation of VSL but only when people have utilitarian or altruistic social preference. This is because these social preferences weigh people's private/selfish utilities and so the private utilities would still enter into the calculation of the VSL. Of course, this leaves open the key question of what weights to apply when aggregating the selfishly framed WTPs to generate a VSL; so one would still need to go beyond the simple elicitation of selfish WTPs. The point, however, is that the possible use of selfish WTP in this way only makes sense if social preferences have this utilitarian character and there is no reason to suppose that social preferences uniquely have this character. Indeed, there is considerable evidence that fairness considerations loom large in people's social preferences (e.g., see Fehr and Schmidt 1999; Charness and Rabin 2002; Falk et al. 2003).

outcome in terms of 'lives lost'; the other a better outcome on 'average income losses'. The terms of trade between 'lives lost' and 'income losses' change as the person moves through the sequence of these paired option choices and where they switch between the better 'lives lost' and 'average income loss' options gives a lower bound for the implied VSL.

To test whether this social planner way of framing the WTP question affects the VSL, we also ask a standard, 'selfishly' framed WTP question. We ask subjects how much they are willing to pay for a COVID-19 treatment that affects their likelihood of dying by x%. We refer to a treatment because we cannot sensibly ask about the willingness to pay for an intervention like a lockdown that reduces that person's likelihood of death by x% because a behavioral intervention like a lockdown will only work and have such effects when applied to everyone. This does not constitute a problem because our alternative social planner H-L question was not tailored to any specific COVID-19 intervention.

A COVID-19-specific selfishly framed WTP control is important in our design because it is well known that people are sensitized to risks that appear salient at the time (see e.g., Gigerenzer 2015) and we fielded our survey at the height of the pandemic. Likewise, it has been argued that people dislike ambiguous risks more than those that are well understood and this may inflate the contemporary VSL of COVID-19 lives saved (see Hammitt 2020). Hence, it is likely that they will reveal higher VSLs using the standard selfishly framed questions than is common in more normal times, and this needs to be taken into account when assessing the size of the H-L social planner VSL. Indeed, this is what we find. The standard selfish WTP question reveals a VSL of $19m and £12m in the US and UK respectively. This is notably larger than the OECD's mean 'off the shelf' VSL of $3m and also larger than the relatively high Environmental Protection Agency VSL figure of about $10m (Robinson 2020). However, the social planner framed H-L question generates an even bigger VSL of $36m and £22m, respectively. In other words, the social planner framed question reveals a VSL that is about double the figure generated by the standard, 'selfish' WTP question. Thus, the framing of the preference elicitation question does matter significantly for the calculated

VSL – at least when addressing a major shock like a pandemic. A natural question arises: which VSL should policy makers use in these circumstances?

There are two parts to the answer to this question. One concerns whether to use contemporaneously elicited VSLs or ones that are derived in more normal circumstances. We have nothing to say on this aspect of the question here, save to note that we present evidence, referred to above, that the salience of the shock in contemporaneous elicitations does inflate the VSL relative to non-pandemic times. The other part of the answer to this question, which we focus on, is whether to use the social planner derived VSL or the standard selfishly framed VSL. The answer on this depends on whether the social planner VSL plausibly taps into people's social preferences in a way that the standard selfishly framed WTP question does not. If it does, then policy makers should use the social planner VSL because it reflects the full array of people's preferences and not just the subset of their selfish ones. The literature suggests that the social planner approach is better placed in theory in this respect but the difference we find might arise for other reasons. The social planner question uses the H-L elicitation, for example, and perhaps this matters. We therefore address whether the difference we find plausibly arises because the social planner question better engages with the full array of people's preference. We present three kinds of evidence to suggest that it does.

First, we ask our subjects an additional WTP question. It preserves the individual frame of the standard WTP question and matches it exactly in the sense that the treatment to be considered has the same effect on the personal likelihood of death. The only difference is that the description of the treatment now, in part, works explicitly by reducing transmission of COVID-19. In this way, we weaken the selfish framing of the standard question because the frame now alludes to the possible interests of others via the explicit reference to transmission. If framing matters for the engagement with social preferences, then this modified standard question seems more likely to engage with them and so produce a higher VSL when people have social preferences that are positively oriented to the interests of others or involve being

constrained by principles like that of the liberal no-harm principle. Thus, in so far as people reveal higher VSLs in the modified standard WTP, it cannot be due to a difference in the elicitation technique since both use the standard individually focused question. Instead, it points to a failure in the selfish version of this question to engage fully with people's social preferences.

This is what we find: the VSLs for the transmission augmented version of the standard WTP question are $25m and £17m. These are significantly larger than the standard selfish WTP based VSLs. Indeed, the gap between the social planner VSL and the standard, 'selfish' one is closed by 31% and 38% respectively in the US and UK when the standard question is modified to include explicit transmission effects. We also note, to return to that earlier discussion in the literature of how properly to incorporate social preferences in VSL elicitation when people have 'utilitarian' social preferences, that this higher valuation is genuine in the sense that the reduced transmission to others is a benefit for others that arises without those others having to incur any cost (i.e., it is a valuation that properly takes account of how the intervention affects both benefits and costs to others).

Second, we test whether the difference at an individual level in the selfishly framed VSL and the social planner framed VSL can be explained by plausible other individual measures of an individual's pro-social preferences, such as altruism and fairness preferences that are elicited separately through additional survey questions. We find that this is the case. In particular, our measure of fairness preferences predicts, at the individual level, the gap between our subjects' revealed social planner VSL and their standard, selfishly framed VSL.

Third, we check for the stability in the social planner VSL. In other words, are the apparent social preferences elicited by the social planner question stable? We do this by capitalizing on our two survey waves, and checking on the stability of preferences both within and across waves. We test their stability in each wave by asking our subjects to make the H-L decision twice at different times in the survey wave. If their answers reflect underlying preferences then we expect stability in their valuations; whereas random answers

would produce instability. They are stable in this sense. We test for their stability across time both in the aggregate and by examining whether there is any evidence that people's VSLs are endogenous to their experience/perception of COVID-19 between the two waves. We find virtually no evidence of preference endogeneity in this sense.

We conclude from our evidence during a major, global shock that the standard, 'selfishly' framed WTP fails to capture people's social preferences and this leads to a gross underestimate of VSLs.

In practice, one may suspect that the problem of 'selfish' framing in the standard WTP question matters much less when the intervention is 'small' or highly local. This is because few others will likely be affected by the intervention in the first place and even fewer of these others are likely to be the object of people's social preferences when the intervention is 'small'. A large intervention like a lockdown in relation to a major shock like COVID-19 is very different in this respect. COVID-19 potentially affects parent, grandparents and friends and, in so far as we care about these others, it is not surprising that we value an intervention because it affects their chances of dying as well as influencing our own. Lockdowns also have, as we have suggested, distributional implications and so may engage fairness type social preferences.

For this reason, our conclusion should perhaps be qualified: it likely applies to major policy interventions more than small or local ones. Nevertheless, the conclusion remains important. We continue to face, with climate change and the possibility of future pandemics, the likelihood of other major shocks that will require large policy interventions –ones that would also likely touch upon issues of intergenerational and spatial inequality and fairness. The evaluation of such interventions requires the use of the right VSL and on the evidence of this paper it is not the usual 'off the shelf' one. This is our key contribution: the VSL should be much higher because the standard 'off the shelf' VSLs derived from selfishly framed WTPs do not engage fully with people's social preferences. This is particularly important

for major policy evaluations because it is precisely when events potentially require major policy interventions that large numbers of lives are likely to be at stake.

In the next section, we set out the research design. Section III gives the results. In section IV, we further examine the robustness of our results and the interpretation that the social planner frame picks up on people's social preferences, whereas the standard selfishly framed WTP does not. We conclude in section V.

II RESEARCH DESIGN AND METHODS

To conduct the survey experiment, we relied on Prolific Academic, a web-based panel with about 35,500 participants in the United States (US) and 44,600 participants in the United Kingdom (UK) as of May 2020. Our first quota-based panel sample was recruited between Friday 17 and Tuesday 21 April 2020; at the end of the week when both the UK and the US were predicted to hit peak deaths (IHME 2020a,b). We used the US Current Population Survey (US Census Bureau 2018), the 2011 UK Census (ONS 2011), and the 2011 Scotland Census (NRS 2011) in order to achieve a representative sample. We excluded Northern Ireland from the survey. We created a total of 170 subgroups weighted based on age, gender, region and work status. Table A1 and A2 in the appendix are the stratification tables for the UK and US, respectively. We targeted a total sample size of 2,500 respondents for each country, of which we were able to reach 95.36% in the UK and 89.08% in the US. In sum, 2,385 and 2,233 respondents participated in the UK and the US, respectively. Tables A3 and A4 in the appendix report the subgroups that we could not fill our quotas completely on Prolific and thus weighted accordingly in our analysis to ensure representativeness. All of these subgroups were within the oldest two age groups of which Prolific has disproportionately fewer active participants.

We then repeated our study in a second wave between October 28 and November 3, 2020, using the same panel of participants and including a series of additional questions. Our

attrition rate was 37% (further analysis in appendix B.4.).[3][4] Further details on sampling, as well as the full survey instrument that we used are available in appendix.[5]

II.1 Experimental design

Our experimental design has three VSL elicitation tasks. Our first elicitation task is the standard, individual and selfishly framed WTP question. Subjects are asked how much they are willing to pay for a hypothetical treatment for COVID-19 that would increase their survival rate if they caught COVID-19 by an equivalent of five people in one million. This question was asked in the second wave and each respondent was presented with 10 options from £0 to 'above £200' in the UK and $0 to 'above $260' in the US.[6]

Our second elicitation task is an amended version of the standard individually framed WTP question that alludes to possible externalities through transmission. The individuals in the second wave are asked how much they are willing to pay for a treatment that reduces their chances of death from COVID-19 by the equivalent of five people in one million because it lowers the transmission of COVID-19 and the chances of infection. In this way, the selfish framing of the standard question is attenuated.[7]

Our third elicitation task adopts a social planner frame for the reasons set out earlier: the literature suggests it should engage better with people's social preferences. Subjects face a sequence of eight binary choices between pairs of health and wealth outcomes in both waves. Figure 1 shows the actual sequence of eight decisions between these pairs given to UK and

[3] The survey was pre-registered on https://osf.io/qtes9/files/ and registered as a minimal risk study with the King's Research Ethics Committee under REC ref.MRSP-19/20-18.

[4] Tables A5 and A6 in appendix A report the number of respondents reached by subgroup for the second wave.

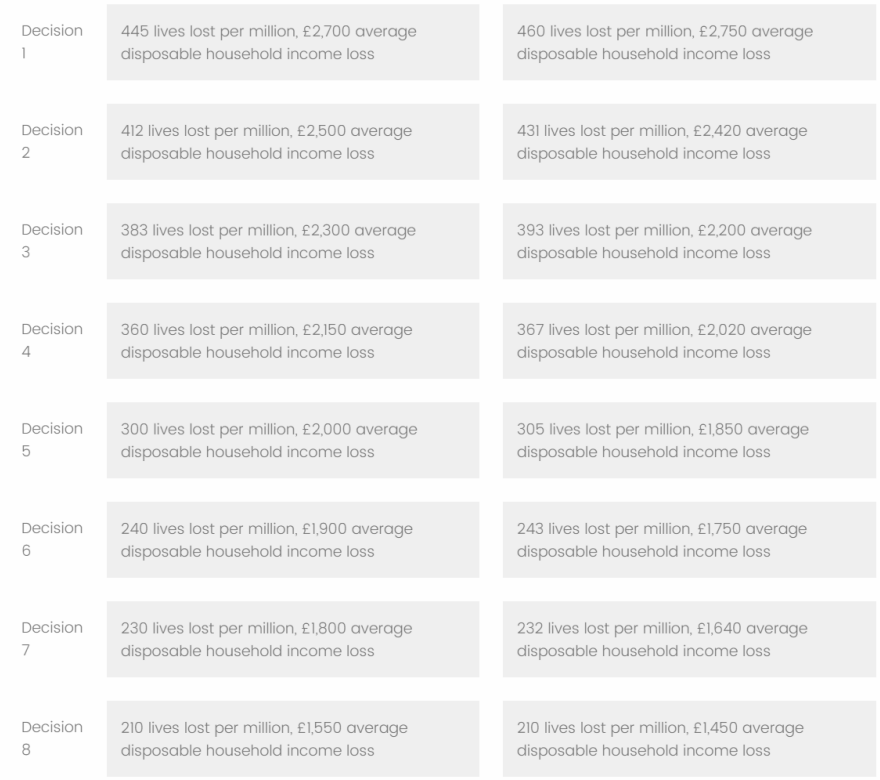
[5] The data and code used for the analysis will be made available online at Harvard's Dataverse for replication purposes upon acceptance for publication.

[6] The differences in values between the UK and US are based on the exchange rate at the time we conducted the study.

[7] The exact wording of the two questions can be found in appendix C.

US respondents.[8] Subjects were asked to read a short text on how restrictions on personal movements help contain the spread of coronavirus and save lives but with a cost of disrupting and lowering economic activity. They were then presented with eight decisions with each option giving a combination of 'lives lost per 1 million of the population through COVID-19 over the next 3 months' and 'the average loss of household income due to measures to prevent transmission of COVID-19 over the next 3 months'. In each of the eight decisions, they clicked on the option that they think has the best combination.

Figure 1: Social planner VSL options



If a person values both life and income and has a preference ordering over their various combinations, they should choose option A in Decision 1 and option B in Decision 8. This is because, in Decision 1, A dominates B in both the health and wealth outcomes, whereas in

[8] We slightly deviated from the pre-registered figures in our decisions menu due to further elasticity calculations following our pilot.

Decision 8, B weakly dominates A as both have the same death outcome, but B is better on income loss. In the intermediate Decisions 2-7, option A has the better health outcome and option B has the better wealth outcome. As subjects move through Decisions 2-7, the health advantage of A over option B becomes progressively smaller in terms of deaths avoided per unit of income lost. In this way, a person with a preference ordering will switch from option A to B as they progress through Decisions 1-8. Where they switch indicates how strongly they prioritize health over wealth: the later the switch, the stronger the preference for health over wealth (Holt and Laury 2002; Bateman et al. 2002).

In addition, subjects were asked a set of demographic, attitude and belief survey questions in both waves.

III RESULTS

Panel A of Figure 2 gives the frequency of responses to the two individually framed WTP questions in the UK and the US. 'Intervention' refers to our standard individual and selfishly framed WTP and 'Transmission' refers to the amended individual WTP question which makes explicit reference to the role played by transmission. The figures reveal a substantial amount of heterogeneity in the responses to both questions. While there is a non-negligible number of respondents who are not willing to pay any amount for either treatment, the majority of respondents in both countries is willing to pay at least some amount (around 70% for the selfish WTP and about 75-80% for the amended WTP question). A relatively large proportion of respondents also choose the highest possible value ('above £200' in the UK and 'above $260' in the US). This proportion is larger for the amended WTP question than for the selfish one, with about 18% of respondents choosing it in the US and about 12% in the UK.

Panel B reports on the distribution of switch points in the UK and the US in the social planner H-L task for those respondents switching only once in both the first and the second

round, disaggregated by the Spring and Autumn waves. Although the majority in both countries switch at Decision 8 in both rounds, indicating a very high valuation of health over wealth for the majority, over 40% of subjects switch before and like the individually framed WTPs in Panel A, there is considerable variation in the implied VSL across our population.

We have focused in Panel B on those participants who switch only once in the sequence of binary choices. This is because switching once is consistent with having a preference ordering over health and wealth and so these participants attach, if implicitly, a finite value to a life saved. To put this restriction in perspective, 74% of the observations in the Autumn wave of our sample fit this category. Of the remainder, 16% showed multiple switch points and so although a preference is revealed in each of the eight individual decisions, taken together, these 'preferences' do not cohere to form a preference ordering over health and wealth. Such a proportion is typical (see, e.g., Holt and Laury 2002). The remaining 10% of subjects have no switch points: respondents either always chose A, favoring health independently of the wealth consequences (8%), or always B (2%). These are extreme, but nevertheless coherent preferences to hold.[9] Together with 74% who have a single switch point in both rounds, this means 84% of our subjects can be said to reveal preferences over saving lives and avoiding income losses.[10]

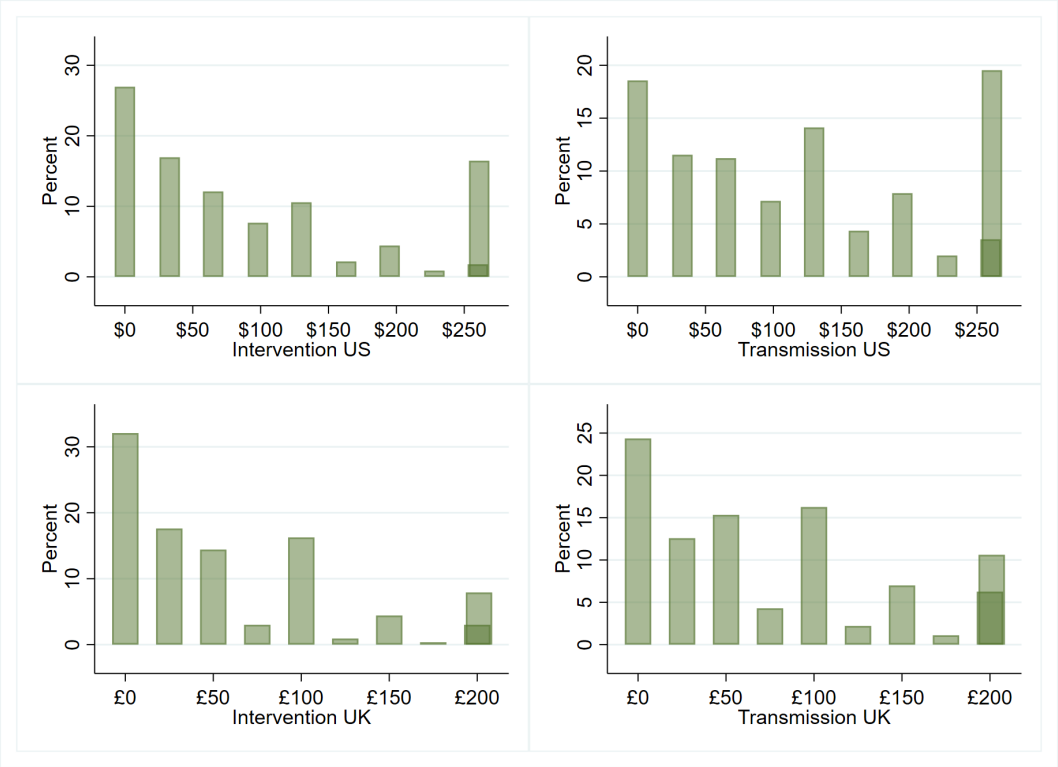
Figure 3 reports the mean VSL estimates by elicitation question and country for our second wave. In both countries, the figure clearly illustrates that VSL estimates are lowest when we use the first individual and selfishly framed WTP. The VSL estimate increase significantly in the second transmission modified individually framed WTP: by about $5.4 million and £3.8 million respectively. Finally, the social planner framed H-L task gives the largest VSL: £22m in the UK and $36m in the US. All the differences between the respective

[9] While we remain largely agnostic regarding the intrinsic motivations behind subjects' choosing always A – for instance, it can be that respondents only care about the deaths dimension of the trade off and ignore everything else, or even reject the presence of a health-wealth trade off altogether – any such explanation is consistent with the claim that subjects choosing always A strictly prioritize health over wealth, and, thus the substantive interpretation of our treatment effects is independent of the exact preference formulation that our subjects had in mind when answering.

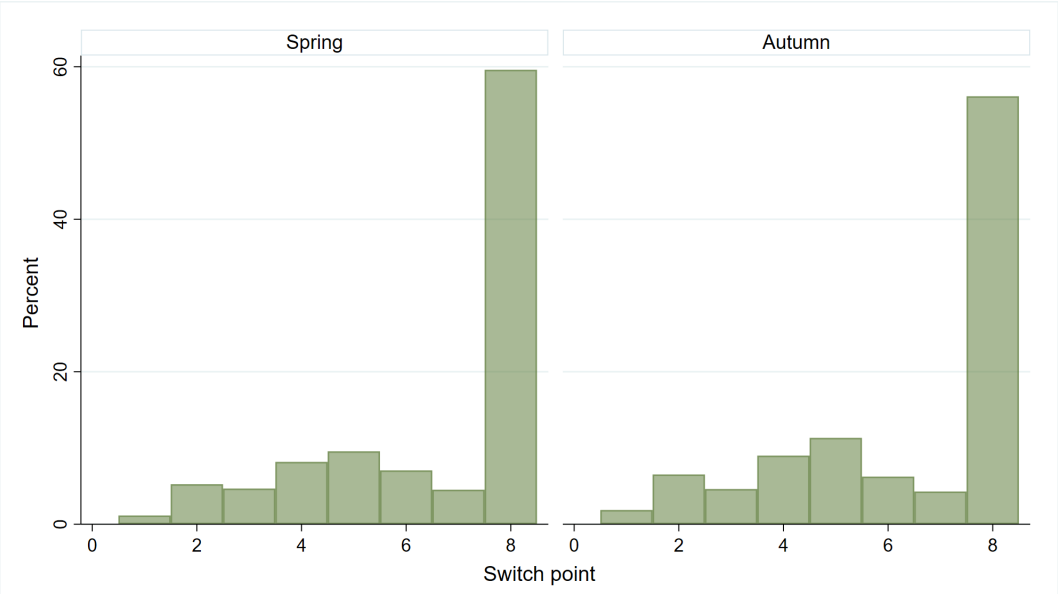
[10] In Appendix B.1 we conduct the same analysis for our Spring wave and find almost identical proportions.

Figure 2: Distribution of choices

(a) Panel A



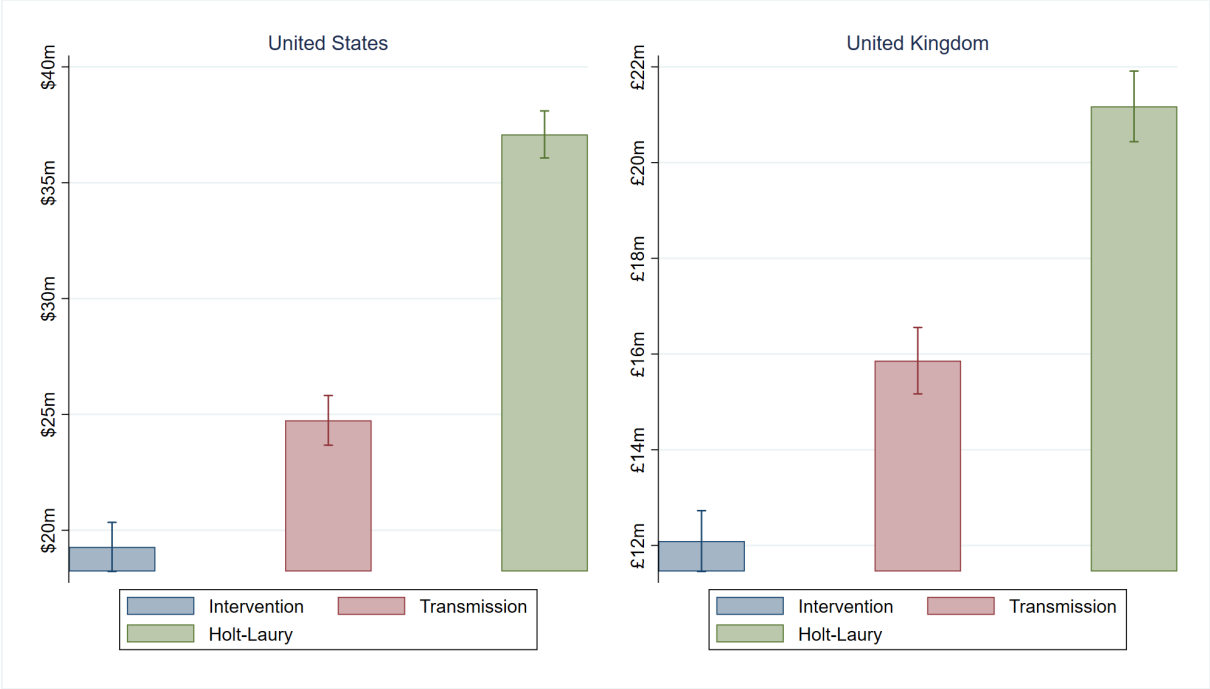
(b) Panel B



Note: Panel A shows the distribution of choices for our two WTP elicitation questions. Answers of "above £200" and "above $260" for both questions are coded as £201 and $261, respectively. Panel B reports the distribution of switch points for our Holt-Laury elicitation across our two waves.

VSLs within countries are highly significant. It is important to note, that these values are in all three tasks lower bound estimates as a non-negligible proportion of subjects chose the highest possible amounts in the WTP questions and the Holt-Laury values are by design lower bound values.

Figure 3: Mean implied VSL by elicitation method and country



IV ROBUSTNESS CHECKS

IV.1 The VSL gap between the standard selfish WTP and a transmission modified standard WTP question

The fact that the transmission modified individual WTP yields a significantly higher VSL than the standard selfish WTP suggests that the modified question is engaging with something over which people have preferences that the selfishly framed WTP does not. A person's social preferences is an obvious candidate because of the way that the modified wording draws attention to transmission of the virus. However, if there is less transmission, then there may

also be fewer long-COVID cases and this could explain the additional value placed on the transmission treatment (Mason et al. 2008). We can test for this possibility to some extent by examining whether the difference between the two standard, individual WTP based measures correlate for individuals with their risk aversion, feeling healthy or being in the government defined risk group for COVID-19. They do not (see table B4 in appendix B.6).

IV.2 Do individual measures of pro-sociality help predict the VSL differences for an individual?

In the survey, we also ask questions that are designed to reveal directly the pro-social motivations of our subjects, if they have them. In particular, we ask a question concerning whether they believe income differences that arise from luck are acceptable because this is often taken to influence the extent to which people believe that fairness considerations should enter into judging specific outcomes (Alesina and Angeletos 2005). In addition, we ask the usual 'generalized trust' question; a dictator game decision; and an altruism question that asks how much a subject is willing to donate to a charity. In the first panel of table 1 below, we examine whether any of these pro-social measures help predict the difference between the selfish WTP derived VSL and the modified standard WTP implied VSLs (Gap 1) and the difference between the selfish WTP derived VSL and the social planner H-L implied VSLs (Gap 2).

Individual trust helps predict the transmission/selfish WTP gap in the US and fairness helps predict the selfish WTP/social planner H-L gap in the US and the UK. Thus, there is some evidence in the US associating the individual transmission/selfish WTP gap with an indicator of pro-sociality and in both countries a likely concern for fairness helps predict the selfish WTP/social planner H-L gap. The effect sizes are also substantial. A 1-point increase on the 10-point fairness scale reduces the difference between the two implied VSL estimates by $805,000 in the US and £499,000 in the UK.

Table 1: Differences in elicitation methods within and between waves (in £/$1,000s)

	United States		United Kingdom	
	Pro-social change 1	Pro-social change 2	Pro-social change 1	Pro-social change 2
Social preferences				
Luck acceptable	46.56	-805**	-125	-499**
	(154)	(321)	(112)	(226)
Generalized trust	2,070**	-3,112*	87.22	1,023
	(940)	(1,763)	(586)	(1,219)
Dictator game giving	13.6	-538	109	159
	(185)	(380)	(156)	(293)
Altruism	0.95	-8.56*	4.13*	-2.39
	(2.66)	(4.58)	(2.10)	(3.77)
Observations (unique IDs)	1,059	706	1,366	970
	VSL change 1	VSL change 2	VSL change 1	VSL change 2
Changes between waves				
Change in seriousness	-491	276	112	1,408
	(945)	(1,168)	(807)	(946)
Change in concern	1,564	2,091*	-1,555**	-842
	(1,008)	(1,147)	(757)	(846)
Change in feeling healthy	163	177	-310	-311
	(317)	(317)	(232)	(232)
Econ. vulnerability change	509	-139	1,089	-670
	(800)	(857)	(743)	(972)
Individual FE	✓	✓	✓	✓
Observations (unique IDs)	999	544	1,394	878

Notes: Estimates in the first panel come come from linear regressions. 'Luck acceptable' ranges from 0-10 with 0 indicating it is not acceptable at all for income differences to exist because of luck and 10 meaning 'completely acceptable'. Generalized trust is a binary variable with 1 equal to having trust in others. Dictator game giving ranges from 0-10 (in £/$) and altruism ranges from 0-1000 (in £/$). In the second panel, VSL change 1 is based on panel analysis and VSL change 2 comes from regressions with individually calculated changes. Seriousness and concern range from 0-4 with higher values indicating more perceived seriousness of and concern due to COVID-19. Feeling healthy ranges from 0-10 with higher values indicating that the respondent feels healthier. Economic vulnerability reports respondents' change in earnings during the past month due to COVID-19 ranging from -1 (less than usual) to 1 (more than usual). All models are weighted for representativeness based on age, gender, region and work status. Robust standard errors are presented in parentheses. *** p<0.01, ** p<0.05 , * p<0.1.

IV.3 Stability in social planner derived VSLs

If individual differences in preferences underpin the individual differences that we observe in the implied VSLs, then we expect that individuals will reveal stability across their answers when asked the same question twice in the same wave. Since our social planner based H-L VSLs are strikingly higher than the selfishly framed WTPs and there is evidence above to support that they are higher because the social planner question better engages with people's social preferences, we focus on them (we analyse the stability of the two WTPs in appendix section B.3).

We consider stability during the first survey here. 1,006 of the subjects who conducted the same H-L exercise in two rounds in April[11] revealed a single switch point, of which 805 have the same switch point in both (i.e., 80%); 201 did not (20%). To put these results in perspective, suppose single switching had been generated randomly; that is, our subjects had simply randomly chosen which decision point to switch from A to B. This would generate a single switch point but could not be said to reflect an underlying coherent preference ordering and valuation of life saved. Had our single-switch subjects come from such random switching, we would expect to observe the same switch point across the two rounds in only 12.5% of our subjects (i.e., 8 x 1/64). This strongly suggests that our results cannot be explained by random behavior. But what proportion might have chosen randomly? To answer this question, we calibrate the likely number of preference-based choosers in our control sample under the assumption that our sample consists of preference order followers, fuzzy preference order followers and these random choosers.

Fuzzy preference followers are people who know the region they like but not the precise switch point, and so choose randomly within that region. We assume a two-point preference region for these subjects: so if someone with fuzzy preferences thinks they should switch at decision 6 or decision 7, they have an equal chance of choosing 6 or 7. There is 50% chance that such people will choose the same switch point in both rounds. With these assumptions, we calculate of the 1006 subjects in the control, 90% are either preference (68%) or fuzzy preference (23%) based choosers and only 99 (9.8%) are pure random choosers (see appendix section B.2 for a more detailed analysis).

Turning to stability across the two waves in April and October 2020. Figure 4 reports mean values for both countries by wave. Our spring wave hereby refers to the data collected in April 2020 and the autumn wave to data collected in October and November of 2020. In the US, the difference between waves is negligible and not statistically significant. In the

[11] This experiment was part of a larger information provision experiment. We only refer to the respondents in the control group here, who received no treatment information, as the information would have likely affected the revealed VSLs and WTPs.

UK, we observe a decrease of about £1 million which is statistically significant. Overall, despite substantial changes in circumstances in both countries between spring and autumn of 2020, these results suggest a significant stability of our VSL estimates at the aggregate level.

Figure 4: Mean implied social planner VSL by wave

We also consider whether there is any evidence that the individual level social planner H-L VSLs are endogenous to the individual experiences/perceptions of COVID-19. In the second panel of table 1 we regress the changes in individual VSLs on the changes in individuals' reported views regarding the seriousness of COVID-19 compared with flu, changes in their concerns for themselves and their families, changes in how healthy they feel and changes in their sense of economic vulnerability. None of the changes in the experiences/perception of COVID-19 seem to have affected the VSLs, with the exception of the change in concern in the UK. In short, there is little evidence here that the VSLs were endogenous to evolving experience/perception of COVID-19 between Wave 1 and Wave 2.

V DISCUSSION AND CONCLUSION

We find evidence that the standard selfishly framed WTP yields a VSL that is around one half of the VSL generated by the social planner-like H-L elicitation process – at least, in relation to a major policy intervention like the behavioral ones undertaken during the COVID-19 pandemic. We developed the social planner-like approach because, given the known influence of framing, there is a worry that the standard selfish frame might fail to engage people's social preferences. We know people reveal that they have social preferences and so if the standard selfishly framed WTP fails to engage them, then the associated VSL would be an underestimate of its true value. The social planner H-L procedure seems better suited to capture the influence of social preferences and, taken at face value, our results suggest that the underestimate with the selfish WTP frame is real. Indeed, it is a gross underestimate.

The key issue, then, concerns whether the social planner H-L estimate can be taken at face value as better capturing people's preferences in-the-round because it is more likely to engage with a person's social preferences. There is evidence that the H-L estimate reflects an underlying preference in the sense that it is stable and that the difference between it and the selfish WTP-based VSL can be explained at the individual level by differences in people's pro-sociality in other respects. In particular, it is differences in people's apparent concern for fairness that helps predict the size of the individual's gap between their selfishly framed VSL and their social planner one.

To put this result in context. In one similar study where a uniform tax rate version of the social planner question was asked, Gyrd-Hansen et al. (2016) find that individuals underestimate others' VSLs and therefore reduce their WTP as they do not want others to pay more than they are willing to. This is, of course, a fairness consideration that might be expected, from our result on the influence of fairness, to affect the social planner type VSL. Importantly, though, this means that the VSL so derived may still be an underestimate.

Against this, it seems likely that social preferences are less likely to be in play in small policy interventions. It is only in major policy interventions, like those taken in connection with COVID-19, where people will likely appreciate how an intervention influences others that they care about and judge how fair it might be. Nevertheless, it is precisely when there is a major policy intervention that many lives are likely to be at stake. So, it is especially in these circumstances that policy evaluation is likely to be led astray by the standard selfishly framed WTP. In short, these major policy interventions are precisely when getting the VSL right is most important, and based on the evidence of this survey, the off-the-shelf estimates or contemporaneous ones based on the standard selfishly framed WTP questions get it badly wrong.

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APPENDIX

PART A: MATERIALS AND METHODS

A.1 Data and sampling

Tables A1 and A2 are the stratification tables used for sampling of the first wave in the United Kingdom and United States, respectively.

Table A1: Stratification - United Kingdom

	Employed (For 65+ and Scotland both employed and unemployed)					Unemployed			
	North	Midlands	South	Wales	Scotland	North	Midlands	South	Wales
Female – Age									
16-24	22.96	23.82	32.71	4.53	15.82	22.85	22.05	31.15	4.64
25-34	34.18	36.26	62.10	6.59	16.98	13.02	13.47	20.65	2.39
35-49	61.11	66.48	91.56	12.09	29.46	18.07	19.28	29.52	3.63
50-64	40.92	45.57	61.00	8.54	26.67	29.80	29.31	36.14	6.58
65+	69.89	75.83	95.66	15.60	25.39				
Male – Age									
16-24	23.11	24.62	32.91	4.70	15.88	23.63	22.95	32.27	4.87
25-34	38.23	41.61	70.96	7.35	16.47	8.82	7.89	11.71	1.74
35-49	64.79	73.30	103.95	12.66	27.97	12.74	11.08	15.29	2.55
50-64	47.57	54.28	70.33	9.80	25.62	22.05	19.19	23.50	4.82
65+	55.18	61.67	75.87	12.60	19.23				

Table A2: Stratification – United States

	Employed (also includes unemployed 65+)				Unemployed			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West
Female – Age								
18-24	14.11	20.39	31.58	20.17	10.98	10.49	23.89	14.10
25-34	28.92	34.16	61.33	38.53	10.40	9.66	25.07	16.27
35-44	25.44	32.29	55.80	36.64	9.14	9.48	22.33	15.41
45-54	28.51	33.40	57.51	34.90	9.26	10.88	24.31	13.91
55-64	24.98	28.73	45.27	27.63	15.91	16.95	37.60	21.58
65+	52.43	60.08	106.15	62.46				
Male – Age								
18-24	13.10	19.64	33.75	21.07	12.00	11.59	23.25	14.48
25-34	33.26	38.67	67.53	48.23	6.55	6.87	14.51	10.02
35-44	28.69	35.94	64.57	45.16	4.56	5.09	10.29	7.07
45-54	29.68	35.36	65.08	39.56	6.59	6.96	13.42	7.38
55-64	24.84	30.99	49.21	31.59	11.89	12.37	23.93	14.87
65+	42.59	49.76	86.33	52.67				

Tables A3 and A4 report which subgroups we were able to fill completely and the numbers reached for those subgroups we were not able to fill entirely in the UK and US, respectively.

Tables A5 and A6 report the number of respondents reached by subgroup during our second wave in the UK and US, respectively.

Table A3: Subgroups not filled – United Kingdom

	Employed (For 65+ and Scotland both employed and unemployed)					Unemployed			
	North	Midlands	South	Wales	Scotland	North	Midlands	South	Wales
Female – Age									
16-24	✓	✓	✓	✓	✓	✓	✓	✓	✓
25-34	✓	✓	✓	✓	✓	✓	✓	✓	✓
35-49	✓	✓	✓	✓	✓	✓	✓	✓	✓
50-64	✓	✓	✓	✓	✓	✓	✓	✓	✓
65+	64	✓	92	8	21				
Male – Age									
16-24	✓	✓	✓	✓	✓	✓	✓	✓	✓
25-34	✓	✓	✓	✓	✓	✓	✓	✓	✓
35-49	✓	✓	✓	✓	✓	✓	✓	✓	✓
50-64	✓	✓	✓	✓	✓	✓	✓	✓	✓
65+	38	34	43	8	10				

Table A4: Subgroups not filled – United States

	Employed (also includes unemployed 65+)				Unemployed			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West
Female – Age								
18-24	✓	✓	✓	✓	✓	✓	✓	✓
25-34	✓	✓	✓	✓	✓	✓	✓	✓
35-44	✓	✓	✓	✓	✓	✓	✓	✓
45-54	✓	✓	✓	✓	✓	✓	✓	✓
55-64	✓	✓	✓	✓	✓	✓	✓	✓
65+	33	28	57	34				
Male – Age								
18-24	✓	✓	✓	✓	✓	✓	✓	✓
25-34	✓	✓	✓	✓	✓	✓	✓	✓
35-44	✓	✓	✓	✓	✓	✓	✓	✓
45-54	✓	✓	✓	✓	✓	✓	✓	✓
55-64	12	✓	40	20	8	22	✓	12
65+	32	27	37	34				

PART B: ADDITIONAL ANALYSIS

B.1: Switch point analysis for spring wave

72% of the observations in the spring wave of our sample fit the category of switching only once. Of the remainder, 17% showed multiple switch points and so although a preference is revealed in each of the eight individual decisions, taken together, these 'preferences' do not cohere to form a preference ordering over health and wealth. This proportion is strikingly similar to that of our autumn wave and is also typical (see, e.g., Holt and Laury 2002). The remaining 11% of subjects have no switch points: respondents either always chose A, favoring health independently of the wealth consequences (10%), or always B (1%). These are extreme, but nevertheless coherent preferences to hold. Together with 72% who have a single switch point in both rounds, this means 83% of our subjects can be said to reveal preferences over saving lives and avoiding income losses.

Table A5: Respondents reached in wave 2 – United Kingdom

	Employed (For 65+ and Scotland both employed and unemployed)					Unemployed			
	North	Midlands	South	Wales	Scotland	North	Midlands	South	Wales
Female – Age									
16-24	7	6	9	2	8	10	10	17	3
25-34	20	19	36	3	8	7	7	11	1
35-49	44	42	64	8	21	16	9	20	2
50-64	38	38	56	8	22	25	25	32	5
65+	55	65	87	6	18				
Male – Age									
16-24	9	9	12	1	3	9	10	12	0
25-34	20	19	39	4	10	5	4	6	1
35-49	48	59	80	10	19	9	6	13	3
50-64	39	45	59	8	21	18	18	21	5
65+	34	29	41	5	7				

Table A6: Respondents reached in wave 2 – United States

	Employed (also includes unemployed 65+)				Unemployed			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West
Female – Age								
18-24	3	1	8	3	4	3	10	4
25-34	17	15	30	15	6	6	14	6
35-44	10	25	33	18	5	7	9	11
45-54	18	22	42	18	7	7	16	10
55-64	18	17	30	23	11	14	35	15
65+	33	24	46	28				
Male – Age								
18-24	2	6	6	4	4	2	6	4
25-34	16	17	29	14	2	7	7	4
35-44	14	20	36	24	3	2	6	3
45-54	20	18	45	15	7	4	6	3
55-64	9	17	28	12	4	9	14	11
65+	24	18	26	28				

B.2: Preference stability across two rounds in wave 1

To have a preference ordering, there must be only one switch point each time a person faces the eight binary decisions. There are some people who exhibit more than one switch point, either the first or the second time they confront the binary options. We typically ignore a person's choices when this happens. Those respondents – as well as those who did not choose a switch point in either the first or second round of the experiment – are coded as missing in our main variables.

To interpret our treatment effects as effects on preferences, it matters whether we can reasonably assume that people who have a single switch point on each set also have a preference ordering. This is not necessarily the case because anyone who chose a switch point randomly would satisfy the condition of only switching once. And if random selection explained their switch point then the treatment effect would be better interpreted as some interaction with the randomization process. To test for this possibility, we analyze the stability of preferences in the control group where no treatment effect could occur. We have evidence of such consistency of choice between the first and second time these decisions are

made, and this would be unusual if people chose the switch point randomly (805 of 1,006 control group-respondents who chose a switch point both pre- and post-treatment expressed stable preferences). In fact, the probability of choosing the same switch point twice if the choice of switch point on each occasion was random would be 1/8 (i.e., 8x 1/64), while we have 80% consistent choices.

The number of preference-based choosers might be plausibly calculated in the following way by allowing for strict preference followers, 'fuzzy' ones (defined below) and random choosers.

'Fuzzy' preference followers are people that know the region they like but not the precise point: they cannot distinguish between adjacent switching points and so toss a coin. For example, if someone thinks they should switch at decision 6 or decision 7, they toss a coin and might choose 7. When asked again they toss the coin again and there is a 50% chance they choose 7 again and a 50% chance they now choose 6. Thus, there is a 50% chance that we observe one downward movement. Alternatively, they could have chosen 6 in first place; then they have an equal chance of staying at 6 or moving up to 7 in the second decision. For this person there is a 50% chance they pick the same, a 25% chance that they move up and a 25% chance that they move down. We have 136 respondent who change by one decision point, which would arise if there were 272 people who had fuzzy preferences as defined above.

However, some people who just choose randomly would also change their switch point by one position = 7/32. Since 1/8 of these random choosers would select the same point, it follows that 21/32 of the random choosers would move their decision by more than one point. We have 65 choices that move by more than one switch point. This would imply 99 random choosers in our sample. This being the case, the random choosers would also account for 22 of the observations of one switch point changes. We had 136 observations with one switch and so that leaves 114 of these choices to be accounted for by respondents with fuzzy preferences.

These overall 228 respondents with fuzzy preferences would produce 114 of the consistent choices we observe (and we would expect 12 of these observations to come from the random choosers). Thus, our residual number of genuine preference-based choosers is 679, with 228 fuzzy preference choosers and 99 random choosers. Overall, our sample therefore consists of 90% either consistent or fuzzy preference-choosers.

B.3: WTP stability across two rounds in wave 2

In table B1 we report the percentages of respondents who increased, decreased or kept a stable WTP in a second round of wave 2. As the study was part of a larger information

provision experiment, we can test the stability of preferences for those respondents who were randomly assigned to the control group of the information provision experiment and only listened to a short piece of music.

The vast majority of respondents, about 87% in both countries, kept a stable WTP in both rounds for both measures. About 6-8% of respondents in both countries decreased their WTP and about 5-6% of respondents increased their WTP in the second round. While there is some movement from the first to the second round, these numbers overall illustrate a remarkable stability of the WTP estimates.

Table B1: WTP changes between rounds of wave 2

	United States		United Kingdom	
	Intervention	Transmission	Intervention	Transmission
Increase	6.07	5.83	5.77	5.38
Decrease	6.80	8.01	6.35	8.27
Stable	87.14	86.17	87.88	86.35
Total	100	100	100	100

B.4: Balance test of attrition

The attrition rate for our panel was 37%. While this percentage appears somewhat high, it is reasonable given the 6 months break between the two waves and the higher turnover of participants on Prolific than on more established panel providers.

Table B2 reports a balance test of the respondents who dropped out of our panel after the first wave. Most importantly, there is no difference in the VSL estimate between those respondents who remained in the panel and those who dropped out. This is reassuring as it confirms that the stability of our VSL estimates is not due to those respondents dropping out who had a particularly low or high VSL estimate. Also reassuring is that beliefs about the COVID-19 crisis do not predict whether a respondent drops out or not. There is weak statistically significant evidence in the US that respondents who consider themselves somewhat more towards the right politically were more likely to drop out. In the US, men were also more likely to drop out of the panel than women. The only variable significant in both countries in age, with younger people being more likely to drop out of the panel than older people. While no significant difference would have been preferable, younger people dropping out is in fact somewhat preferable to older respondents dropping out as we had fewer older respondents in our panel, relative to our quotas, to begin with.

Table B2: Balance test of attrition

	United States	United Kingdom
Demographics		
Female	-0.271**	-0.058
	(0.121)	(0.126)
Age	-0.047***	-0.056***
	(0.004)	(0.005)
Income	0.023	0.012
	(0.023)	(0.030)
Political orientation	0.053**	-0.018
	(0.025)	(0.034)
Preferences		
VSL	0.000	0.000
	(0.000)	(0.000)
Beliefs		
Seriousness	0.179	-0.060
	(0.150)	(0.149)
Concern	0.057	0.068
	(0.097)	(0.103)
Observations	1,290	1,427

Notes: Estimates come from logistic regressions. The outcome variable is equal to 1 if the respondent dropped out of the panel after wave 1. Political orientation ranges from 0 to 10 with a higher self-reported value indicating a more right-wing orientation. Seriousness ranges from 0-4 with higher values indicating more perceived seriousness of COVID-19. Concern equally ranges from 0-4 with higher values indicating more concern due to COVID-19. Feeling healthy ranges from 0-10 with higher values indicating that the respondent feels healthier. Both models are weighted for representativeness based on age, gender, region and work status. Robust standard errors are presented in parentheses. *** p<0.01, ** p<0.05 , * p<0.1.

B.5: Individual-level characteristics of VSL estimates

In table B3, we report some individual-level characteristics of our different VSL estimates. Most strikingly, we find that income is positively correlated with higher WTP estimates but not with the social planner elicitation in either country. This suggests that the VSL revealed through the social planner elicitation is less constrained by personal considerations, such as household income.

In the US, we find that political orientation is significantly correlated with all three VSL estimates with those respondents who consider themselves more towards the right politically having lower estimates. This is only the case for the social planner elicitation in the UK.

Interestingly, age does not consistently and significantly predict differences in VSL estimates. On social preferences, we also do not find many significant differences except for

those already discussed in table 1 of the main text and a significant correlation between altruism and a high WTP in both countries.

Table B3: Individual-level characteristics of VSL estimates (in £/$1,000s)

	United States			United Kingdom		
	Intervention	Transmission	Holt-Laury	Intervention	Transmission	Holt-Laury
Demographics						
Female	554	1,845	1,333	3,090***	3,424***	-243.08
	(1,204)	(1,203)	(1,234)	(784.14)	(835.73)	(912.37)
Age	71.13*	90.29**	51.55	21.17	71.44**	55.65*
	(40.85)	(40.99)	(43.77)	(27.45)	(30.14)	(33.62)
Income	1,102***	1,368***	161.75	935.31***	1,201***	-194.64
	(243)	(243)	(241.86)	(194.74)	(212.31)	(227.14)
Political orientation	-556**	-778***	-793.62***	226.20	85.55	-640.85***
	(241)	(247)	(238.40)	(203.68)	(221.51)	(234.83)
Social preferences						
Luck acceptable	-157	17.54	-576.91**	-69.00	-172.11	-77.08
	(237)	(236)	(237.43)	(164.82)	(168.22)	(179.25)
General trust	2,583**	4,204***	-343.37	1,001	730.63	990.01
	(1,297)	(1,275)	(1,275)	(793.87)	(858.97)	(974.65)
Dictator game giving	50.41	-43.07	-47.61	-139.47	-84.59	55.02
	(263)	(263)	(266.09)	(198.42)	(205.61)	(213.80)
Altruism	9.39***	9.89***	1.705	6.302**	9.958***	4.574*
	(3.40)	(3.37)	(3.046)	(2.446)	(2.610)	(2.698)
Observations	1,001	1,001	671	1,212	1,212	868

Notes: Estimates come from linear regressions and are weighted for representativeness based on age, gender, region and work status. Robust standard errors are presented in parentheses. Political orientation ranges from 0 to 10 with a higher self-reported value indicating a more right-wing orientation. 'Luck acceptable' ranges from 0-10 with 0 indicating it is not acceptable at all for income differences to exist because of luck and 10 meaning 'completely acceptable'. General trust is a binary variable with 1 equal to having trust in others. Dictator game giving ranges from 0-10 (in £/$) and altruism ranges from 0-1000 (in £/$). *** p<0.01, ** p<0.05 , * p<0.1.

B.6: Differences between elicitation methods

Table B4 provides further analysis of the differences in VSL estimates between the three elicitation methods in addition to table 1 in the main text. 'Pro-social change 1' is hereby the individual-level difference between WTP1 and WTP2. 'Pro-social change 2' is the individual-level difference between WTP1 and the Holt-Laury estimate. 'Impartial change' is the individual-level difference between WTP2 and the Holt-Laury estimate.

The table again shows that one of the most striking differences between the elicitation methods is how personal household income affects the estimates. Respondents with higher self-reported household income are less likely to increase their VSL estimates from the WTP elicitations to the social planner elicitation. This is consistent with the finding reported in table B3: The two WTP estimates are affected by personal income considerations while the VSL estimate elicited through the social planner frame is not.

Gender and political orientation also affect the individual-level differences between estimates in the UK, but none of the other variables are significantly correlated with the differences in VSL estimates.

Table B4: Differences in elicitation methods (in £/$1,000s)

	United States			United Kingdom		
	Pro-social change 1	Pro-social change 2	Impartial change	Pro-social change 1	Pro-social change 2	Impartial change
Demographics						
Female	1,422	-900	-1,121	452	-2,678**	-3,562***
	(904)	(1,787)	(1,754)	(602)	(1,205)	(1,267)
Age	48.28	-10.47	-62.33	67.6***	73.8	4.18
	(33.90)	(71.14)	(68.61)	(23.7)	(45.3)	(48.9)
Income	191	-1,272***	-1,653***	411**	-780***	-1,241***
	(184)	(351)	(342)	(166)	(300)	(306)
Political orientation	-243	-171	-66.34	-142	-1,011***	-962***
	(150)	(333)	(33.37)	(148)	(295)	(311)
COVID-19						
Risk aversion	200	520	168	-267*	-330	-139
	(187)	(385)	(384)	(138)	(264)	(273)
Feeling healthy	-32.37	-299	-275	-258*	-469*	-53.6
	(198)	(414)	(433)	(149)	(283)	(305)
Risk group	-194	-612	-1,608	-423	-3,023*	-2,735
	(1,191)	(2,347)	(2,208)	(890)	(1,596)	(1,704)
Observations	1,087	722	722	1,315	950	950

Notes: Estimates come from linear regressions and are weighted for representativeness based on age, gender, region and work status. Robust standard errors are presented in parentheses. Political orientation ranges from 0 to 10 with a higher self-reported value indicating a more right-wing orientation. Risk aversion is self-reported and ranges from 0-10 with higher values indicting more risk-seeking behavior. Feeling healthy ranges from 0-10 with higher values indicating that the respondent feels healthier. Risk group is a binary variable with 1 indicating that the respondent is in the government-defined risk group for COVID-19. *** p<0.01, ** p<0.05 , * p<0.1.

B.7: Stability of VSL estimates

Tables B5 and B6 provide further analysis of the stability of the VSL estimates in addition to the second panel of table 1 in the main text. Table B5 reports the effects of individual-level characteristics as reported in wave 1 on changes in the VSL derived through the social planner elicitation between waves.

Strikingly, almost none of the variables predict changes in the VSL estimates. There is some evidence that women in the UK were more likely to increase their VSL between the two waves and that those more concerned in the US in spring increased their VSL, but factors like perceived seriousness of COVID-19, economic concern, how healthy respondents felt or even political orientation do not appear to matter.

Table B6 reports the effects of individual-level changes between waves on differences in elicitation methods. Again, 'Pro-social change 1' is hereby the individual-level difference between WTP1 and WTP2. 'Pro-social change 2' is the individual-level difference between WTP1 and the Holt-Laury estimate and "Impartial Change" is the individual-level difference between WTP2 and the Holt-Laury estimate.

Almost none of the variables affect the differences between the VSL estimates. In the US only, there is some evidence that those who feel more healthy in wave 2 than wave 1 increase their WTP more from WTP1 to WTP2. The same appears to be the case for those who are more concerned in wave 2 than wave 1 which seemingly contradicts the previously mentioned correlation. In the UK, those who report a higher level of general trust in wave 2 than wave 1 increase their VSL elicited through the social planner frame more compared to the two WTP elicitations but the same is not the case in the US. Overall, the results of both, table B5 and B6, further support the stability of our VSL estimates despite significant changes in circumstances between the two waves.

Table B5: Individual-level characteristics of VSL change between waves (in £/$1,000s)

	VSL change – US	VSL change – UK
Demographics		
Female	2,068	2,999***
	(1,539)	(1,083)
Age	-15.95	5.772
	(55.14)	(35.73)
Income	110.8	37.85
	(326.6)	(277.7)
Education	3,221*	311.6
	(1,825)	(1,254)
Religiosity	-475.9	-219.9
	(786.4)	(594.1)
Republican	-3,703	
	(2,372)	
Conservative		1,947
		1,483
Feeling healthy	238.2	-251.0
	(351.9)	(235.2)
Beliefs		
Luck vs effort	-351.3	4.412
	(325.2)	(240.8)
General trust	-1,515	903.2
	(15,969)	(1,112)
Others comply	317.3	216.3
	(739.7)	(516.5)
Seriousness	-2,052	23.25
	(2,006)	(1,207)
Concern	2,631**	-370.9
	(1,326)	(899.8)
Economic concern	-540.9	-1,119
	(1,278)	(844.4)
Behaviors		
Risk taking	364.6	597.0**
	(330.0)	(233.4)
Patience	-252.5	238.8
	(304.4)	(228.5)
Dictator game giving	263.6	-61.12
	(274.1)	(263.6)
Altruism	1.306	1.182
	(3.832)	(3.444)
Following guidelines	393.7	649.4
	(1,017)	(1,225)
Observations	468	656

Table B6: Individual-level changes on differences in elicitation methods (in £/$1,000s)

	United States			United Kingdom		
	Pro-social change 1	Pro-social change 2	Impartial change	Pro-social change 1	Pro-social change 2	Impartial change
Demographics						
Income	-315	1,635	1,387	-793*	117	378
	(523)	(1,290)	(1,319)	(409)	(702)	(723)
Economic anxiety	71.80	134	68.23	294*	423	34.41
	(261)	(512)	(516)	(176)	(353)	(348)
Feeling healthy	455**	-227	-695	-172	-349	-279
	(229)	(499)	(520)	(192)	(357)	(349)
Beliefs						
General trust	-915	-2,186	-47.89	-881	4,070***	5,098***
	(1,243)	(2,839)	(2,741)	(914)	(1,549)	(1,530)
Seriousness	148	1,094	1,938	-515	-1,230	-418
	(954)	(1,974)	(1,987)	(682)	(1,278)	(1,313)
Concern	2,018**	69.84	-1,749	-135	828	1,019
	(846)	(1,633)	(1,645)	(678)	(1,140)	(1,062)
Behaviors						
Risk-taking	-194	35.32	-86.66	88.18	57.39	-49.20
	(206)	(476)	(489)	(166)	(371)	(342)
Patience	269	237	-160	416**	270	700**
	(252)	(435)	(437)	(163)	(284)	(310)
Altruism	-2.01	-2.17	-0.28	2.58	2.90	2.41
	(2.72)	(5.14)	(5.38)	(1.99)	(3.55)	(3.47)
Following guidelines	-432	-1,291	-899	355	832	511
	(649)	(1,015)	(1,161)	(521)	(1,149)	(979)
Observations	966	646	646	1,087	790	790

Notes: Estimates come from linear regressions. All variables are measured as changes between waves. Economic anxiety reports respondents' change in earnings during the past month due to COVID-19 ranging from -1 (less than usual) to 1 (more than usual). Feeling healthy ranges from 0-10 with higher values indicating that the respondent feels healthier. General trust is a binary variable with 1 equal to having trust in others. Seriousness ranges from 0-4 with higher values indicating more perceived seriousness of COVID-19. Concern equally ranges from 0-4 with higher values indicating more concern due to COVID-19. Risk-taking and patience are self-reported and range from 0-10 with higher values indicating more risk-seeking behavior and more patience. Altruism ranges from 0-1000 (in £/$) and following guidelines is the self-reported likelihood of following government guidelines ranging from -2 (very unlikely to 2 (very likely). All models are weighted for representativeness based on age, gender, region and work status. Robust standard errors are presented in parentheses. *** p<0.01, ** p<0.05 , * p<0.1.

PART C: SURVEY INSTRUMENT

United States

Part I – Willingness to pay elicitation

Consider two hypothetical treatments for COVID-19 that must be taken when healthy: Treatment 1 and Treatment 2. When you take either treatment your chances of dying from COVID-19 over the next 3 months fall by the same amount: the survival rates improve by the equivalent of 5 people in 1 million. That is, if in a population of a million people everyone took the treatment, then, on average we expect that 5 people within that population will survive who would have died from COVID-19 over the next 3 months. But we cannot identify which 5 people.

Treatment 1 contributes to reducing your chances of death because it aids recovery if you get serious COVID-19 and are admitted to hospital. It does not affect your chances of getting COVID-19 or transmitting it to others.

Treatment 2 contributes to reducing your chances of death because it reduces the likelihood that you will become infected by COVID-19 and hence also that you will transmit the infection to others.

How much would you pay to receive treatment 1?

- $0
- $32.5
- $65
- $97.5
- $130
- $162.5
- $195
- $227.5
- $260
- Above $260

How much would you pay to receive treatment 2?

- $0
- $32.5
- $65
- $97.5
- $130
- $162.5
- $195
- $227.5
- $260
- Above $260

Part I.II – Preference elicitation in terms of trade off between lives and economic loss

When the restrictions on personal movement are increased, coronavirus spreads more slowly and so causes less loss of life because there is less peak pressure on the healthcare system. However, increasing the restrictions on personal movement also tends to disrupt and lower economic activity and this is associated with loss of income and jobs and some psychological and health costs.

It is difficult to put numbers on these effects. Nevertheless, we present 8 decisions below and ask you in each case to choose between two options. Each option has a combination of 'lives lost per 1 million of the population through COVID-19 over the next 3 months' and 'the average loss of household income due to measures to prevent transmission of COVID-19 over the next 3 months'. In each of the 8 decisions, click on the option that you think has the best combination.

	Option A		**Option B**	
	Lives lost per 1M of population	**Average loss of disposable HH income**	**Lives lost per 1M of population**	**Average loss of disposable HH income**
D1	320	$4000	335	$4150
D2	310	$3850	325	$3740
D3	247	$3670	256	$3500
D4	213	$3500	219	$3300
D5	200	$3300	204	$3100
D6	188	$3120	192	$2820
D7	177	$2350	180	$2000
D8	165	$1950	165	$1800

Part II – Perceptions

Please answer the following questions about the spread of the coronavirus COVID-19.
P1: How serious do you think COVID-19 is compared to the seasonal flu?

- Not at all serious
- Not very serious
- Fairly serious
- Very serious
- Don't know

P2: How concerned are you for you and your family about COVID-19?

- Not at all concerned
- Not very concerned
- Fairly concerned
- Very concerned
- Don't know

P3: How concerned are you about the economic implications of COVID-19?

- Not at all concerned
- Not very concerned
- Fairly concerned
- Very concerned
- Don't know

P4: How likely are you to follow government's guidance for reducing the spread of COVID-19?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

K1: How many people in the US would you estimate will have died in total due to coronavirus by the end of 2020?
K2: By what percentage would you estimate average income in the US will be lower in 2020 as compared to 2019?

Part III – Demographic questions

D1: Which US state do you live in?
D2: Are you Spanish, Hispanic, or Latino?

- Yes
- No

D3: Below you will find a list of five race categories. Please choose one or more races that you consider yourself to be:

- White
- Black or African-American
- American Indian or Alaska Native
- Asian
- Native Hawaiian or other Pacific Islander
- Other group
- Prefer not to answer

D4: What is your household income before tax?

- Under $10,000
- $10,000 - $20,000
- $20,001 - $30,000
- $30,001 - $40,000
- $40,001 - $50,000
- $50,001 - $60,000
- $60,001 - $80,000
- $80,001 - $100,000
- $100,001 - $150,000

- $150,001 - $200,000
- Above $200,000
- Don't know
- Prefer not to answer

D5: Which party do you feel closest to?

- Democratic Party
- Republican Party
- Other
- Don't know

D6: Thinking about the 2016 Presidental Election, to your best recollection, whom did you vote for?

- Hillary Clinton
- Donald Trump
- Other candidate
- Didn't vote
- Don't know
- Prefer not to say

D7: In politics people sometimes talk of left and right. Where would you place yourself on the following scale?

[Scale from 0 (Left) to 10 (Right)]

D8: Some people feel that government should make much greater efforts to make people's incomes more equal. Other people feel that government should be much less concerned about how equal people's incomes are. Where would you place yourself on this scale?

[Scale from 0 (Try to make incomes equal) to 10 (Be less concerned about equal incomes)]

D9: Some people think that society would be a better place if people had more respect for authority. Other people think society would be a better place if people questioned authority more often. Where would you place yourself on this scale?

[Scale from 0 (Respect authority) to 10 (Question authority)]

D10: To what extent do you believe that income differences arise from luck and to what extent from differences in effort and skills? [Scale from 0 (From luck) to 10 (From effort and skills)]

D11: To what extent do you think it is acceptable for income differences to exist if they arise from luck? [Scale from 0 (Not acceptable at all) to 10 (Completely acceptable)]

D12: To what extent, if at all, would you support the government introducing a Universal Basic Income, where the government makes sure that everyone has an income, without a means test or requirement to work?

- Very supportive
- Supportive
- Neither supportive or unsupportive
- Unsupportive
- Very unsupportive
- Don't know

D13: How, if at all, has your support for Universal Basic Income changed due to the economic impact of the COVID-19 pandemic?

- Much more supportive
- Somewhat more supportive
- Neither more or less supportive
- Somewhat less supportive
- Much less supportive
- Don't know

D14: Do you think that the federal government in Washington could be doing more to tackle climate change, or is it already doing as much as it reasonably can?

- Could be doing more
- Doing as much as it reasonably can

- Don't know

D15: To what extent, if at all, would you support the government introducing more extensive policies to tackle climate change?

- Very supportive
- Supportive
- Neither supportive or unsupportive
- Unsupportive
- Very unsupportive
- Don't know

D16: During the last seven days, on average how much time (if any) have you spent per day following the news?

- None, no time at all
- Less than 1/2 hour
- 1/2 hour to 1 hour
- 1 to 2 hours
- More than 2 hours
- Don't know

D17: Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?

- Most people can be trusted
- Can't be too careful
- Don't know

D18: How much of the time do you think you can trust the federal government in Washington to do what is right?

- Hardly ever

- Some of the time
- Most of the time
- Just about always
- Don't know

D19: How much trust do you have in elected politicians in general?

- None at all
- A little
- Some
- Quite a bit
- A lot
- Don't know

D20: Which of these best describes what you were doing last week?

- Working full time (30 or more hours per week)
- Working part time (8-29 hours a week)
- Working part time (less than 8 hours a week)
- On furlough (temporary leave)
- Unemployed and looking for work
- Full time university student
- Other full time student
- Retired
- Not in paid work for any other reason
- Other

D21: What is your highest level of educational attainment?

- College and above

- High school
- Elementary school
- No formal education

D22: How religious do you consider yourself to be?

- Very religious
- Fairly religious
- Not very religious
- Not religious at all
- Don't know
- Prefer not to say

D22.1: During the next months, how likely or unlikely is it that you will not have enough money to cover your day to day living costs?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D23: Thinking about the past month, did you, as a result of the COVID-19 pandemic, earn less, about the same or more money than usual?

- Less than usual
- About the same
- More than usual
- Don't know

D24: How healthy have you felt in the last weeks?

[Scale from 0 (Not healthy at all) to 10 (Very healthy)]

D25: According to US government guidelines, those above the age of 65 and/or those with underlying health conditions are at an increased risk from COVID-19. Do you consider yourself to be in this group?

- Yes
- No
- Don't know
- Prefer not to say

D26: How likely or unlikely do you think it is that you have had the coronavirus?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D27: How would you assess the government's introduction of lockdown measures?

- Too quick
- Fairly quick
- About right
- Fairly slow
- Too slow
- Don't know

D28: How would you assess the government's relaxation of lockdown measures?

- Too quick

- Fairly quick
- About right
- Fairly slow
- Too slow
- Don't know

D29: How would you assess the severity of the government's lockdown measures?

- Too severe
- Severe
- About right
- Relaxed
- Too relaxed
- Don't know

D30: How competent would you assess the government's response to COVID-19?

- Very competent
- Competent
- Somewhat competent
- Incompetent
- Very incompetent
- Don't know

D31: To what extent do you think you can influence the likelihood of catching COVID-19 through your own behavior and actions?

- Not at all
- Somewhat
- Quite a bit
- A lot
- Don't know

D32: Do you think other people are likely to comply with the government's guidance for reducing the spread of COVID-19?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D33: Please tell us, in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use any number between 0 and 10 to indicate where you fall on the scale.

[Scale from 0 (Completely unwilling to take risks) to 10 (Very willing to take risks)]

D34: Are you generally an impatient person, or someone who always shows great patience? Please use a scale from 0 to 10 where 0 means "very impatient" and a 10 means you are "very patient". You can also use any numbers between 0 and 10 to indicate where you fall on the scale.

[Scale from 0 (Very impatient) to 10 (Very patient)]

D35: Imagine you were given \$10 to divide between yourself and another person in increments of \$1. Considering your current situation, how much of the \$10 would you keep for yourself and how much would you give to the other person? Please use the slider below to indicate how much you would give to the other person.

D36: Imagine you won \$1,000 in a lottery. Considering your current situation, how much would you donate to charity?

Feedback: Please let us know in the field below whether you have any feedback regarding the study. Were any of the questions or tasks unclear?

United Kingdom

Part I – Willingness to pay elicitation

Consider two hypothetical treatments for COVID-19 that must be taken when healthy: Treatment 1 and Treatment 2. When you take either treatment your chances of dying from

COVID-19 over the next 3 months fall by the same amount: the survival rates improve by the equivalent of 5 people in 1 million. That is, if in a population of a million people everyone took the treatment, then, on average we expect that 5 people within that population will survive who would have died from COVID-19 over the next 3 months. But we cannot identify which 5 people.
Treatment 1 contributes to reducing your chances of death because it aids recovery if you get serious COVID-19 and are admitted to hospital. It does not affect your chances of getting COVID-19 or transmitting it to others.
Treatment 2 contributes to reducing your chances of death because it reduces the likelihood that you will become infected by COVID-19 and hence also that you will transmit the infection to others.

How much would you pay to receive treatment 1?

- £0
- £25
- £50
- £75
- £100
- £125
- £150
- £175
- £200
- Above £200

How much would you pay to receive treatment 2?

- £0
- £25
- £50
- £75

- £100
- £125
- £150
- £175
- £200
- Above £200

Part I.II – Preference elicitation in terms of trade off between lives and economic loss

When the restrictions on personal movement are increased, coronavirus spreads more slowly and so causes less loss of life because there is less peak pressure on the healthcare system. However, increasing the restrictions on personal movement also tends to disrupt and lower economic activity and this is associated with loss of income and jobs and some psychological and health costs.

It is difficult to put numbers on these effects. Nevertheless, we present 8 decisions below and ask you in each case to choose between two options. Each option has a combination of 'lives lost per 1 million of the population through COVID-19 over the next 3 months' and 'the average loss of household income due to measures to prevent transmission of COVID-19 over the next 3 months'. In each of the 8 decisions, click on the option that you think has the best combination.

	Option A		**Option B**	
	Lives lost per 1M of population	**Average loss of disposable HH income**	**Lives lost per 1M of population**	**Average loss of disposable HH income**
D1	445	£2700	460	£2750
D2	412	£2500	431	£2420
D3	383	£2300	393	£2200
D4	360	£2150	367	£2020
D5	300	£2000	305	£1850
D6	240	£1900	243	£1750
D7	230	£1800	232	£1640
D8	210	£1550	210	£1450

Part II – Perceptions

Please answer the following questions about the spread of the coronavirus COVID-19.
P1: How serious do you think COVID-19 is compared to the seasonal flu?

- Not at all serious
- Not very serious
- Fairly serious
- Very serious
- Don't know

P2: How concerned are you for you and your family about COVID-19?

- Not at all concerned
- Not very concerned
- Fairly concerned
- Very concerned
- Don't know

P3: How concerned are you about the economic implications of COVID-19?

- Not at all concerned
- Not very concerned
- Fairly concerned
- Very concerned
- Don't know

P4: How likely are you to follow government's guidance for reducing the spread of COVID-19?

- Very unlikely
- Fairly unlikely
- Neither likley nor unlikely

- Fairly likely
- Very likely
- Don't know

K1: How many people in the UK would you estimate will have died in total due to coronavirus by the end of 2020?
K2: By what percentage would you estimate average income in the UK will be lower in 2020 as compared to 2019?

Part III - Demographic questions

D1: Which area of the United Kingdom do you live in?

- England
- Scotland
- Wales
- Northern Ireland

D2: To which of these groups do you consider you belong?

- White British
- Any other white background
- White and Black Caribbean
- White and Black African
- White and Asian
- Any other mixed background
- Indian
- Pakistani
- Bangladeshi
- Chinese

- Any other Asian background
- Black Carribean
- Black African
- Any other black background
- Other ethnic group
- Prefer not to answer

D3: What is your household income before tax?

- Under £10,000
- £10,000 - £20,000
- £20,001 - £30,000
- £30,001 - £40,000
- £40,001 - £50,000
- £50,001 - £60,000
- £60,001 - £80,000
- £80,001 - £100,000
- £100,001 - £150,000
- Above £150,000
- Don't know
- Prefer not to answer

D4: Which party do you feel closest to?

- Conservative
- Labour
- Liberal Democrat
- Scottish National Party (SNP)

- Plaid Cymru
- The Brexit Party
- Green Party
- United Kingdom Independence Party (UKIP)
- Democratic Unionist Party
- Sinn Fein
- Social Democratic and Labour Party (SDLP)
- Alliance Party
- Ulster Unionist Party
- Other
- Don't know

D5: Thinking about the 2016 Brexit referendum, to your best recollection, which side did you vote for, 'Leave', or 'Remain'?

- Leave
- Remain
- Didn't vote
- Don't know
- Prefer not to say

D6: In politics people sometimes talk of left and right. Where would you place yourself on the following scale?

[Scale from 0 (Left) to 10 (Right)]

D7: Some people feel that government should make much greater efforts to make people's incomes more equal. Other people feel that government should be much less concerned about how equal people's incomes are. Where would you place yourself on this scale?

[Scale from 0 (Try to make incomes equal) to 10 (Be less concerned about equal incomes)]

D8: Some people think that society would be a better place if people had more respect for

authority. Other people think society would be a better place if people questioned authority more often. Where would you place yourself on this scale?

[Scale from 0 (Respect authority) to 10 (Question authority)]

D9: To what extent do you believe that income differences arise from luck and to what extent from differences in effort and skills?

[Scale from 0 (From luck) to 10 (From effort and skills)]

D10: To what extent do you think it is acceptable for income differences to exist if they arise from luck?

[Scale from 0 (Not acceptable at all) to 10 (Completely acceptable)]

D11: To what extent, if at all, would you support the government introducing a Universal Basic Income, where the government makes sure that everyone has an income, without a means test or requirement to work?

- Very supportive
- Supportive
- Neither supportive or unsupportive
- Unsupportive
- Very unsupportive
- Don't know

D12: How, if at all, has your support for Universal Basic Income changed due to the economic impact of the COVID-19 pandemic?

- Much more supportive
- Somewhat more supportive
- Neither more or less supportive
- Somewhat less supportive
- Much less supportive
- Don't know

D13: Do you think that the government in Westminster could be doing more to tackle climate change, or is it already doing as much as it reasonably can?

- Could be doing more
- Doing as much as it reasonably can
- Don't know

D14: To what extent, if at all, would you support the government introducing more extensive policies to tackle climate change?

- Very supportive
- Supportive
- Neither supportive or unsupportive
- Unsupportive
- Very unsupportive
- Don't know

D15: During the last seven days, on average how much time (if any) have you spent per day following the news?

- None, no time at all
- Less than 1/2 hour
- 1/2 hour to 1 hour
- 1 to 2 hours
- More than 2 hours
- Don't know

D16: Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?

- Most people can be trusted
- Can't be too careful
- Don't know

D17: How much of the time do you think you can trust the Westminster government to do what is right?

- Hardly ever
- Some of the time
- Most of the time
- Just about always
- Don't know

D18: How much trust do you have in elected politicians in general?

- None at all
- A little
- Some
- Quite a bit
- A lot
- Don't know

D19: Which of these best describes what you were doing last week?

- Working full time (30 or more hours per week)
- Working part time (8-29 hours a week)
- Working part time (less than 8 hours a week)
- On furlough (temporary leave)
- Unemployed and looking for work
- Full time university student
- Other full time student
- Retired
- Not in paid work for any other reason

- Other

D20: What is your highest level of educational attainment?

- Higher Education and above
- Secondary education
- Primary education
- No formal education

D21: How religious do you consider yourself to be?

- Very religious
- Fairly religious
- Not very religious
- Not religious at all
- Don't know
- Prefer not to say

D22.old: During the next months, how likely or unlikely is it that you will not have enough money to cover your day to day living costs?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D22: Thinking about the past month, did you, as a result of the COVID-19 pandemic, earn less, about the same or more money than usual?

- Less than usual

- About the same
- More than usual
- Don't know

D23: How healthy have you felt in the last weeks?
[Scale from 0 (Not healthy at all) to 10 (Very healthy)]

D24: According to UK government guidelines, those above the age of 70 and/or those with underlying health conditions are at an increased risk from COVID-19. Do you consider yourself to be in this group?

- Yes
- No
- Don't know
- Prefer not to say

D25: How likely or unlikely do you think it is that you have had the coronavirus?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D26: How would you assess the government's introduction of lockdown measures?

- Too quick
- Fairly quick
- About right
- Fairly slow
- Too slow
- Don't know

D27: How would you assess the government's relaxation of lockdown measures?

- Too quick
- Fairly quick
- About right
- Fairly slow
- Too slow
- Don't know

D28: How would you assess the severity of the government's lockdown measures?

- Too severe
- Severe
- About right
- Relaxed
- Too relaxed
- Don't know

D29: How competent would you assess the government's response to COVID-19?

- Very competent
- Competent

- Somewhat competent
- Incompetent
- Very incompetent
- Don't know

D30: To what extent do you think you can influence the likelihood of catching COVID-19 through your own behavior and actions?

- Not at all
- Somewhat
- Quite a bit
- A lot
- Don't know

D31: Do you think other people are likely to comply with the government's guidance for reducing the spread of COVID-19?

- Very unlikely
- Fairly unlikely
- Neither likely nor unlikely
- Fairly likely
- Very likely
- Don't know

D32: Please tell us, in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use any number between 0 and 10 to indicate where you fall on the scale.

[Scale from 0 (Completely unwilling to take risks) to 10 (Very willing to take risks)]

D33: Are you generally an impatient person, or someone who always shows great patience? Please use a scale from 0 to 10 where 0 means "very impatient" and a 10 means you are

"very patient". You can also use any numbers between 0 and 10 to indicate where you fall on the scale.

[Scale from 0 (Very impatient) to 10 (Very patient)]

D34: Imagine you were given £10 to divide between yourself and another person in increments of £1. Considering your current situation, how much of the £10 would you keep for yourself and how much would you give to the other person? Please use the slider below to indicate how much you would give to the other person.

D35: Imagine you won £1,000 in a lottery. Considering your current situation, how much would you donate to charity?

Feedback: Please let us know in the field below whether you have any feedback regarding the study. Were any of the questions or tasks unclear?