Explaining the sexuality gap in attitudes & policy preferences: The case

of health over wealth in response to the Covid-19 pandemic

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Abstract

Sexual minority citizens, on average, hold more liberal political attitudes than their

heterosexual counterparts. However, the cause of this 'sexuality gap' remains contested. The

broadly consensual nature of partisan responses to the Covid-19 pandemic in the UK provides

a unique case study to effectively control for the potential role of partisan cues and so shed

light on the mechanisms that determine the sexuality gap. In this regard, we make three

contributions in this letter. Firstly, using survey data on citizens' attitudes towards prioritising

health over the economy, we find that sexual minority voters disproportionately place greater

emphasis on the former. This gap remains regardless of socio-demographics and party choice,

suggesting a socialisation effect of sexuality. We use mediation analysis to demonstrate the

sexuality gap can be explained primarily via divergent political outlooks and only to a lesser

extent via differing levels of personal empathy, as has previously been theorised.

Keywords: sexuality gap; covid-19; empathy; attitudinal formation; socialisation

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#### Introduction

In this letter we make three contributions. Empirically, we demonstrate that sexual minority voters, regardless of their gender, harbour significantly distinct preferences regarding public policy responses to the coronavirus pandemic compared to their heterosexual peers. When it comes to the polemical trade-off between reducing the infection rate and saving lives or protecting the economy and saving livelihoods, lesbian, gay and bisexual (LGB) citizens are disproportionately likely to favour the former. We find that gay/bisexual men are likely to hold the same preferences as heterosexual women, whilst lesbian/bisexual women are even more supportive of health-over-wealth policies than their heterosexual counterparts.

Given the broad consensus among UK parties to prioritise the immediate health needs of its citizens in response to the crisis, the Covid-19 pandemic provides an interesting case in which the divergence in sexually stratified populations' attitudes can be analysed without the presence of partisan heuristics that would otherwise prime citizens one way or another. Empirically, we demonstrate that, amongst voters of most parties, LGB citizens are more health-orientated than their heterosexual peers.

Finally, we move beyond establishing the presence of a sexuality gap and provide empirical evidence to explain it – addressing a key outstanding issue in the literature on political attitudes and behaviour. Whilst the sexuality gap has been postulated to be the product of higher levels of empathy (Schnabel, 2018; Swank, 2018a, 2019; Worthen, 2020), research has yet to identify this mechanism. We conceptualise and thereafter operationalise empathy in terms of "emotional concern for others that may encourage normative, moral and pro-social action" (Schieman and Van Gundy, 2000: 153). Relying on a mediation analysis via structural equation modelling, we test the mediating role of both personal empathy and left-right ideological positions on public policy preferences related to Covid-19. Empirically, we illustrate that sexuality minority citizens' increased prioritisation of health over wealth can be explained, in large part, by ideological outlook whereas personal empathy has a small effect, both directly and indirectly via ideological outlook. As such, we argue that the sexuality gap can be

explained by a socialisation effect—independent of socio-demographics, party choice and party cues—that is overwhelmingly *political* and to a far lesser extent *socioemotional*.

## LGBT+ ideological divergence

Research into the political attitudes and behaviours of, and towards (Abou-Chadi and Finnigan, 2019; Flores and Barclay, 2016; Kuntz et al., 2015), sexual minority citizens represents a growing area of study (Bailey, 1999; Cravens, 2019; Edelman, 1992; Egan, 2012, 2019; Flores et al., 2020; Hertzog, 1996; Sherrill and Flores, 2014; Swank, 2018b; Turnbull-Dugarte, 2020b). Mounting evidence demonstrates that sexual minorities represent a distinct social stratum with divergent policy preferences and political attitudes compared to their heterosexual peers. In the US, studies show that sexual minorities are more likely to identify as liberals (Cravens, 2019; Schnabel, 2018; Worthen, 2020), vote for and identify with liberal (left-leaning) parties (Egan, 2012; Sherrill and Flores, 2014; Swank, 2018b), harbour more liberal attitudes on issues such as abortion, the environment, and the death penalty (Egan 2012; Worthen 2020), and express greater support for marginalised groups (Grollman, 2017, 2018; Swank, 2018b; Worthen, 2020). More recent European-based studies provide further support, with LGB voters in Western Europe more likely to hold globalist attitudes on issues such as immigration and EU integration (Turnbull-Dugarte, 2020a) and to vote for Social Democratic and liberal parties (Turnbull-Dugarte, 2020b), regardless of their socio-economic status. However, there remains a key shortcoming in the literature – namely, empirically explaining the sexuality gap.

Existing studies speak to, at least, two potential mechanisms. Firstly, there is some evidence for a 'top-down' explanation wherein left-leaning parties garnered support among sexual minorities due primarily to their pro-LGBT+ policies. A welfare-maximising view of sexual minorities assumes that they cast their ballots for those most likely to provide the group with policy outcomes that advance their institutional and social welfare (Schaffner and Senic, 2006; Turnbull-Dugarte, 2020b) or to remedy sexual minorities' shared grievances (Sherrill, 1996).

Having supported left-leaning parties due to their group-specific policies on LGBT+ rights, sexual minority voters, in turn, follow left-leaning parties on other issues. In essence, sexual minority citizens follow partisan cues and identities, which serve as powerful shortcuts for voters (Egan, 2019; Foos and de Rooij, 2017; Green et al., 2002).

An alternative 'bottom-up' thesis centres on the process of socialisation involved with growing up as a sexual minority in a heteronormative society in which institutionalised and societal discrimination is the norm, and the effect this has on shaping personal and political attitudes. Sexual minority citizens' beliefs, attitudes and worldview are theorised to be the product of the value-shaping role of out-group status, institutional discrimination, and marginalisation particularly that experienced during their formative years (Bailey, 1999; Schnabel, 2018; Worthen, 2020), leading to attitudinal divergence, regardless of socio-economic or geographic factors, via the common experience of being "othered" (Egan 2012). Specifically, scholars have postulated that the primary mechanism during this socialisation process is an increase in empathy (Bailey, 1999; Grollman, 2017; Schnabel, 2018; Swank, 2018b; Worthen, 2020): a socioemotional investment in and understanding of others' well-being (Rosenberg, 1990; Schieman and Turner, 2001). This has been theorised to lead to a political desire to "counteract social injustices" (Swank, 2018b) including for other marginalised collectives (Bailey, 1999; Turnbull-Dugarte, 2020b) or ethnic minorities (Grollman, 2017, 2018; Worthen, 2020). In short, this explanation posits that it is the lived experience of sexual minority status that shifts personal values and political attitudes on a wide range of policy issues.

#### The sexuality gap and the case of Covid-19 policy preferences

To shed light on these mechanisms that underpin the sexuality gap in political attitudes, we take the case of the UK government's policy response to Covid-19 in 2020. Since the pandemic began, state lockdowns, household confinement and public curfews have all become staple interventions undertaken by a range of governments as they struggled to combat Covid-19 infections and deaths. Such interventions, whilst endorsed by scientific advisors and international bodies such as the World Health Organisation (WHO), are largely unprecedented

in peace times. The state-sponsored restraints on individual liberties and economic activity come at significant economic costs (Hargreaves Heap et al., 2020). Ultimately, governments, facing a perceived, if arguably dubious (Casey, 2020), trade-off between health and wealth (lives and livelihoods), have opted for the former and the economies of those states where lockdowns have been invoked have found themselves subject to substantial economic contractions.

Why do individuals vary in their attitudes towards the Covid-19 pandemic? Although the pandemic has provoked a flurry of studies, most have focused on explaining differences in behaviour, notably in terms of mask-wearing and other types of policy compliance. Van der Linden and Savoie (2020; see also Brouard et al 2020) show that being female, supporting left-wing parties, and regional dynamics are all associated with mask-wearing. Aside from socio-demographics and left-right politics, Cassino and Besen-Cassino (2020) find effects of gender identity and the Big Five personality traits, Bourgeois et al (2020) show that compliance with guidelines can be predicted by sense of duty and Hoffmann and de Vries (2020) show that higher empathy predicts compliance with health measures.

In terms of individuals' policy preferences to the pandemic, Hargreaves-Heap et al (2020) demonstrate that while citizens are more inclined to favour lockdown measures that seek to reduce rates of infection, despite the negative economic consequences they cause, the prioritisation of health measures decreases as individuals are informed of the substantive (and negative) economic effects of these interventions. Mellon et al (2020) find that, in the UK, policy preferences are largely a function of ideological (left-right) attitudes, more so than gender, class, education, support for EU membership or libertarian-authoritarian beliefs, with some exceptions regarding the severity of punishment.

Importantly, public compliance and support for lockdowns in the UK, and other European states, is *not* influenced by partisanship in the same way that is observed in the US.<sup>4</sup> Polling

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<sup>&</sup>lt;sup>4</sup> For a discussion of the partisan-shaping effect of support and compliance with Covid-19 related measures in the US, see Grossman et al (2020) and Gadarian et al. (2020).

data from the UK shows that the very small majority of the population that oppose lockdown measures are not sourced from any particular ideological background or political party (and Brexit vote) affiliation (YouGov, 2020a). DeVries and Hoffman (2020) similarly find little evidence of partisanship or political polarisation of adherence to Covid-19 related measures in Belgium, France, Germany, Spain, Italy, Poland or the Netherlands. The lack of strong partisan cues, particularly in the UK, on a salient issue, makes it an interesting case study from which we can make a broader contribution to our understanding of the mechanisms behind the sexuality gap. The relatively non-partisan nature of Covid-19 policy responses in the UK effectively controls for the role of partisan cues. In this letter, we ask: in the absence of partisan cues on Covid-19 policy preferences, is there still a sexuality gap in these preferences? If so, what explains this gap?

#### Data and Method

To answer these questions, we present the results of two analyses. First, we model the health-wealth preferences of individuals who identify as LGB and heterosexual to establish if there is a sexuality gap in Covid-19 response priorities using a simple linear regression model. Second, we assess the extent to which divergence in preferences can be explained by i) empathy, and i) left-right political dispositions, via a mediation analysis using structural equation modelling.

The data come from wave twenty of the British Election Study (BES) internet panel<sup>5</sup>, the fieldwork for which was completed during June 2020<sup>6</sup>. Of the full sample (N=27,608), 8.5% (N=2,346) identify as a sexual minority (full survey instruments reported in the online appendix). Our primary dependent variable of interest is respondents' health-wealth

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<sup>&</sup>lt;sup>5</sup> Details of BES internet panel are provided on the study's webpage. The online survey provides data on a representative sample of the UK population. All analyses presented apply the sampling probability weights provided by the BES to ensure accurate representation of the demographic makeup of the population.

<sup>&</sup>lt;sup>6</sup> By June 2020, the first 'wave' of Covid-19 cases had largely subsided (Office of National Statistics, 2020). Throughout the first half of 2020, the UK's political atmosphere was characterised by consensus, with opposition parties broadly supporting the government's measures to restrict the spread of the virus (McGuinness, 2020), and the majority of voters of all persuasions expressing support for the UK and devolved governments' lockdown restrictions (YouGov, 2020b).

preferences, scaled from 0 (saves lives even though it may harm the economy) to 10 (save the economy even though it may cost lives).

To help isolate the independent effect of sexuality, we include a vector of control variables. These include conventional socio-demographic indicators such as gender, ethnicity, age, age<sup>2</sup>, income and education. In addition, we control for two variables specific to the coronavirus that are likely to play a substantive role in explaining individuals' Covd-19 response measures. First, we include an indicator that captures those respondents who personally know someone who has died from Covid-19. Second, we measure the extent to which Covid has had an economic impact on respondents' household. Both of these variables are likely to play a substantive role in shaping citizens' preferences on the policy response to the pandemic, with those suffering a loss of life within their personal network more likely to place a premium on saving lives and those experiencing negative economic effects more likely to prioritise an economy-prioritising response. Finally, we include two further variables in our mediation analysis: left-right self-placement, on a 0 (left) - 10 (right) scale, and our theoretical construct of 'empathy', specified as a latent variable using confirmatory factor analysis based on ten items measuring levels of agreement with statements on personal emotional engagement with others' emotional state, taken from the British Election Study and with high factor loadings of between 0.48 and 0.77. Summary statistics, a correlation matrix of the main variables and a description of the ten empathy items are provided in the online appendix material.

# Results

Is there a sexuality gap in Coronavirus policy preferences?

Figure 1 illustrates the results of our main model and reports the predicted mean value on the dependent variable for heterosexuals and sexual minority voters (left-hand panel) including the full vector of controls. The results display that there is a significant and substantive amount of variation between the health-wealth preferences of the UK's heterosexual and sexual minority populations. The marginal effect of sexuality of -.52 among the full sample equates

to 15.2% change in the sample mean (19.5% of a standard deviation). The sexuality effect found in the full sample is not conditioned by gender. The point-estimate of sexuality is larger for women (-0.67) than men (-0.42) but there is no non-zero difference in the effect size between the two gender-stratified samples. The full regression output is reported in the appendix Table A2)

Over and above the explanatory and confounding effect of different socio-economic and Covidspecific determinants, sexual minorities are still *more* inclined to favour health-orientated measures over economic-orientated responses than the rest of the population despite the lack of partisan cues signalling a preference for one policy priority over another.

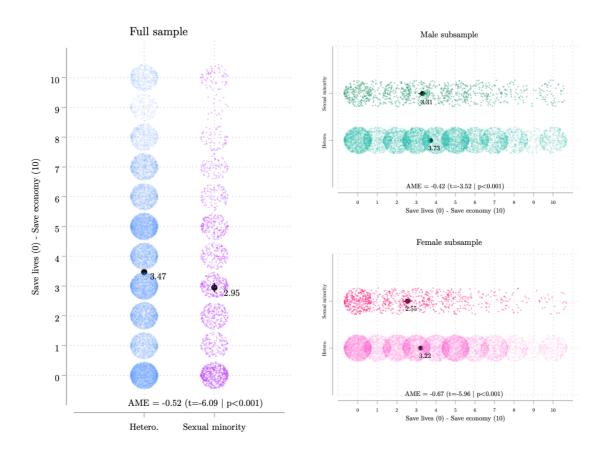


Figure 1: Modelling health-wealth preferences stratified by sexuality & gender

Partisan (un)conditionality

In Figure 2 we consider whether the health-focused preferences of LGB individuals is conditioned by partisanship. To do so we replicate the main model to include a multiplicative interaction term between sexuality and self-reported vote choice in the most recent (2019) general election. Consistent with previous research (Turnbull-Dugarte, 2020b), a plurality of LGB citizens voted for the UK Labour party (49% of LGB respondents) or other smaller socially liberal parties like the Liberal Democrats (14%) or the Greens (5%).

With the exception of those who voted for the Conservatives, the modelled effect of sexuality is negative (indicating more support for health over wealth) regardless of partisan vote choice. The marginal effect of sexuality is statistically distinguishable from zero in all cases expect amongst those who voted for the Brexit party and others<sup>7</sup>. These insignificant effects are largely a function of the reduced number of LGB observations amongst these moderator values (1.9% and 1.4% of LGB voters respectively) leading to limited statistical power.

<sup>&</sup>lt;sup>7</sup>Those in the other category include those who voted for alternative minor parties, individual candidates or those who don't recall their vote choice.

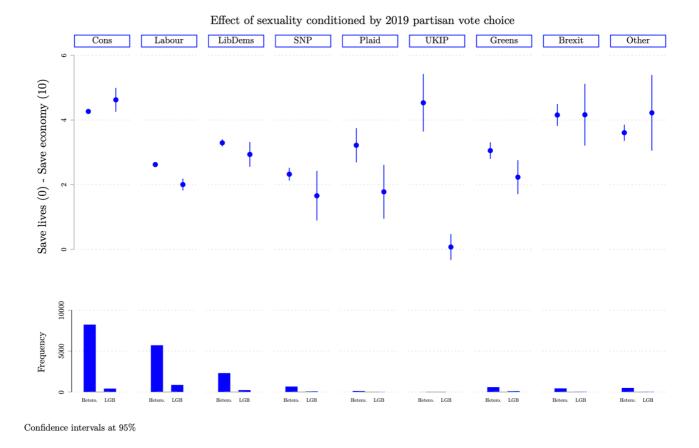


Figure 2: Marginal effect of sexuality by (2019) reported vote choice

## Explaining the sexuality gap

The results of our models demonstrate that sexual minorities are far more likely to place a premium on public policy responses to Covid-19 that prioritise the immediate health risks over efforts to safeguard the economy. This gap exists even when controlling for variables that have previously been shown to be efficacious such as gender, age, income, education and even party choice. In the subsequent analysis we move beyond empirically establishing variation in Covid-19 health-wealthy preferences and ask what explains this variation.

The theoretical pathways<sup>8</sup> that explain the sexual gap in the health-wealth preferences of citizens are illustrated in Figure 3. In total we theorise four potential pathways to explain sexuality gap in Covid-19 preferences: i) direct effects, ii) indirect via left-right self-placement, iii) indirect via empathy, and iv) indirect via and left-right placement.

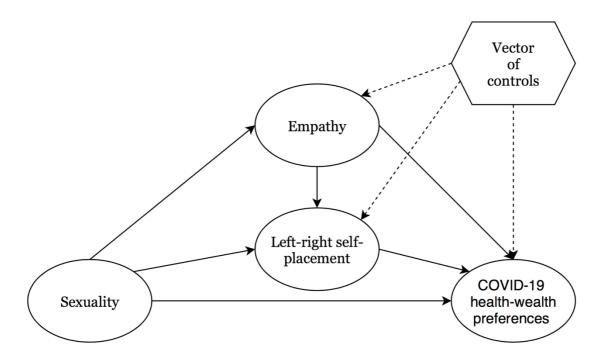


Figure 3: Theoretical pathways of asymmetric preferences between sexuality groups

We model the various causal paths that explain the sexuality gap via a mediation analysis. Mediation analysis allows us to isolate how much of the independent effect of sexuality on our primary outcome – health-wealth preference – is the result of sexuality's anterior effect on left-right ideological identification and empathy

reporting as non-heterosexual, he also finds that such effects are extremely marginal.

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<sup>&</sup>lt;sup>8</sup> We can be confidence that left-right self-placement is causal anterior to Covid-19 policy preferences given the novelty of the latter. We assume that sexuality, as a randomly assigned attribute, is exogenous to left-right preferences. Whilst Egan (2019) shows, in the US, that partisanship can predict self-

Relying on a generalised structural equation model, we can disaggregate the overall effect of sexuality by estimating three individual parameters: the average total effect, the average mediated effect(s), and the average direct effect (see Imai et al., 2010, 2011) shown in Figure 4.

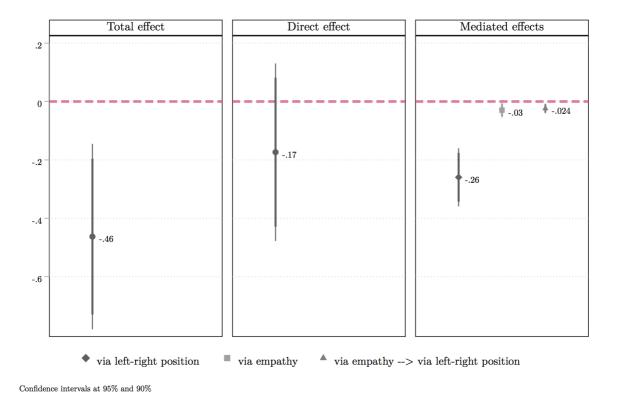


Figure 4: Mediation of sexuality through left-right position

Overall, of the four theoretical pathways via which sexuality explains health vs. wealth preferences, around 57 per cent of the total effect (-.46) is via left-right self-placement only (-.17); around 7 per cent via empathy only (-.03); slightly less is via empathy and then left-right self-placement (-.024); and around 37 per cent via some other mechanism. The -.17 effect that is explained via left-right positions is substantive and equates to 5% of the sample mean (6.4% of a standard deviation).

#### Discussion

The results of our analysis demonstrate that sexual minority voters are significantly more disposed to favour Covid-19 response measures that prioritise health over wealth. Whilst sexual minority voters in the past have been argued to support liberal (leftist) policies and parties because of both partisan cues as well as socialised personal and political distinctiveness, hitherto there were few opportunities to isolate one effect from the other. Relying on a mediation analysis, we find that the divergent preferences between sexuality groups is largely explained by their asymmetric political values. By comparison, whilst the theorised value-shaping role of personal empathy is observed to have an effect, both directly and indirectly via its role in pre-determining left-right placement, its substantive magnitude is limited. This suggests that the sexuality gap can be explained by asymmetric political socialisation that does not rely on the socioemotional mechanism of empathy. We identify three avenues for future research: first, identifying the components of this asymmetric political socialisation; second, testing the generalisability of our findings to other minority groups, with appropriate consideration of theoretical differences; and, third, considering the possibility of other non-political mediators such as basic human values (Kuntz et al., 2015).

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## Appendix file

Table A 1: Summary statistics

Variable	N	Mean	$\mathbf{SD}$	Min	Max
Health-wealth preferences	27608	3.485	2.683	0.000	10.000
Lockdown-liberty preferences	27269	2.855	2.577	0.000	10.000
Sexuality	27608	0.085	0.279	0.000	1.000
Gender	27608	1.563	0.496	1.000	2.000
Age	27608	52.427	16.473	18.000	94.000
Income	27608	5.176	2.755	1.000	14.000
Education	23588	3.072	1.322	0.000	5.000
Ethnicity	26896	1.600	2.362	1.000	16.000
Knows someone who died from Covid	27342	0.172	0.427	0.000	2.000
Household income affected by Covid	27608	3.713	0.954	1.000	6.000
Left-right ideology	22892	4.935	2.278	0.000	10.000
Empathy factor variable <sup>9</sup>	4637	-0.011	0.987	-3.110	4.798
2019 Vote choice	24578	2.284	1.923	1.000	9.000

<sup>&</sup>lt;sup>9</sup> Constructed with Confirmatory Factor Analysis of ten items measuring agreement (strongly disagree, disagree, agree, strongly agree) with: (empathy1) 'I can usually figure out when my friends are scared'; (empathy2) 'I can usually realise quickly when a friend is angry'; (empathy3) 'I can usually figure out when people are cheerful'; (empathy4) 'I am not usually aware of my friends' feelings'; (empathy5) 'When someone is feeling 'down' I can usually understand how they feel'; (empathy6) After being with a friend who is sad about something, I usually feel sad'; (empathy7) 'My friends' unhappiness doesn't make me feel anything'; (empathy8) 'Other people's feelings don't bother me at all'; (empathy9) 'I don't become sad when I see other people crying'; (empathy10) 'My friends' emotions don't affect me much'.

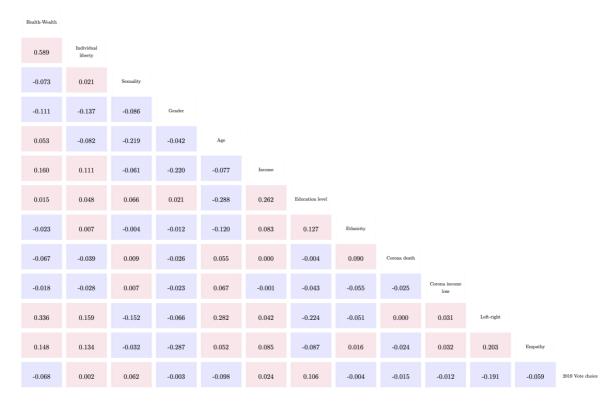


Figure A 1: Correlation matrix

Table A 2: OLS regression models of health-wealth preferences

	(1)	(2)	(3)	(4)	(5)
X	Bivariate	Multivariate	Gender interaction	Male sample	Female sample
Sexuality	-0.47***	-0.52***	-0.41***	-0.42***	-0.67***
	(0.08)	(0.08)	(0.12)	(0.12)	(0.11)
Gender		-0.41***	-0.38***		
		(0.04)	(0.05)		
Sexuality*Gender			-0.27*		
			(0.16)		
Control variables	X	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Constant	3.52***	2.27***	2.27***	2.37***	1.80***
	(0.02)	(0.27)	(0.27)	(0.42)	(0.31)
					40.400
Observations	27,608	22,752	22,752	9,616	$13,\!136$
R-squared	0.00	0.04	0.04	0.03	0.03

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A 3: OLS regression models of support for individual liberties during lockdown

	(1)	(2)	(3)	(4)	(5)
X	Bivariate	Multivariate	Gender interaction	Male sample	Female sample
Sexuality	0.19**	-0.11	-0.02	-0.05	-0.20*
	(0.08)	(0.08)	(0.11)	(0.12)	(0.11)
Gender		-0.64***	-0.62***		
		(0.04)	(0.05)		
Sexuality*Gender			-0.23		
			(0.16)		
Control variables	×	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Constant	2.94***	3.77***	3.77***	4.27***	2.60***
	(0.02)	(0.26)	(0.26)	(0.40)	(0.29)
			22.72.4		40 500
Observations	$28,\!561$	$23,\!534$	$23,\!534$	9,834	13,700
R-squared	0.00	0.03	0.03	0.02	0.02

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table A 4: Addition of left-right preferences and empathy factor variable

	(1)	(2)	(3)	(4)
X	Main model	+ left right	+ left right	Main model using model 3 sample
			+ empathy	
Sexuality	-0.52***	-0.25***	-0.22	-0.51**
	(0.08)	(0.08)	(0.19)	(0.22)
Left-right position		0.41***	0.40***	
		(0.01)	(0.03)	
Empathy			0.16**	
			(0.06)	
Control variables	-0.41***	-0.29***	-0.36***	-0.55***
Constant	2.27***	0.74***	0.86	2.74***
	(0.27)	(0.28)	(0.60)	(0.66)
Observations	22,752	18,915	3,164	$3{,}164$
R-squared	0.04	0.14	0.18	0.06

Robust standard errors in parentheses  $\,$ 

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**NB:** To ensure that reduced effect of sexuality in model 3 is not the result of attrition (reduced sample given question on empathy were only fielded on a subsample of the BES), replicate the main model using the subsample observations with empathy data. The point-estimates of sexuality are symmetrical.

Table A 5: Regression output from generalised structural equation model

V	(1)	(2)	(3)	(4)
X	Health-wealth	Left-right	Empathy	/
	preferences	position		
Sexuality	-0.17	-0.69***	-0.16**	
•	(0.16)	(0.13)	(0.06)	
Left-right position	0.37***	,	,	
	(0.02)			
Empathy	0.18***	0.39***		
	(0.05)	(0.04)		
Control variables	$\checkmark$	$\checkmark$	$\checkmark$	
Var(Health-wealth)				6.05***
				(0.15)
Var(Left-Right)				4.43***
				(0.11)
Var(Empathy)				0.89***
				(0.02)
Constant	1.61***	3.74***	0.99***	
	(0.40)	(0.33)	(0.13)	
Observations	4,020	4,020	4,020	4,020

Standard errors in parentheses \*\*\* p<0.001, \*\* p<0.01, \* p<0.05

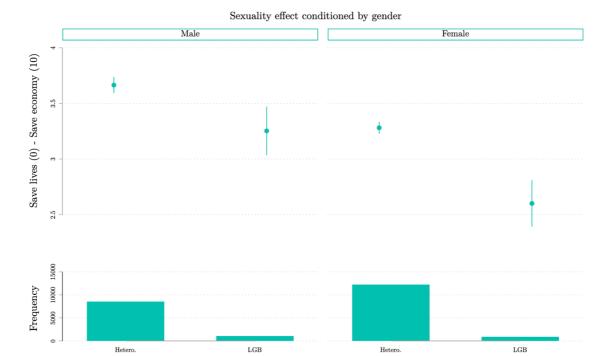


Figure A 2: Conditional effect of gender

Confidence intervals at 95%

Table A 6: Conditional effect of party vote choice

	(1)
X	Health-wealth priorities
Sexuality	0.36*
	(0.19)
Vote choice (ref: Conservative)	
Labour	-1.64***
	(0.05)
Liberal Democrats	-0.97***
	(0.07)
SNP	-1.94***
	(0.11)
Plaid Cymru	-1.05***
	(0.27)
UKIP	0.27
	(0.46)
Greens	-1.21***
	(0.14)
Brexit	-0.11
	(0.18)
Other	-0.54***
	(0.17)
Sexuality*Labour	-0.98***
	(0.22)
Sexuality*Liberal Democrats	-0.72***
	(0.28)
Sexuality*SNP	-1.03**
	(0.45)
Sexuality*Plaid Cymru	-1.80***
	(0.54)
Sexuality*UKIP	-4.82***
	(0.53)
Sexuality*Greens	-1.18***
·	(0.35)
Sexuality*Brexit	-0.34
v	(0.55)
Sexuality*Other	0.70
·	(0.67)
Vector of controls	(o.o.) ✓
Constant	3.65***
2 2 - 25 0 0 0 2 1 0	(0.26)
Observations	20,176
R-squared	0.11

Robust standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# Survey questions and scales

Table A 7: Main variable survey measures

Variable	Instrument	Response/Scale
Health-wealth preferences	Some people think that the	0 – Reduce infections even if
	government should do	it damages the economy
	everything it can to **reduce	1
	the number of coronavirus	2
	infections**, even if it greatly	3
	damages the economy. Others	4
	think that the government	5
	should try to **save the	6
	economy**, even if it	7
	increases the number of	8
	coronavirus infections. Where	9
	would you place yourself and	10 – Save the economy even if
	the parties on this scale?	it increases infections
Lockdown-liberty preferences	Some people think that the	0 – Restrict personal freedom
	government should do	to reduce infections
	everything it can to reduce	1
	the number of coronavirus	2
	infections, even if it means	3
	placing **restrictions on	4
	personal freedom**. Others	5
	think that **personal freedom	6
	should be protected**, even if	7
	it increases the number of	8
	coronavirus infections. Where	9
	would you place yourself on	10 – Protect personal freedom
	this scale?	even if it increases infections
Sexuality	Which of the following best	1 - Heterosexual
	describes your sexuality?	2 - Gay or lesbian
		3 - Bisexual
		4 - Other
		5 - Prefer not to say
Gender	Are you?	1 - Male
		2 - Female
Age		18-94
Income	Gross PERSONAL income is	1 - under £5,000 per year
	an individual's total income	2 - £5,000 to £9,999 per year
	received from all sources,	3 - £10,000  to  £14,999  per
	including wages,	year
		4 - £15,000  to  £19,999  per
		year

	salaries, or rents and before	5 - £20,000 to £24,999 per
	tax deductionsWhat is your	
		year 6 C25 000 to C20 000 per
	gross personal income?	6 - £25,000 to £29,999 per
		year
		7 - £30,000 to £34,999 per
		year
		8 - £35,000  to  £39,999  per
		year
		9 - £40,000 to £44,999 per
		year
		10 - £45,000  to  £49,999  per
		year
		11 - £50,000 to £59,999 per
		year
		12 - £60,000  to  £69,999  per
		year
		13 - £70,000 to £99,999 per
		year
		14 - £100,000 and over
Education	What is the highest	0 – No qualifications
	educational or work-related	1 – Below GCSE
	qualification you have?	2 - GCSE
		3 – A-level
		4 – Undergraduate
		5 – Postgrad
Ethnicity	To which of these groups do	1 - White British
	you consider you belong?	2 - Any other white
		background
		3 - White and Black
		Caribbean
		4 - White and Black African
		5 - White and Asian
		6 - Any other mixed
		background
		7 - Indian
		8 - Pakistani
		9 - Bangladeshi
		10 - Any other Asian
		background
		11 - Black Caribbean
		12 - Black African
		13 - Any other black
		background
		14 - Chinese
		15 - Other ethnic group
		16 - Prefer not to say

Knows someone who died	Has someone you personally	1 - Yes
from Covid	know died as a result of	2 - No
	coronavirus?	
Household income affected by	Has your household monthly	1 - It is less than half of what
Covid	income changed since the	it was
	coronavirus outbreak?	2 - It has decreased by
		between a quarter and a half
		3 - It has decreased by less
		than a quarter
		4 - It hasn't changed
		5 - It has increased
Left-right ideology	In politics people sometimes	0 (Left) - 10 (Right)
	talk of left and right. Where	
	would you place yourself on	
	the following	
	scale?	
2019 Vote choice	Which party did you vote for	1 - Cons
	at the General Election in	2 - Labour
	December 2019?	3 - LibDems
		4 - SNP
		5 - Plaid
		6 - UKIP
		7 - Greens
		8 - Brexit
		9 - Other

Table A 8: Empathy measures used for factor variable

How much do you agree or disagree with the following	Response scale
statement?	
I can usually figure out when my friends are scared	1 - Strongly
I can usually realize quickly when a friend is angry	disagree
I can usually figure out when people are cheerful	2 - Disagree
I am not usually aware of my friends' feelings	3 - Agree
When someone is feeling 'down' I can usually understand how they feel	4 - Strongly agree
After being with a friend who is sad about something, I usually feel sad	
My friends' unhappiness doesn't make me feel anything	- Don't know
Other people's feelings don't bother me at all	
I don't become sad when I see other people crying	
My friends' emotions don't affect me much	