



# Covid-19 Social Study

## Results Release 21

Dr Daisy Fancourt, Dr Feifei Bu, Dr Hei Wan Mak, Prof Andrew Steptoe  
Department of Behavioural Science & Health

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## Executive summary

### Background

This report provides data from the last 26 weeks of the UK COVID-19 Social Study run by University College London: a panel study of over 70,000 respondents focusing on the psychological and social experiences of adults living in the UK during the Covid-19 pandemic.

In this TWENTY-FIRST report, we focus on psychological responses to the first twenty-six weeks since just before the UK lockdown was first announced (21/03 to 20/09). We present simple descriptive results on the experiences of adults in the UK. Measures include:

1. Reported compliance with government guidelines and confidence in the government
2. Mental health including depression, anxiety and stress
3. Harm including thoughts of death or self-harm, self-harm and both psychological & physical abuse
4. Psychological and social wellbeing including life satisfaction, loneliness and happiness
5. **\*\*\*New in this report\*\*\*** Vaccine attitudes and flu & Covid-19 vaccine intentions

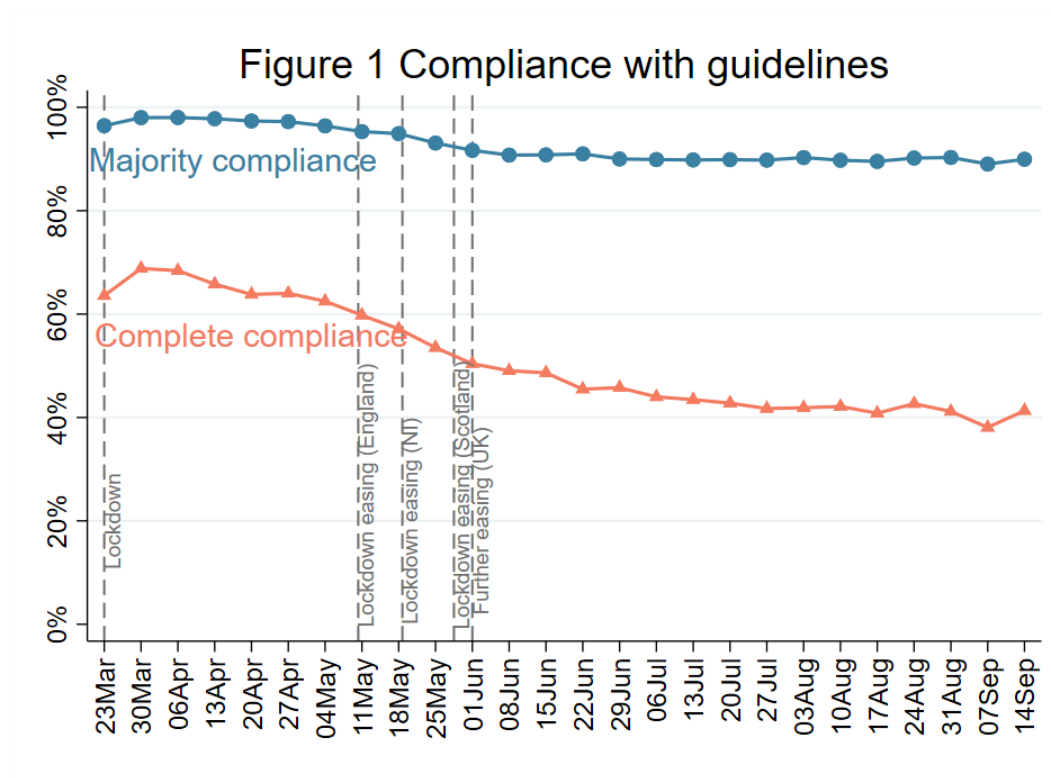
This study is not representative of the UK population but instead was designed to have good stratification across a wide range of socio-demographic factors enabling meaningful subgroup analyses to understand the experience of Covid-19 for different groups within society. Data are weighted using auxiliary weights to the national census and Office for National Statistics (ONS) data. Full methods and demographics for the sample included in this report are reported in the Appendix and at [www.COVIDSocialStudy.org](http://www.COVIDSocialStudy.org)

### Findings

- We asked participants about their attitudes towards vaccines (focusing on vaccines in general rather than a Covid-19 vaccine specifically). Results suggest substantial levels of misinformation amongst the general public about vaccines.
- 53% report believing to varying degrees that vaccines can cause unforeseen effects, with 30% showing substantial beliefs that there can be future problems for adults or children in the future not yet discovered.
- 38% report believing to varying degrees that natural immunity is better than immunity from vaccines, with 4% strongly believing that natural immunity is safer and lasts longer. 25% report believing to varying degrees that vaccines are used for commercial profiteering, with 4% strongly believing that vaccination programmes are a con from pharmaceutical companies and authorities promote vaccination for financial gain. 15% report believing to varying degrees that vaccines do not work, with 4% strongly believing that vaccines do not provide protection.
- Older adults are more likely to display worries about unforeseen effects, preferences for natural immunity, concerns about commercial profiteering, and mistrust of vaccine benefits, as are people from lower-income households.
- On balance, 78% of adults felt they were likely to get a Covid-19 vaccine when one is approved, with 49% saying they were very likely, 15% moderately likely and 13% on balance more likely than unlikely. But 8% felt they were on balance more unlikely than likely to get the vaccine, 4% felt they were moderately unlikely to get it, and 10% very unlikely.
- 64% of adults felt they were likely get a flu vaccine this winter. Older adults felt they were more likely to get the flu vaccine (73%) than a Covid-19 vaccine (58%). But younger adults felt they were more likely to get the Covid-19 vaccine (46% vs 25% getting the flu vaccine).
- Compliance has remained relatively constant over the last two weeks. "Complete" compliance remains just 20%-30% in adults under the age of 30, 40-45% in adults aged 30-50 and 50-55% in adults over the age of 60. "Majority" compliance remains around 90% overall, but is lowest (70-80%) amongst adults under 30.
- Levels of confidence in the central government to handle the Covid-19 epidemic have remained relatively stable over the past fortnight, although there are some indications that levels in England have decreased further.
- In the past fortnight, depression and anxiety levels, life satisfaction, happiness, and loneliness have stayed stable or shown only slight improvements. However, levels are still better than at the start of lockdown. There has still been little change in people reporting major or minor stress due to catching Covid-19, unemployment, finance, or getting food.

# 1. Compliance and confidence

## 1.1 Compliance with guidelines



### FINDINGS

Respondents were asked to what extent they are following the recommendations from government such as social distancing and staying at home, ranging from 1 (not at all) to 7 (very much so). Of note, we ask participants to self-report their compliance, which relies on participants understanding the regulations. Figure 1 shows the percentage of people who followed the recommendations “completely” (with a score of 7) or to a large extent (with a score of 5-7; described below as “majority” compliance).

Compliance has continued to remain stable over the last two weeks, with no further signs of decreases for now. “Majority” compliance remains around 90% overall, but is lowest (70-80%) amongst adults under 30. “Complete” compliance remains around 40%, but is just 20%-30% in adults under the age of 30, 40-45% in adults aged 30-50 and 50-55% in adults over the age of 60. “Complete” compliance is lower in higher income households, in England, in urban areas, and amongst adults living with children compared to adults not living with children.<sup>1</sup>

These findings should be interpreted in light of the results in Report 17 showing that understanding of the current guidelines, though, is low. As such, these figures reflect people’s belief that they are complying rather than necessarily actual compliance levels.

Figures 2a-2h show “complete” compliance by demographic factors, while Figures 2i-2p show “majority” compliance by demographic factors.

<sup>1</sup> NB there is some variation in compliance amongst younger age groups in the past month, but this may be due to statistical noise rather than specific fluctuations in compliance.

Figure 2a Complete compliance by age groups

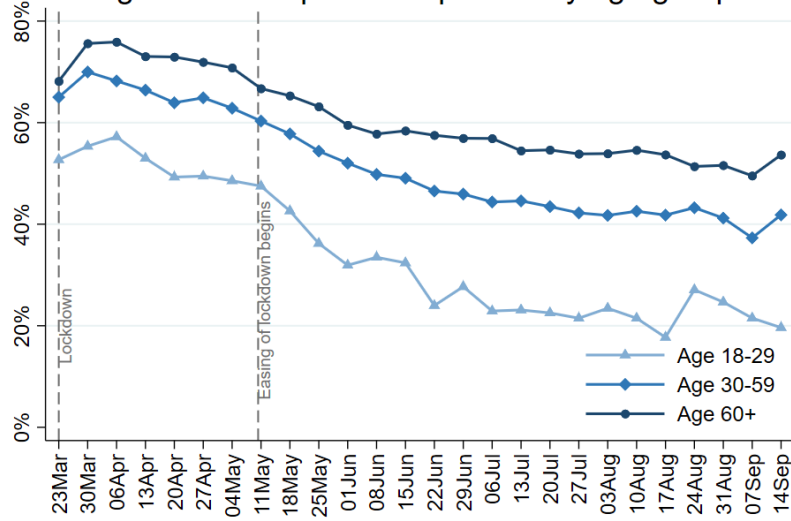


Figure 2b Complete compliance by living arrangement

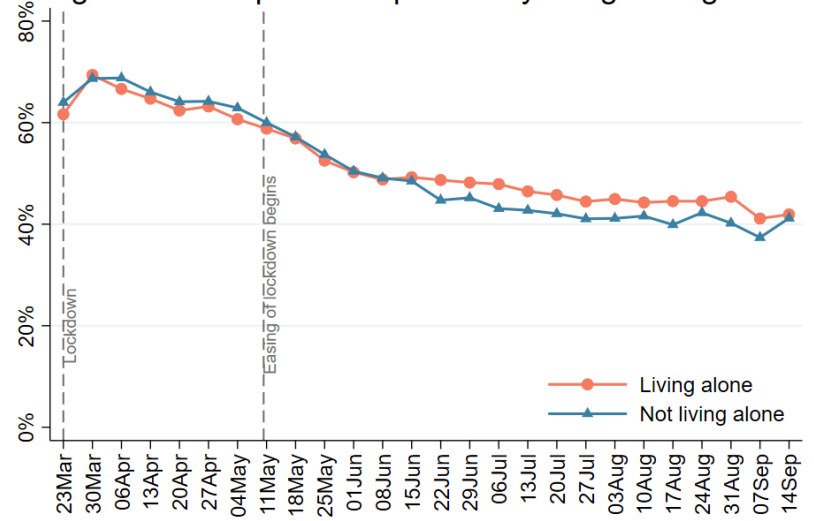


Figure 2c Complete compliance by household income

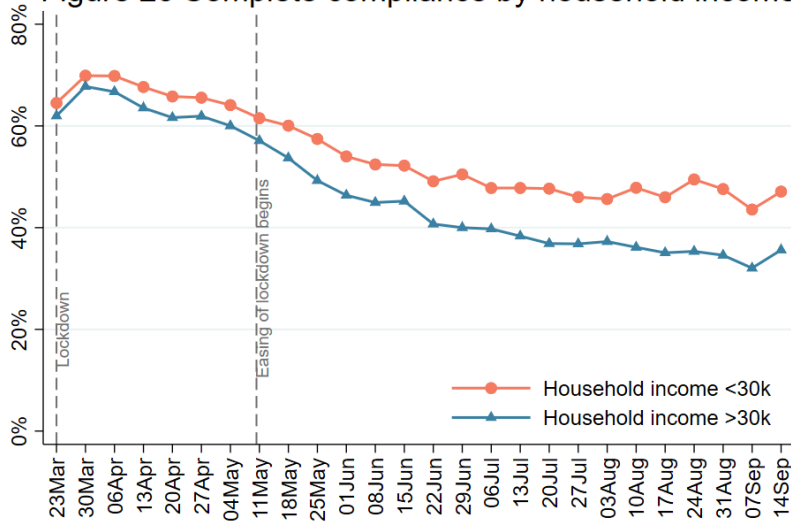


Figure 2d Complete compliance by mental health

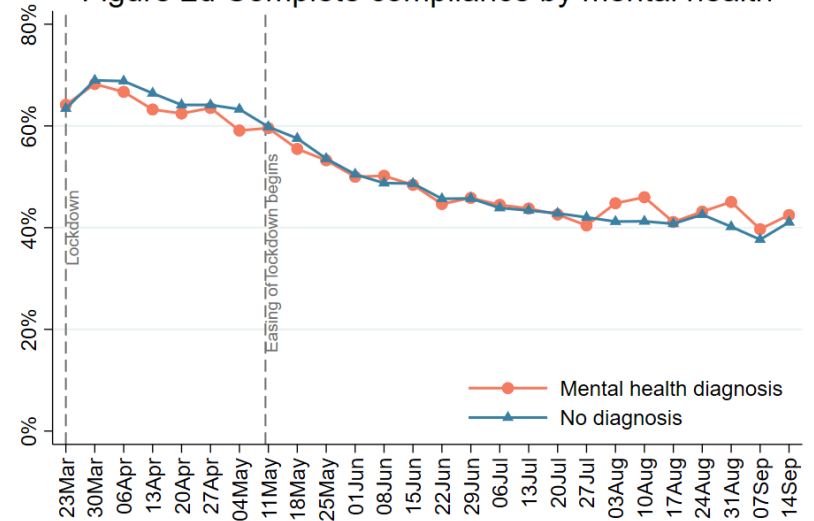


Figure 2e Complete compliance by nations

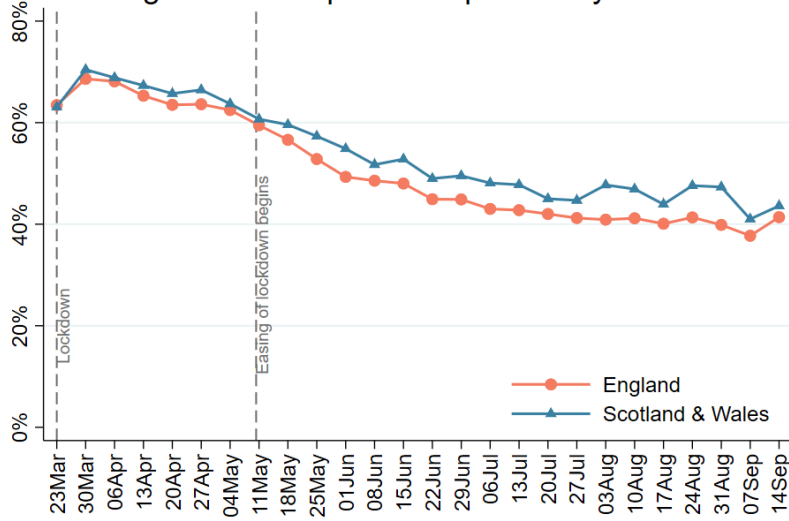


Figure 2f Complete compliance by keyworker status

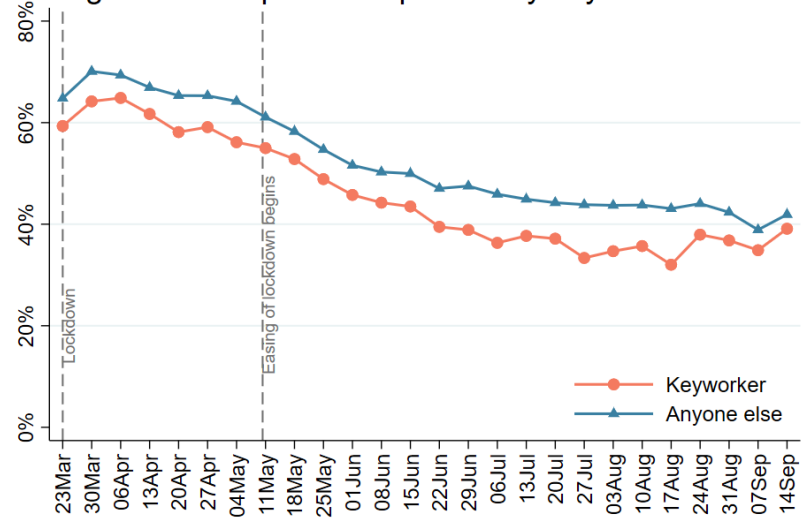


Figure 2g Complete compliance by living with children

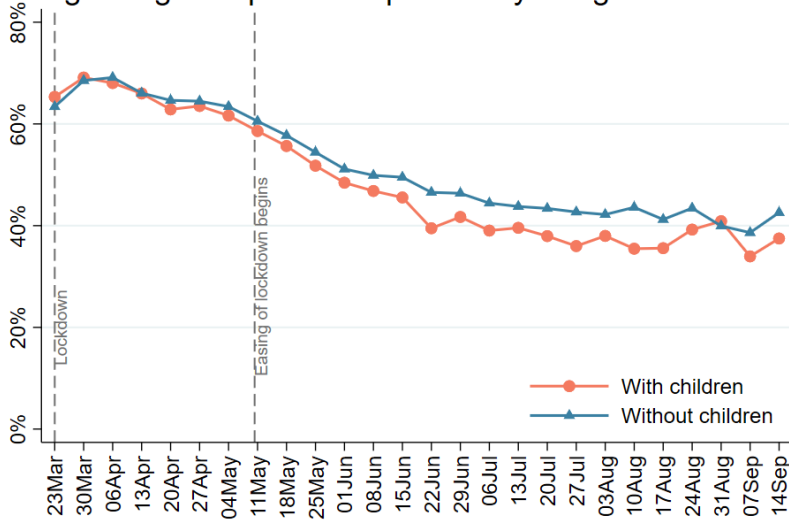


Figure 2h Complete compliance by living area

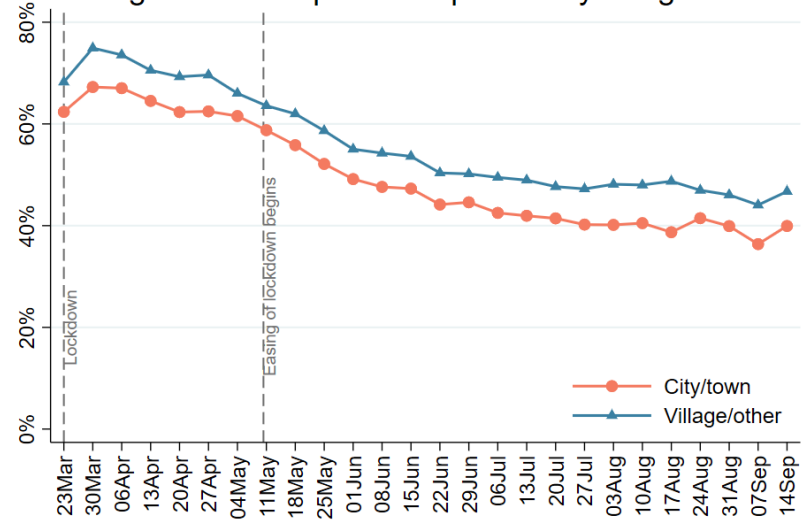


Figure 2i Majority compliance by age groups

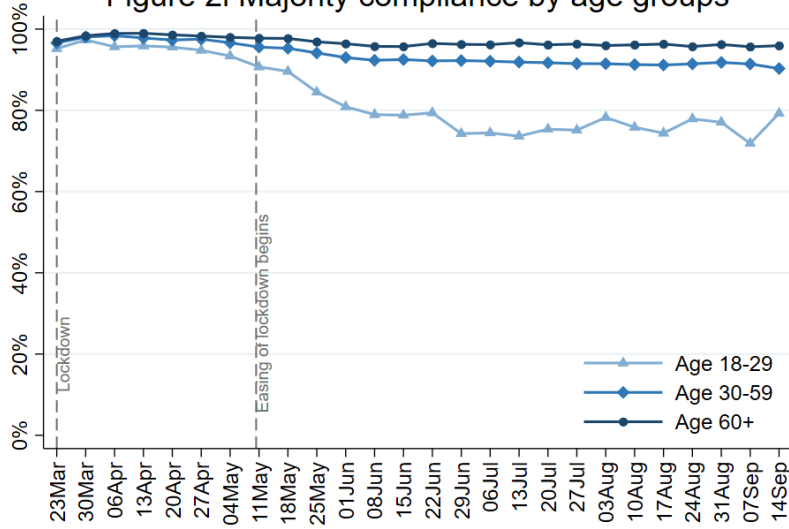


Figure 2j Majority compliance by living arrangement

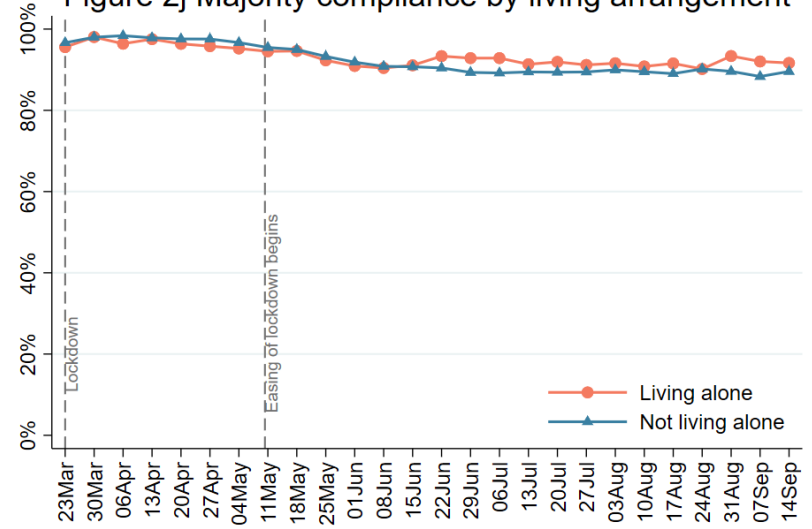


Figure 2k Majority compliance by household income

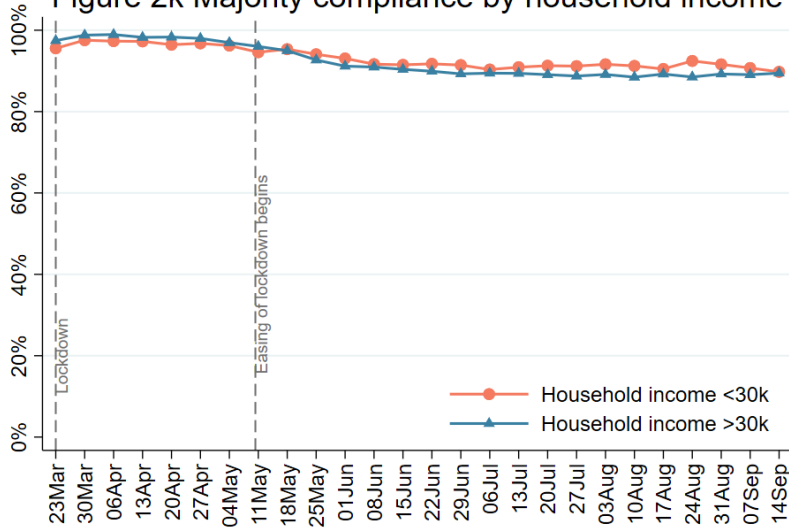


Figure 2l Majority compliance by mental health

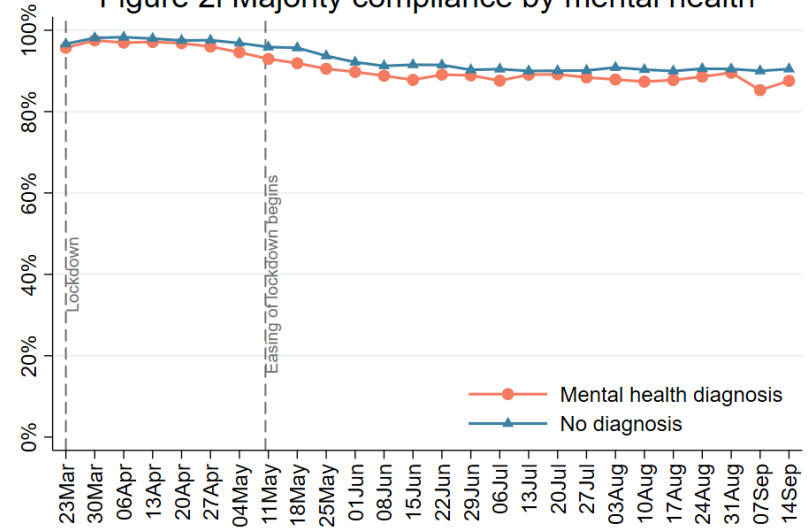


Figure 2m Majority compliance by nations



Figure 2n Majority compliance by keyworker status

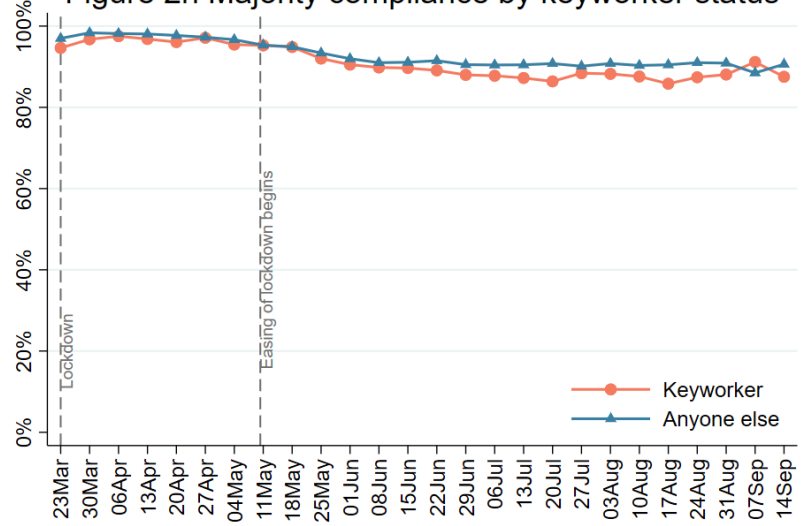


Figure 2o Majority compliance by living with children

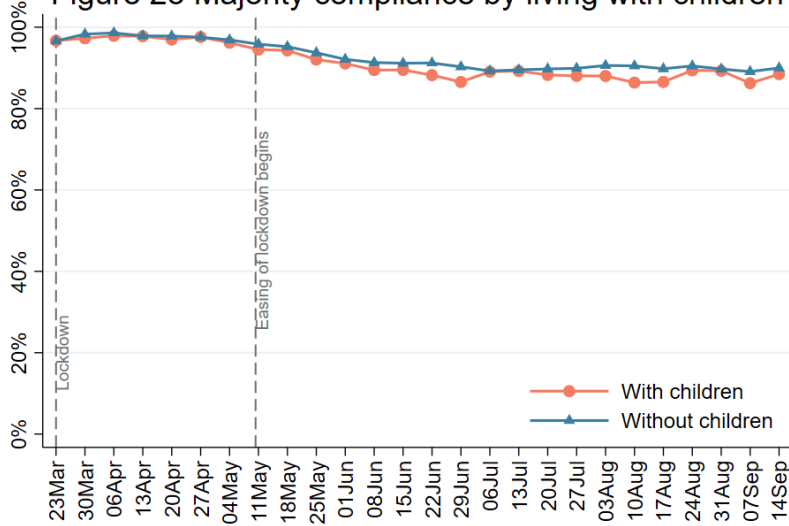
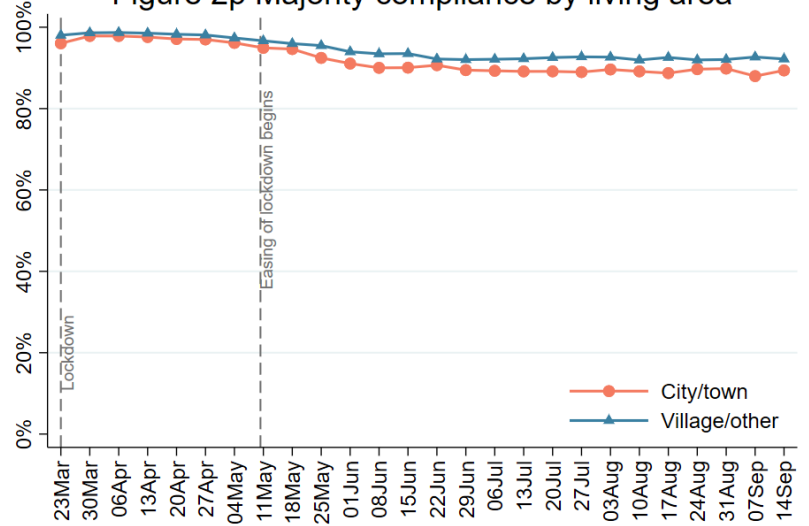
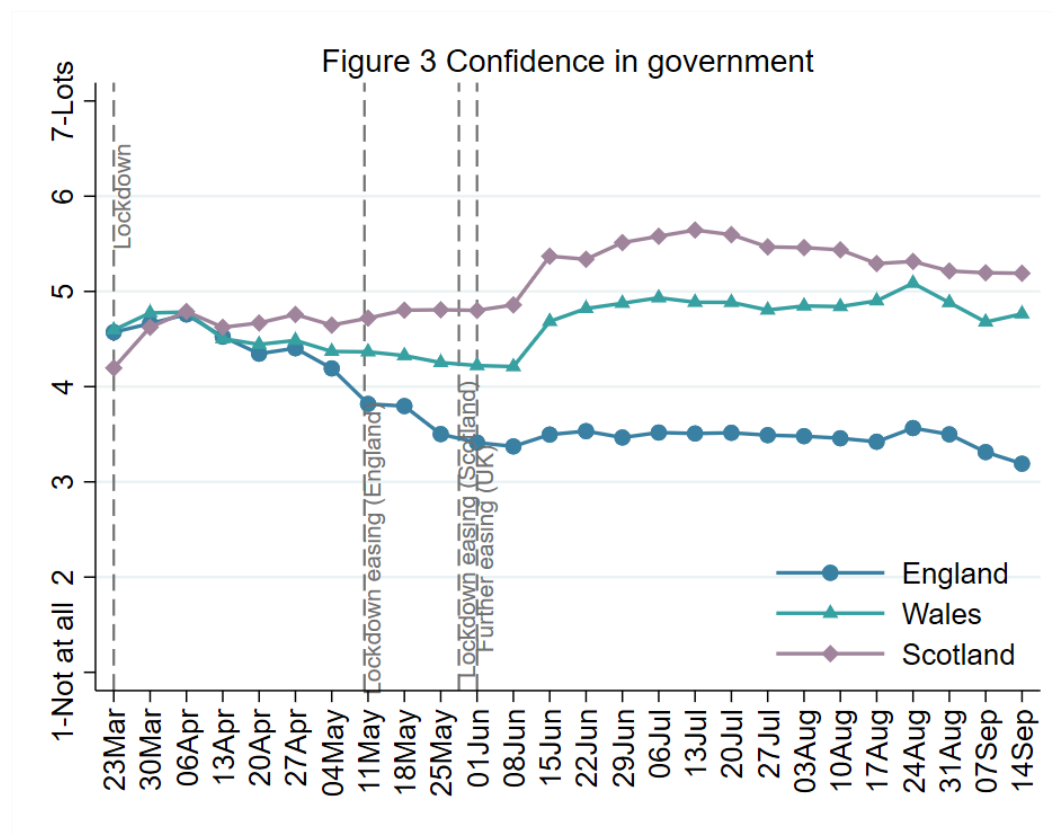


Figure 2p Majority compliance by living area





## 1.2 Confidence in Government



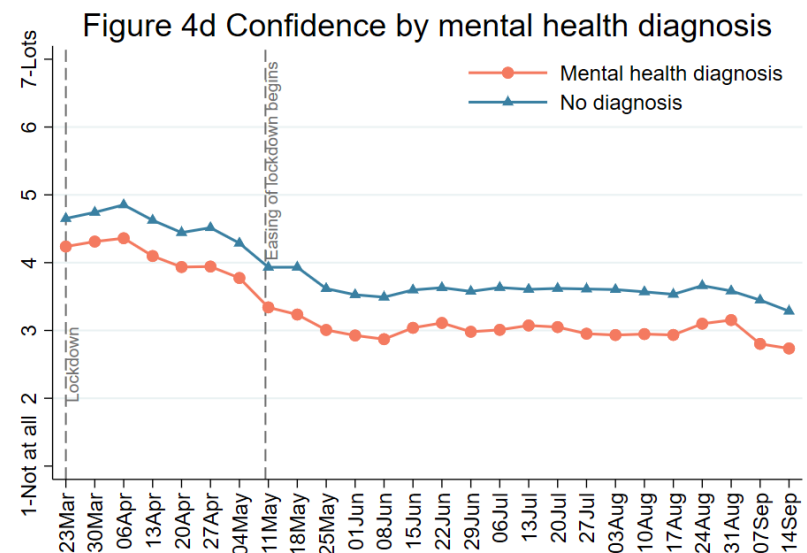
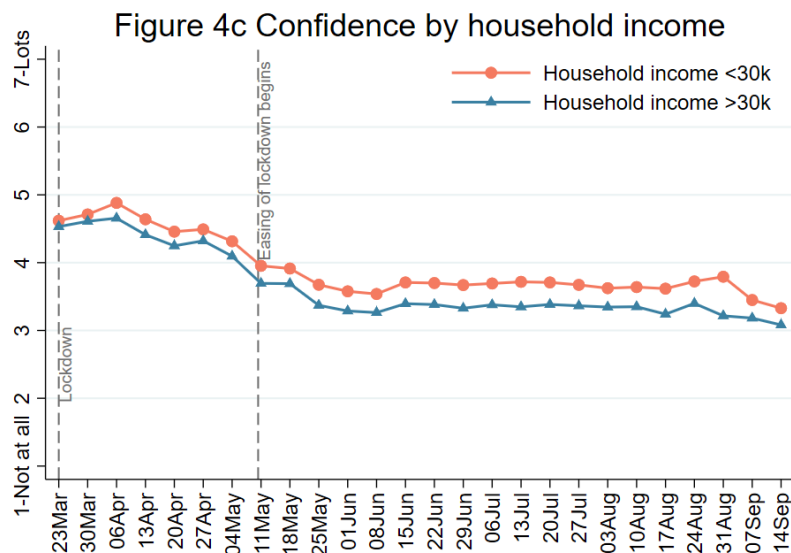
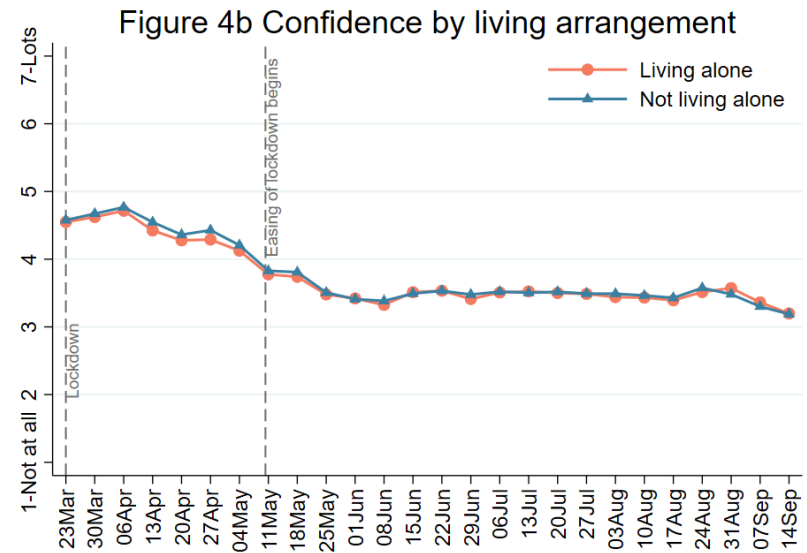
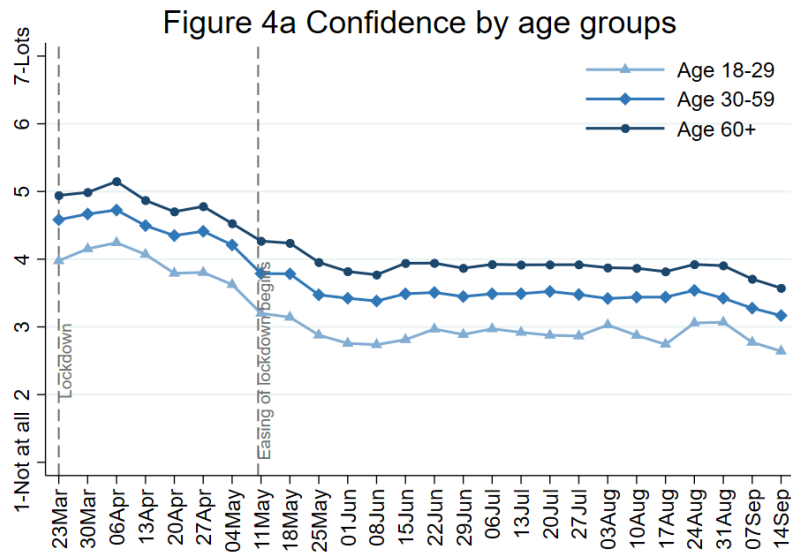
### FINDINGS

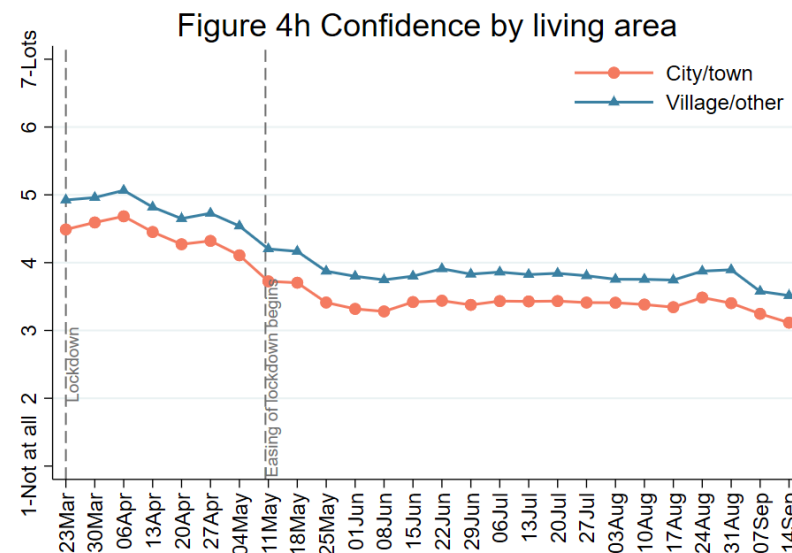
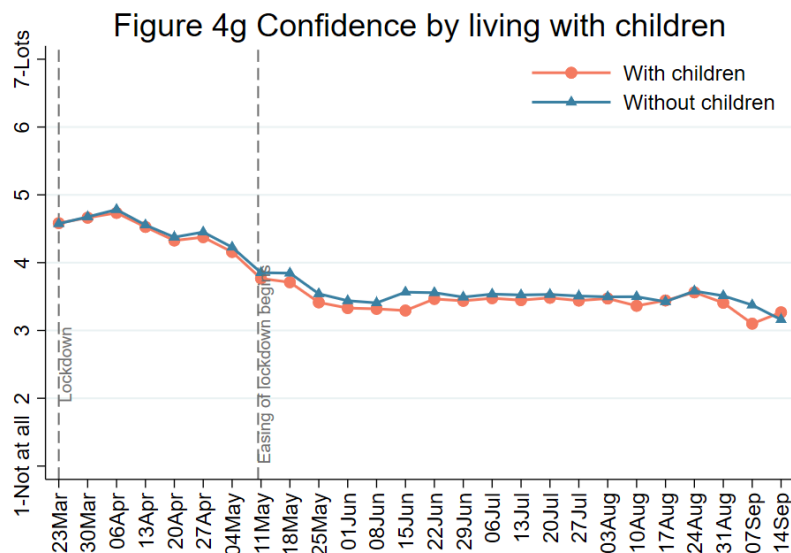
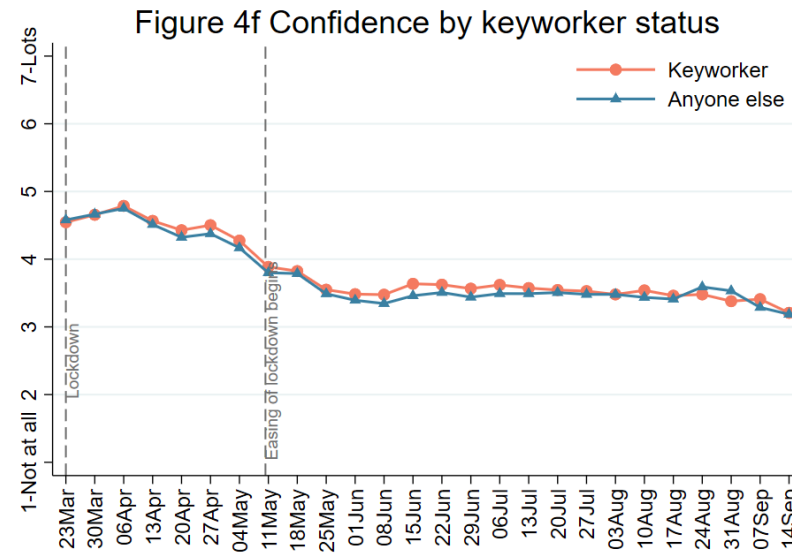
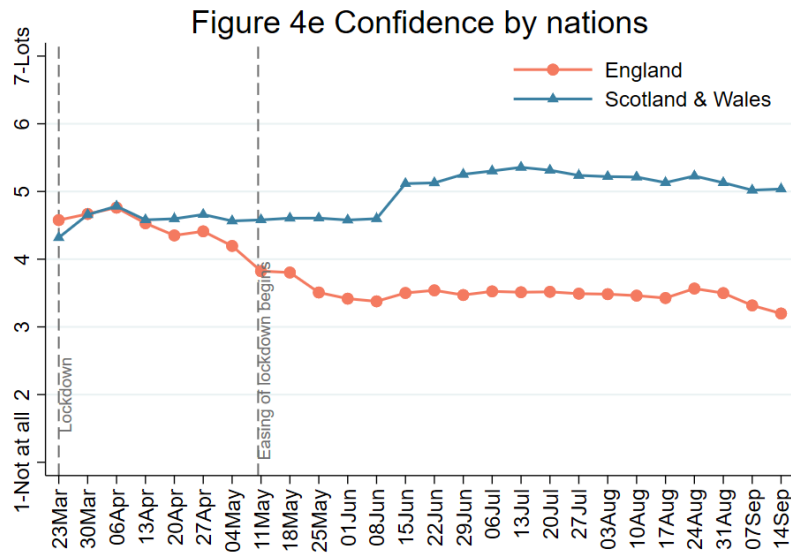
Respondents were asked how much confidence they had in the government to handle the Covid-19 epidemic from 1 (not at all) to 7 (lots). People living in devolved nations were asked to report their confidence in their own devolved governments.

Levels of confidence in the central government to handle the Covid-19 epidemic have remained relatively constant over the past fortnight, with highest levels in Scotland and Wales and lowest levels in England.<sup>2</sup> There are some suggestions that confidence in the government in England may be decreasing again, but this pattern remains to be explored further as more data are collected.

For subgroup analyses in Figures 4a-d and 4f-h, we restrict our results to respondents living in England in order to have sufficient sample sizes for meaningful subgroup analyses (future analyses focusing on weekly rather than daily tracking will look at subgroups in devolved nations). In England, confidence in government is still lowest in those under the age of 30. Confidence is also lower in urban areas and in people with a mental health diagnosis. Confidence is also slightly lower in people of higher household income.

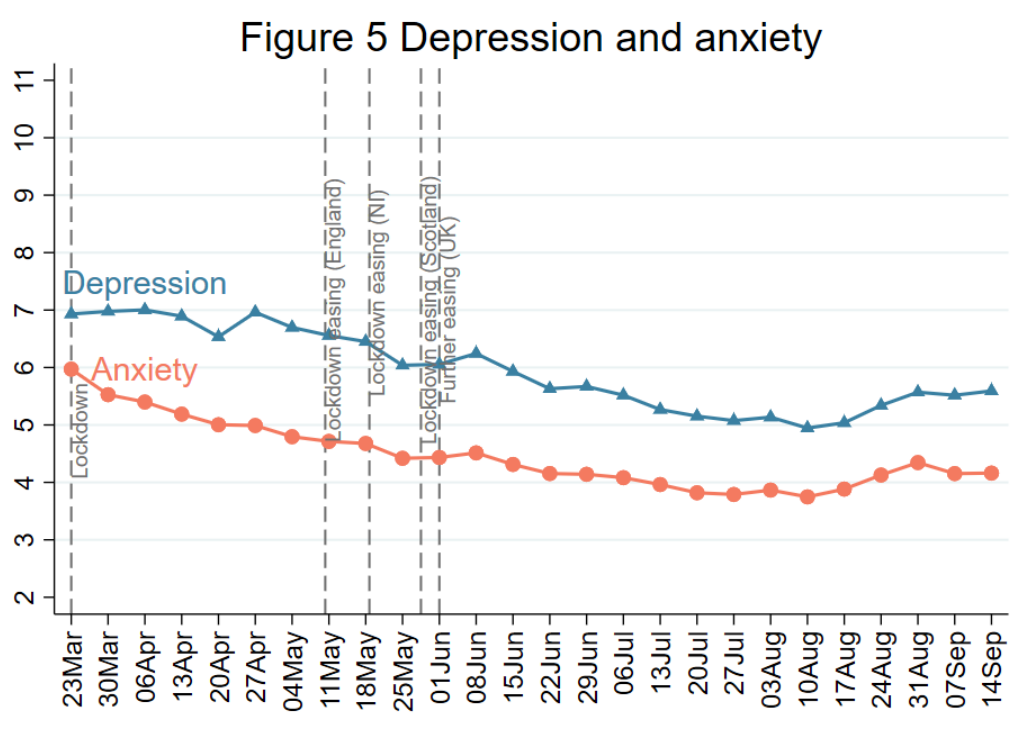
<sup>2</sup> Figures for Northern Ireland have now been removed from our daily tracker graphs due to a small sample size that makes extrapolation even with statistical weighting unreliable. These data are being analysed in other papers and reports.





## 2. Mental Health

### 2.1 Depression and anxiety



#### FINDINGS

Respondents were asked about depression levels during the past week using the Patient Health Questionnaire (PHQ-9) and anxiety using the Generalised Anxiety Disorder assessment (GAD-7); standard instruments for diagnosing depression and anxiety in primary care. These are 9 and 7 items respectively with 4-point responses ranging from “not at all” to “nearly every day”, with higher overall scores indicating more symptoms. Scores of higher than 10 can indicate major depression or moderate anxiety.

Depression and anxiety levels are similar to two weeks ago. Although this study focuses on trajectories rather than prevalence, the levels overall are higher than usual reported averages using the same scales (2.7-3.2 for anxiety and 2.7-3.7 for depression<sup>3</sup>), but appear to be returning towards these usual averages.

Decreases in depression and anxiety have occurred across every subgroup. However, depression and anxiety are still highest in young adults, people living alone, people with lower household income, people living with children, and people living in urban areas. People with a diagnosed mental illness have still been reporting higher levels of symptoms (as might be expected), but they have on average experienced greater improvements in the past fortnight in depressive symptoms, starting to narrow the gap in experiences compared to individuals without a diagnosed mental illness.

<sup>3</sup> Löwe B, Decker O, Müller S, Brähler E, Schellberg D, Herzog W, et al. Validation and Standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the General Population. *Medical Care*. 2008;46(3):266–74. | Tomitaka S, Kawasaki Y, Ide K, Akutagawa M, Ono Y, Furukawa TA. Stability of the Distribution of Patient Health Questionnaire-9 Scores Against Age in the General Population: Data From the National Health and Nutrition Examination Survey. *Front Psychiatry*. NB in the absence of identified directly comparable prevalence estimates in the UK, these studies look at prevalence in the US in the general population.

Figure 6a Depression by age groups

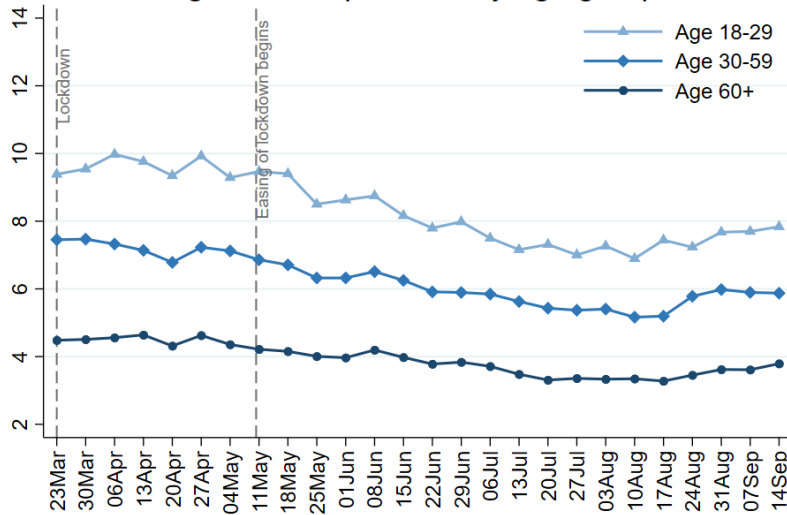


Figure 6b Depression by living arrangement

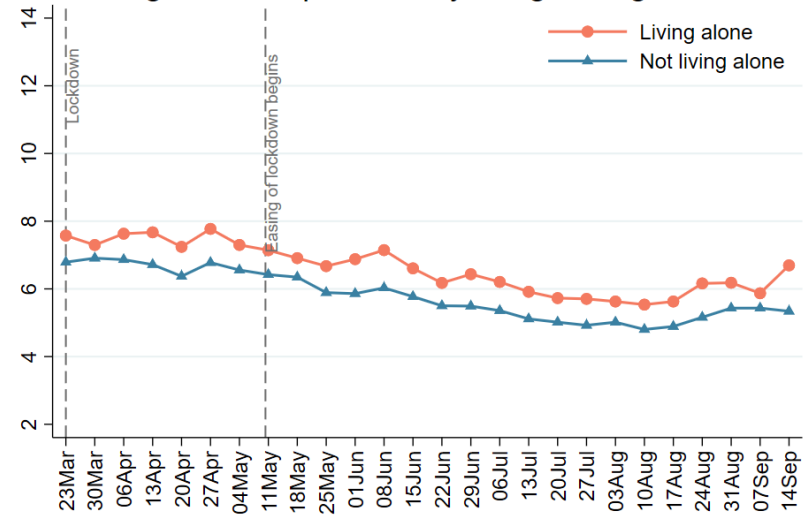


Figure 6c Depression by household income

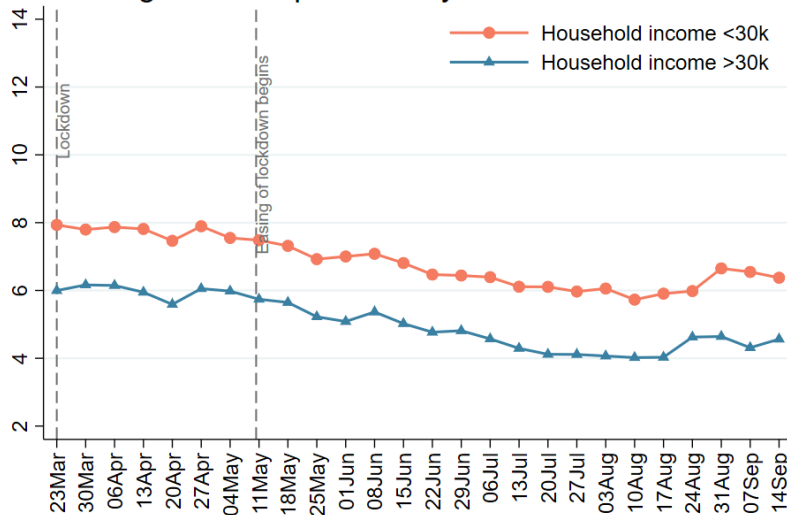


Figure 6d Depression by mental health diagnosis

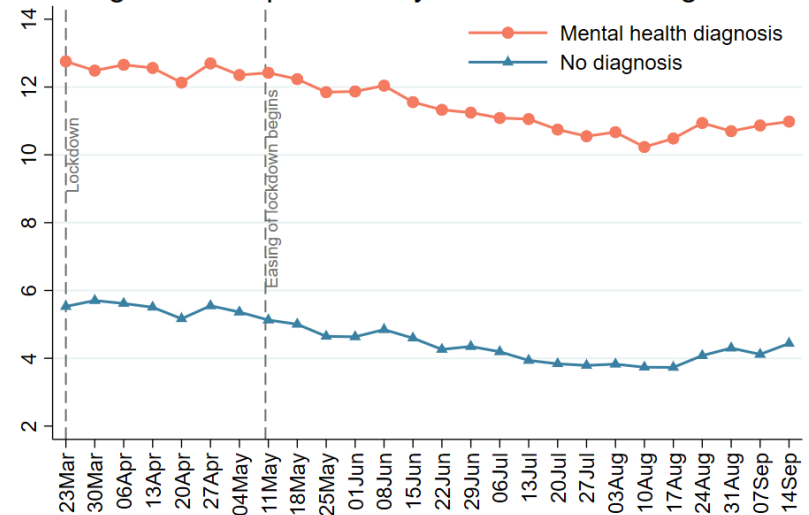


Figure 6e Depression by nations

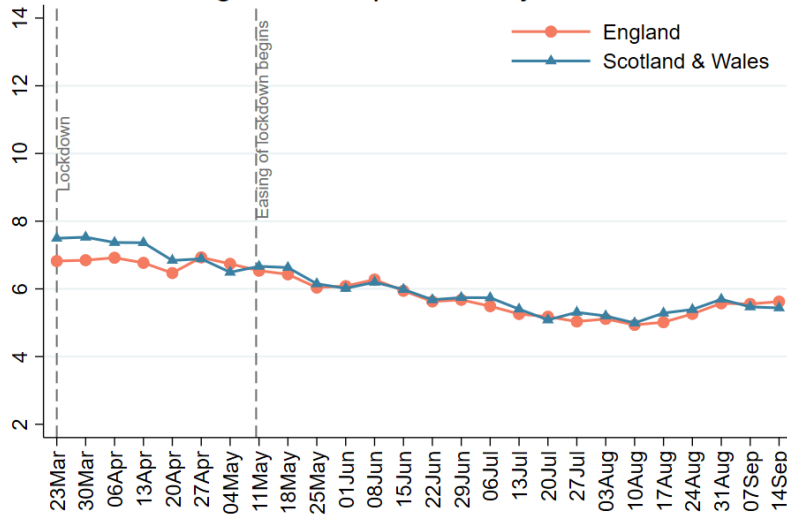


Figure 6f Depression by keyworker status

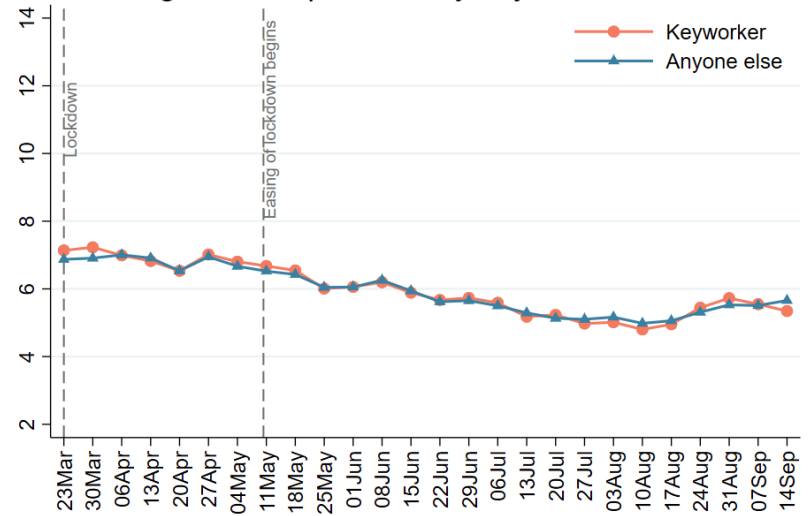


Figure 6g Depression by living with children

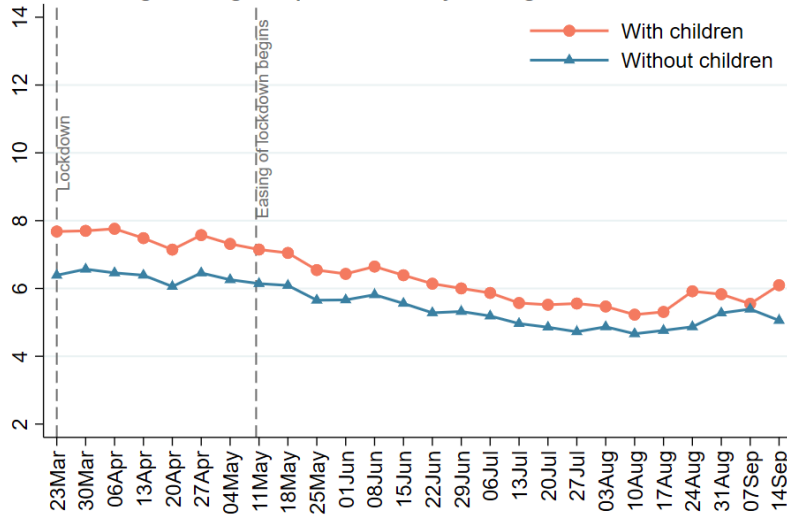


Figure 6h Depression by living area

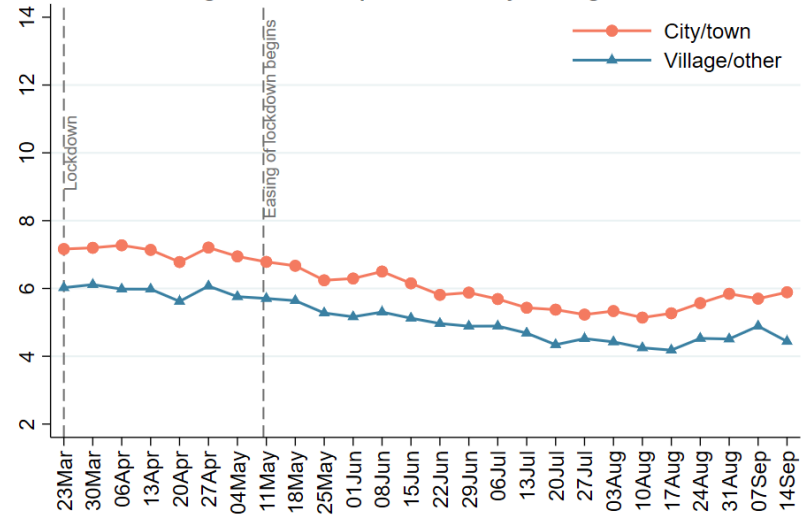


Figure 7a Anxiety by age groups

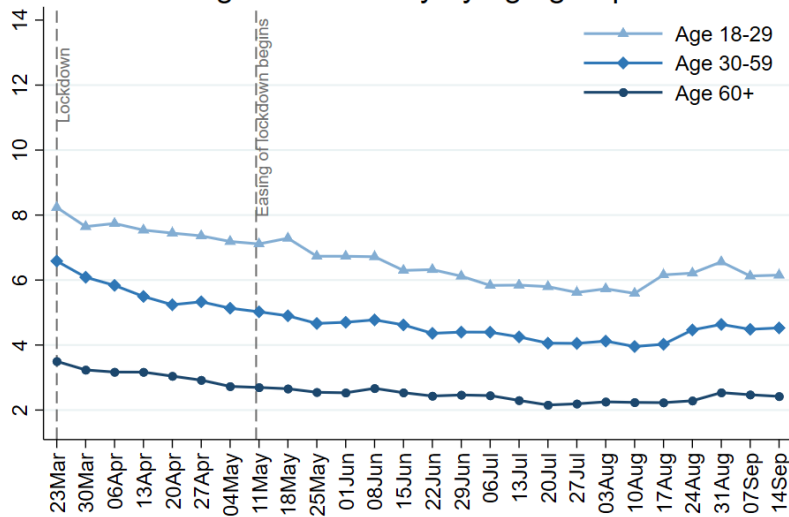


Figure 7b Anxiety by living arrangement

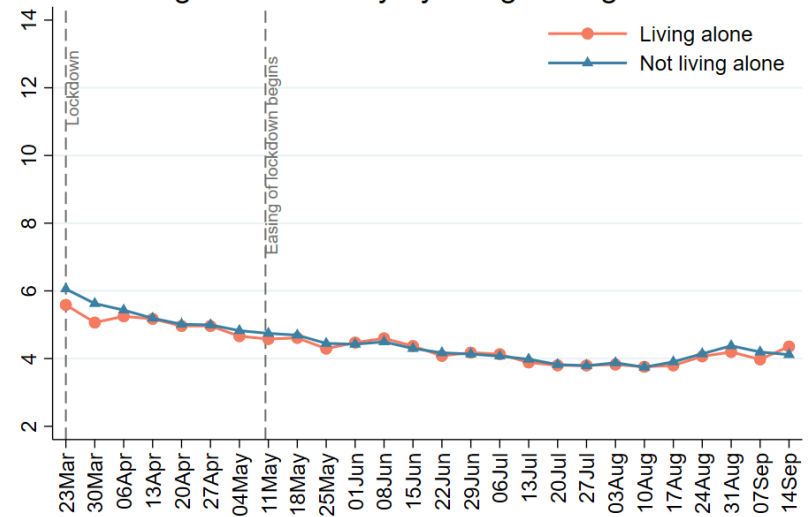


Figure 7c Anxiety by household income

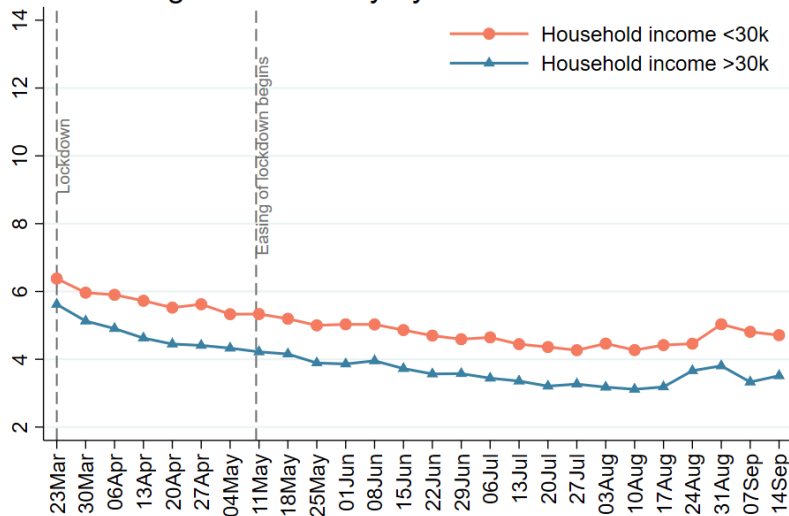


Figure 7d Anxiety by mental health diagnosis

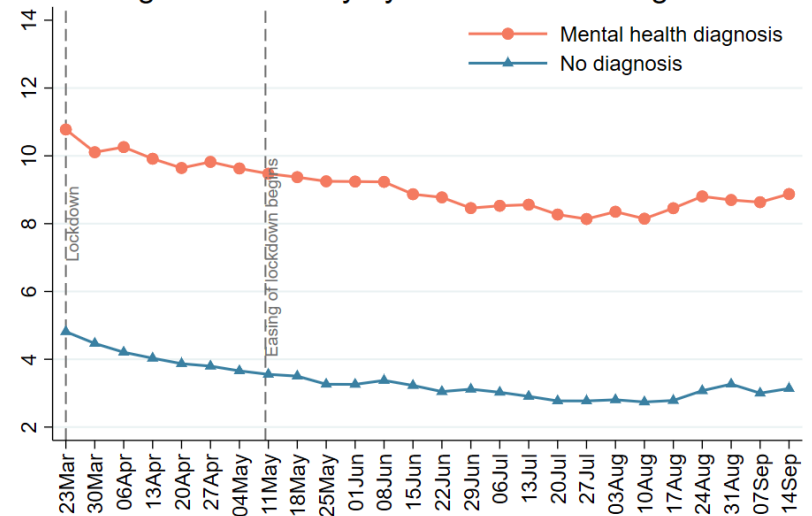


Figure 7e Anxiety by nations

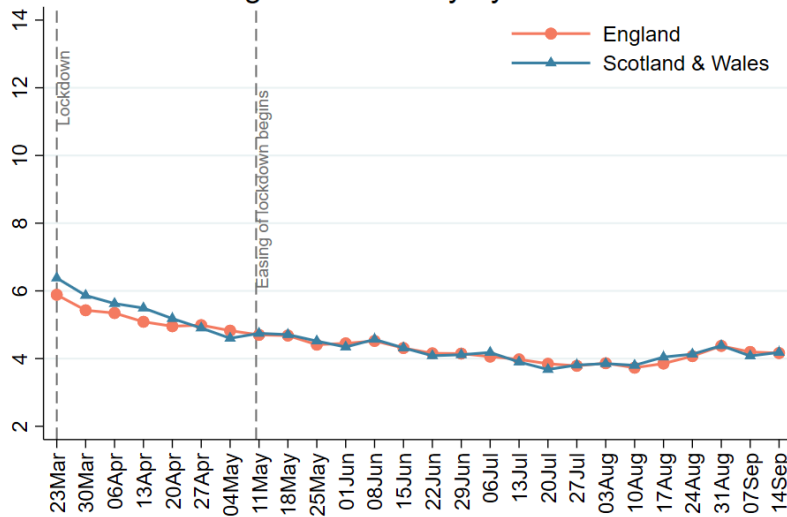


Figure 7f Anxiety by keyworker status

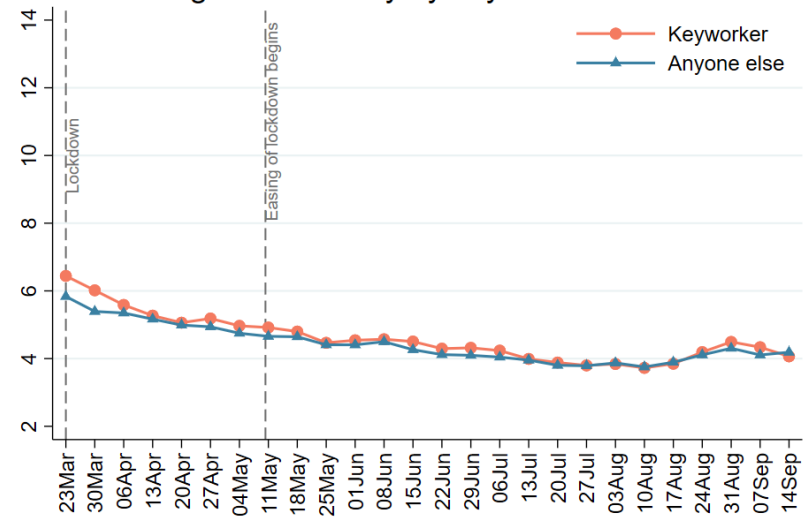


Figure 7g Anxiety by living with children

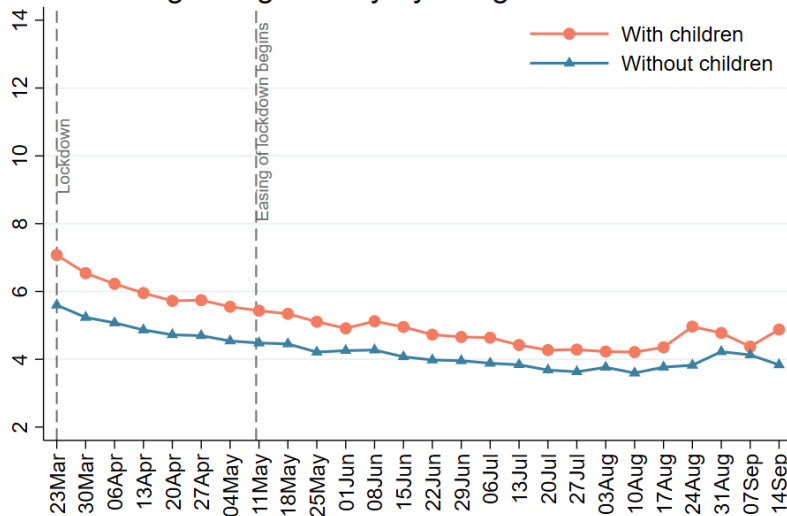
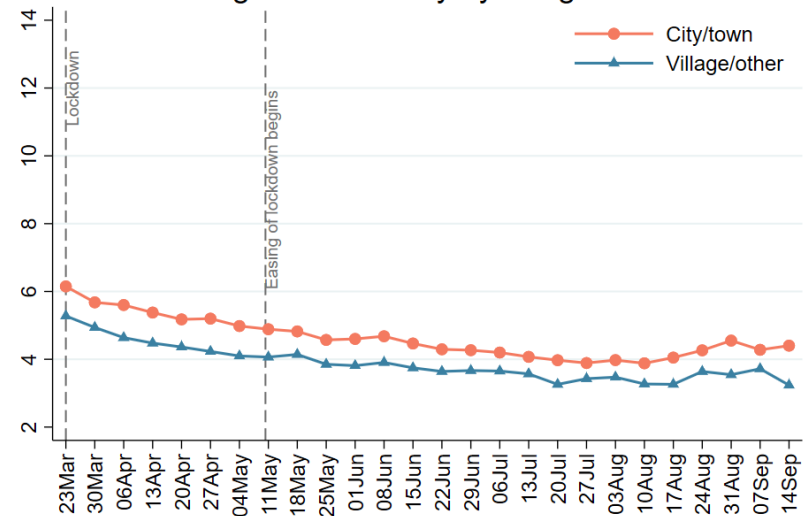
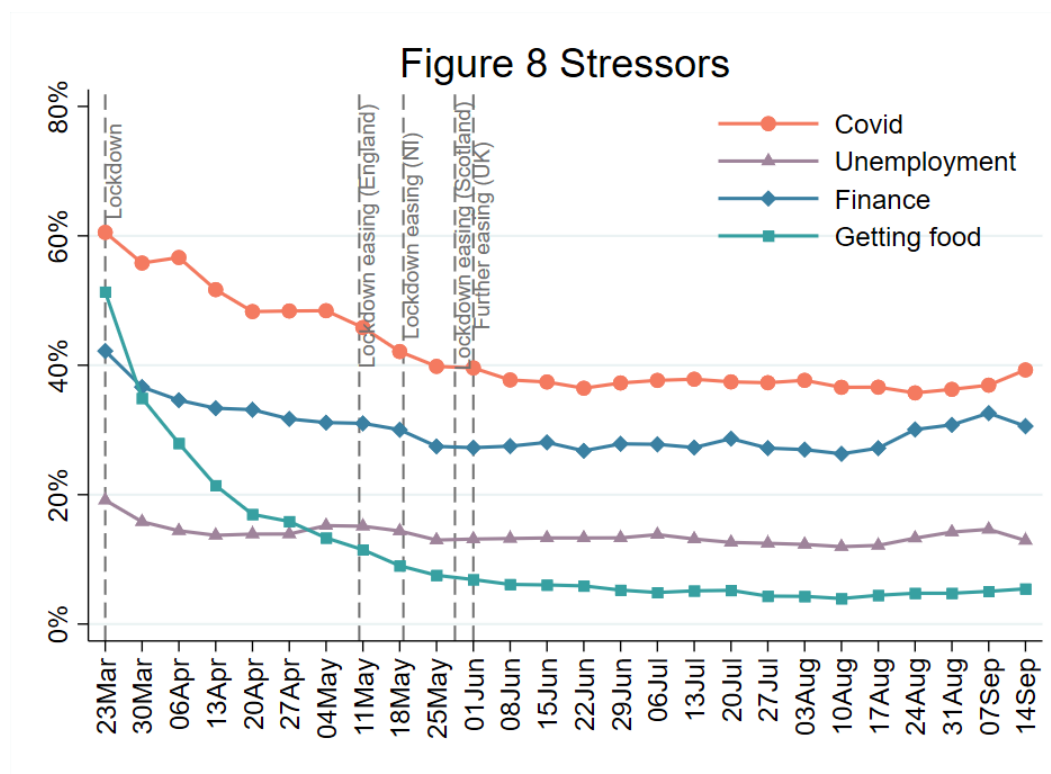


Figure 7h Anxiety by living area





## 2.2 Stress



### FINDINGS

We asked participants to report which factors were causing them stress in the last week, either minor stress or major stress (which was defined as stress that was constantly on their mind or kept them awake at night).

There has still been little change in people reporting major or minor stress due to catching Covid-19, unemployment, finance, or getting food in the past fortnight. Stress relating to Covid-19 (both catching Covid-19 and becoming seriously ill from Covid-19) remains the most prevalent stressor, but is still not affecting the majority of people, with fewer than 40% reporting it. Notably, worries about finance and unemployment have not risen substantially for individuals, despite the end of furlough schemes nearing and more companies discussing redundancy measures.<sup>4</sup> Just 1 in 4 people report being worried about finance and 1 in 6 worried about unemployment. Worries about access to food are still only affecting around 1 in 20 people, but this residual worry is remaining.

People with diagnosed mental illness have been more worried about all factors. But other predictors of stressors have varied. People with lower household income are becoming more worried about Covid-19 than people with higher household income, and they are more worried about finances, but less worried about unemployment. People living with children have worried more about all factors, but the differences on worries relating to Covid-19 and food access have diminished as lockdown has eased. Older adults have worried less about unemployment and food. Unemployment has worried people in England and in urban areas more.

<sup>4</sup> NB data on stress relating to unemployment in the last four weeks show some fluctuations amongst younger adults. However, it is unclear if this is due to natural variations in data reporting or new trends and will be explored further in future weeks.

Figure 9a Covid-19 stress by age groups

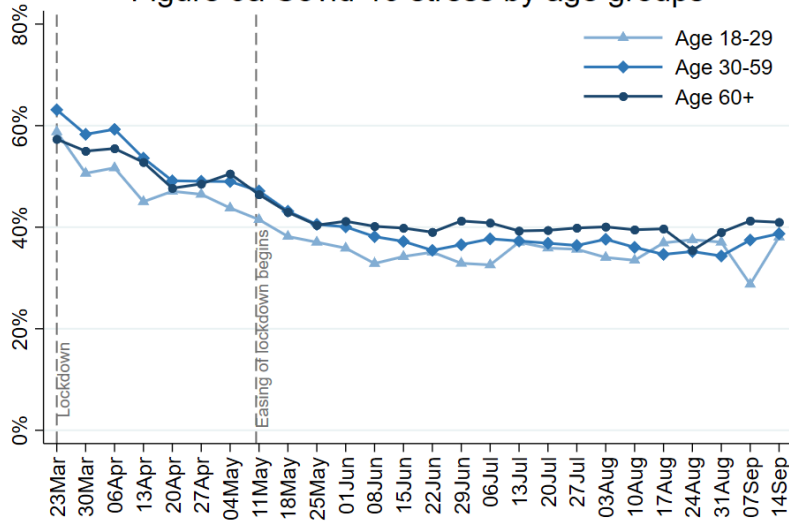


Figure 9b Covid-19 stress by living arrangement

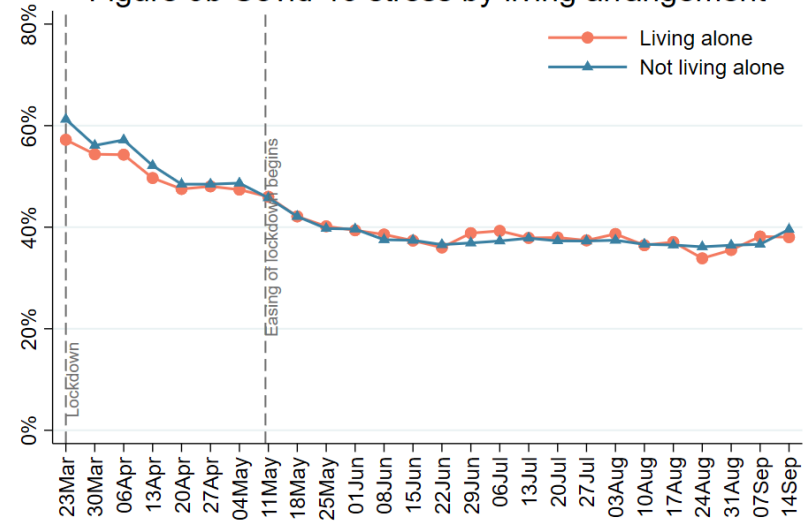


Figure 9c Covid-19 stress by household income

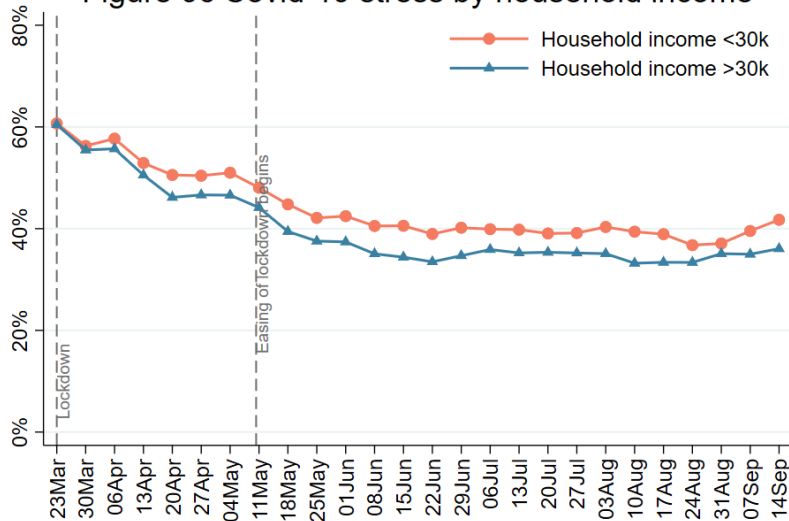


Figure 9d Covid-19 stress by mental health diagnosis

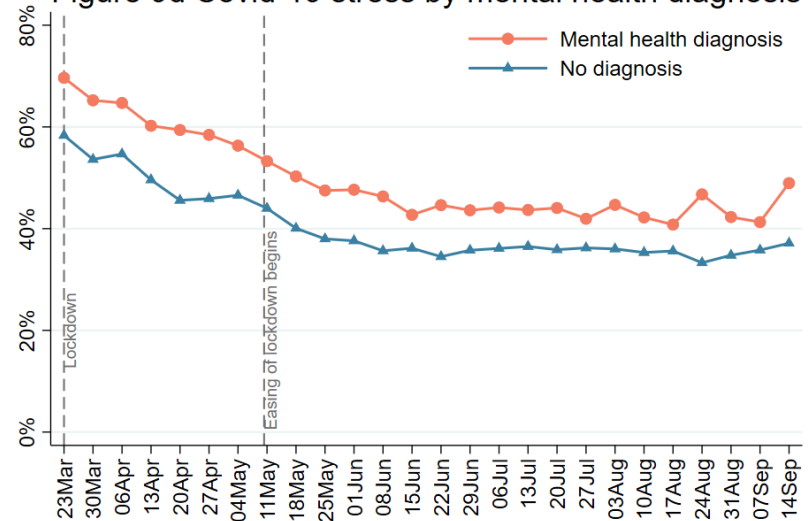


Figure 9e Covid-19 stress by nations

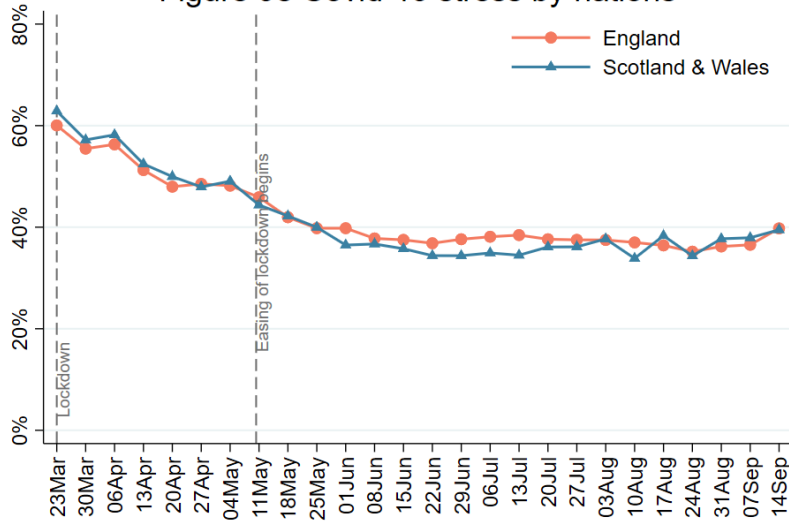


Figure 9f Covid-19 stress by keyworker status

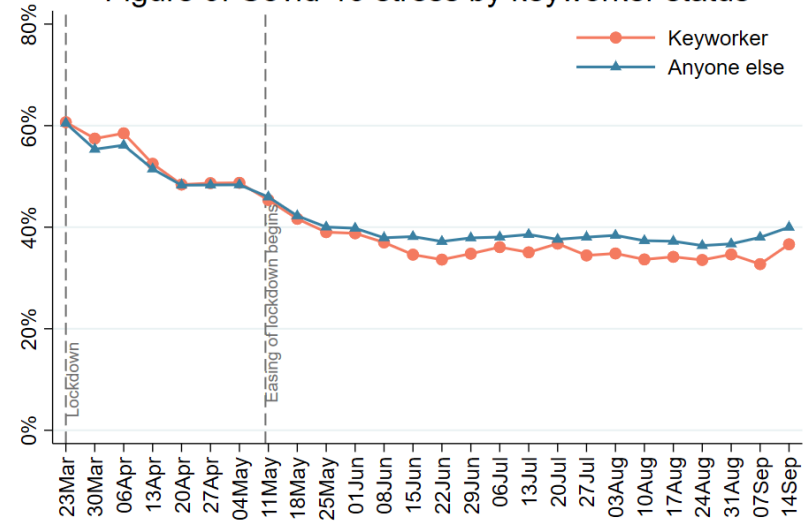


Figure 9g Covid-19 stress by living with children

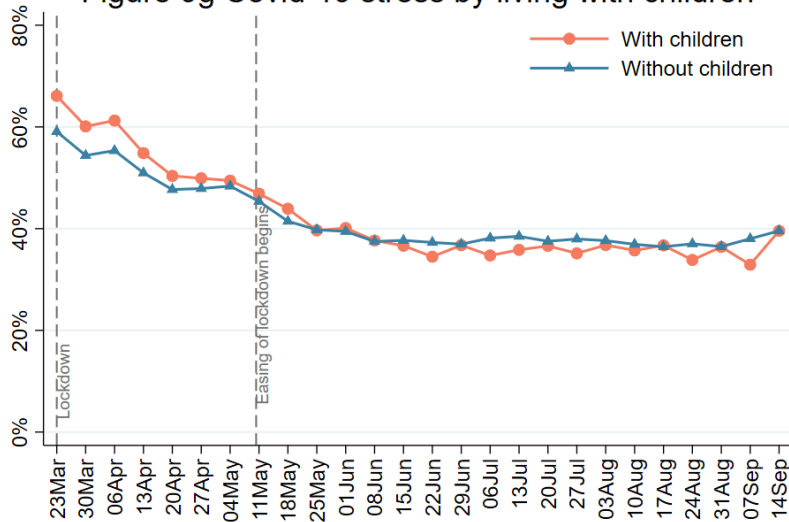


Figure 9h Covid-19 stress by living area

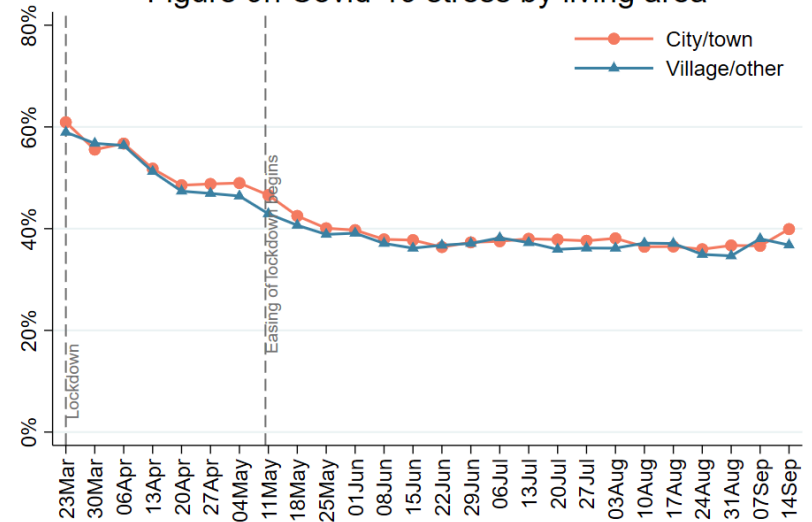


Figure 10a Unemployment stress by age groups

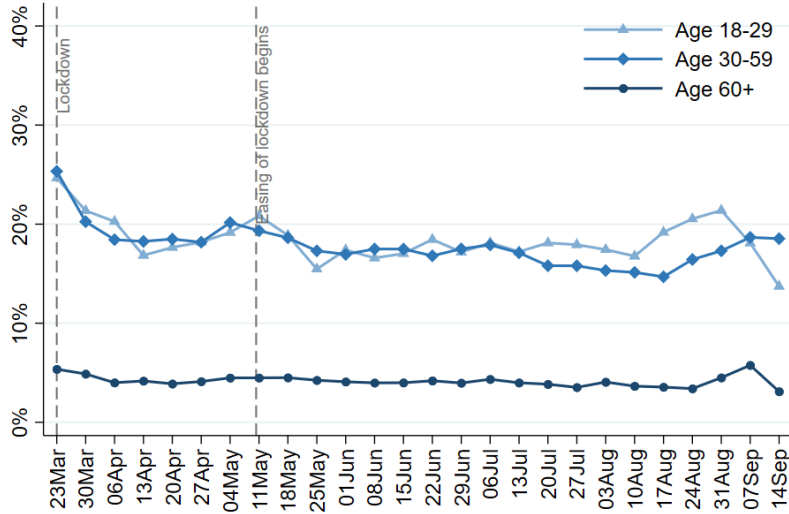


Figure 10b Unemployment stress by living arrangement

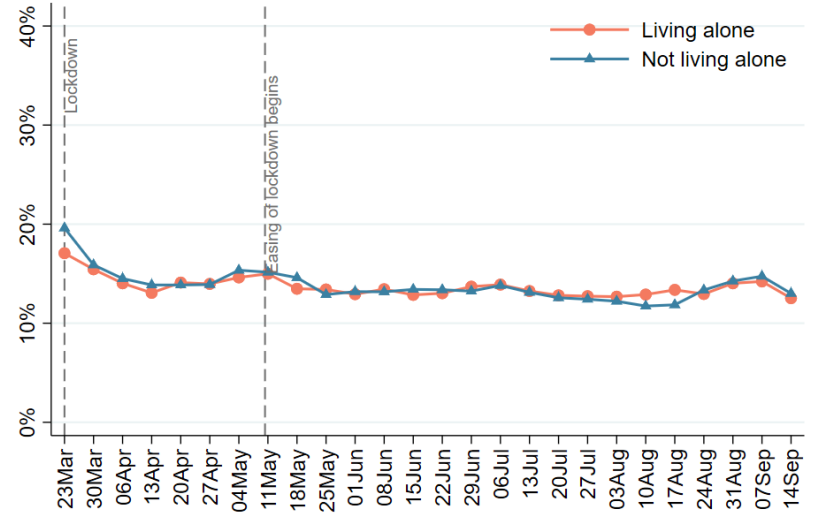


Figure 10c Unemployment stress by household income

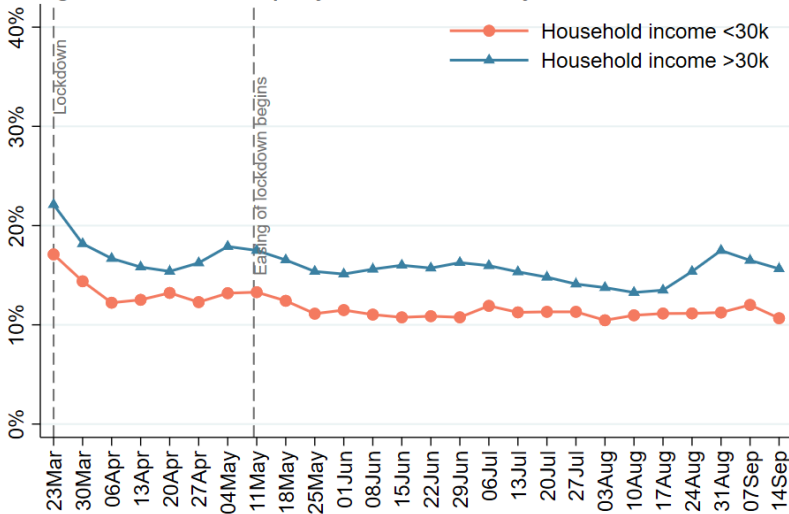


Figure 10d Unemployment stress by mental health

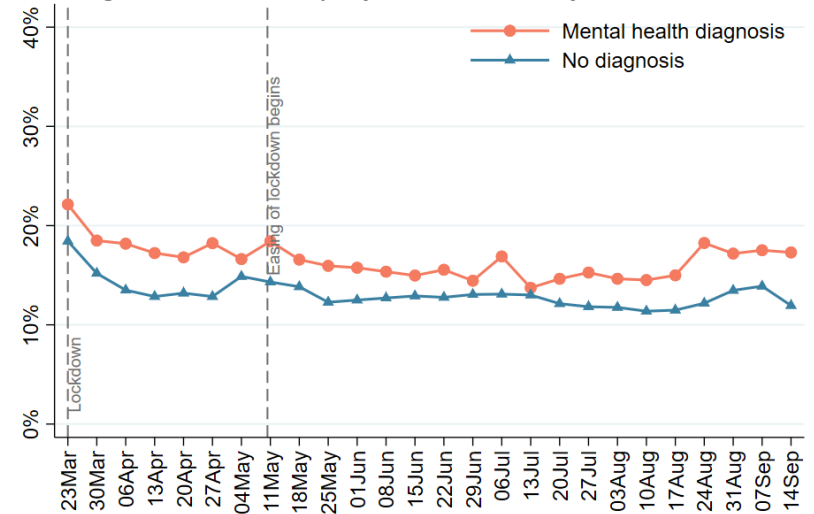


Figure 10e Unemployment stress by nations

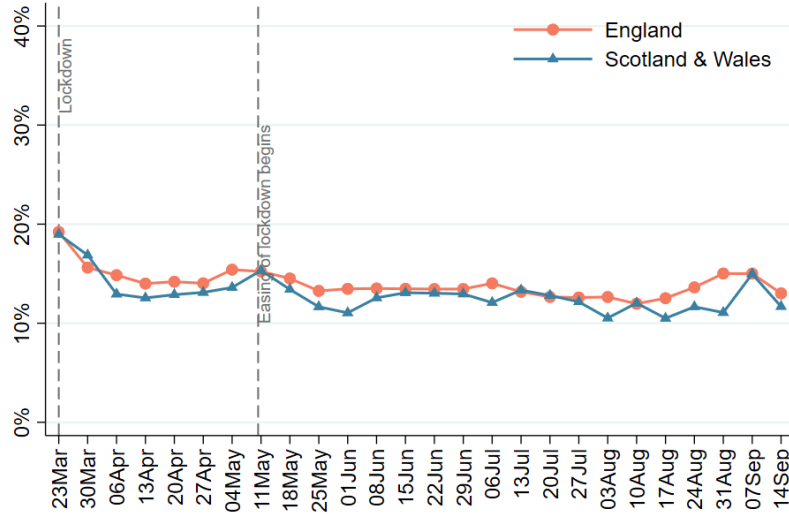


Figure 10f Unemployment stress by keyworker status

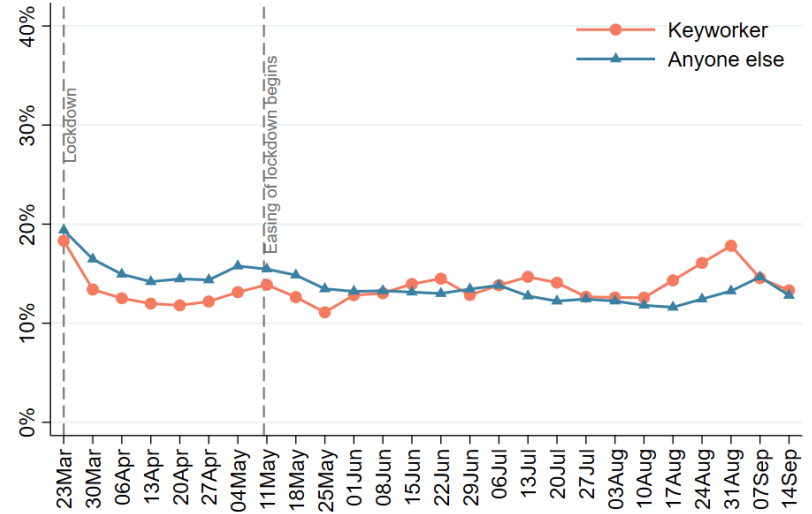


Figure 10g Unemployment stress by living with children

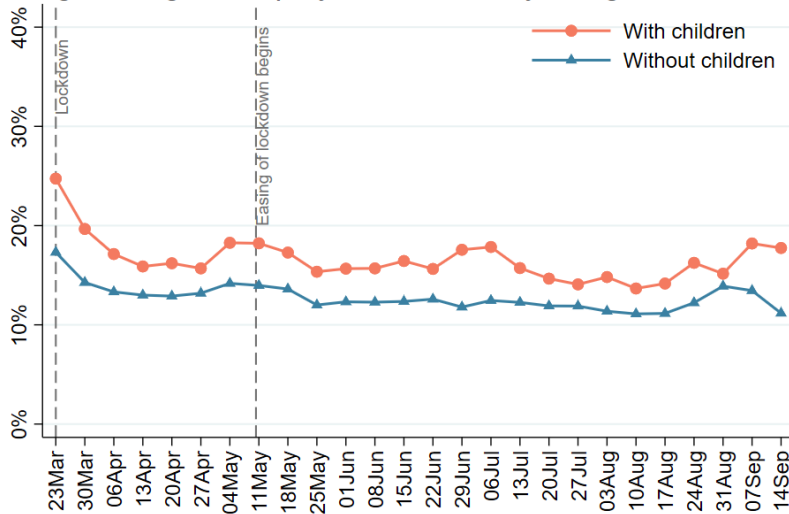
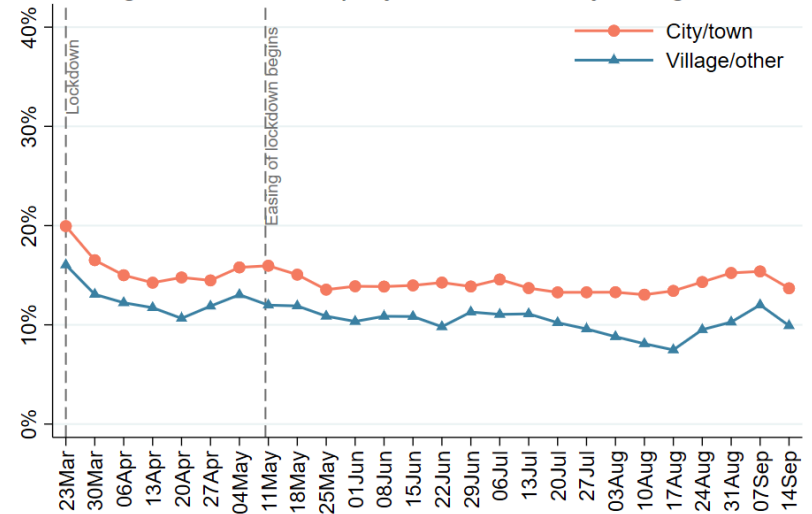


Figure 10h Unemployment stress by living area



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Figure 11a Financial stress by age groups

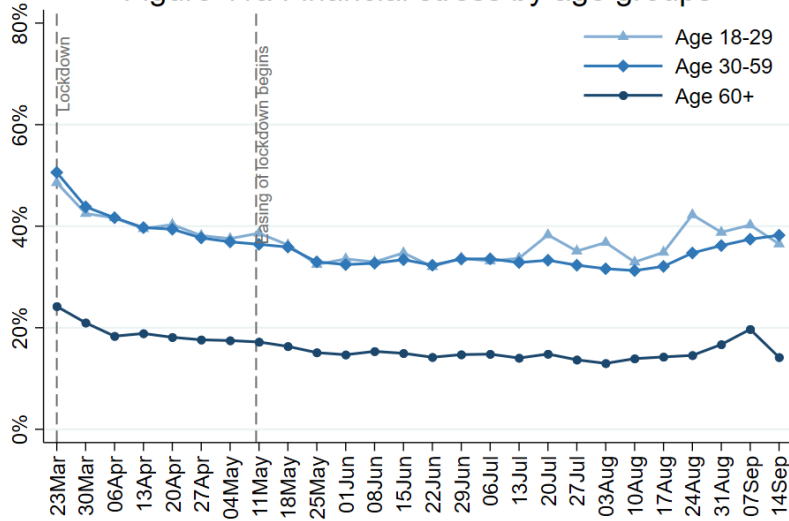


Figure 11b Financial stress by living arrangement

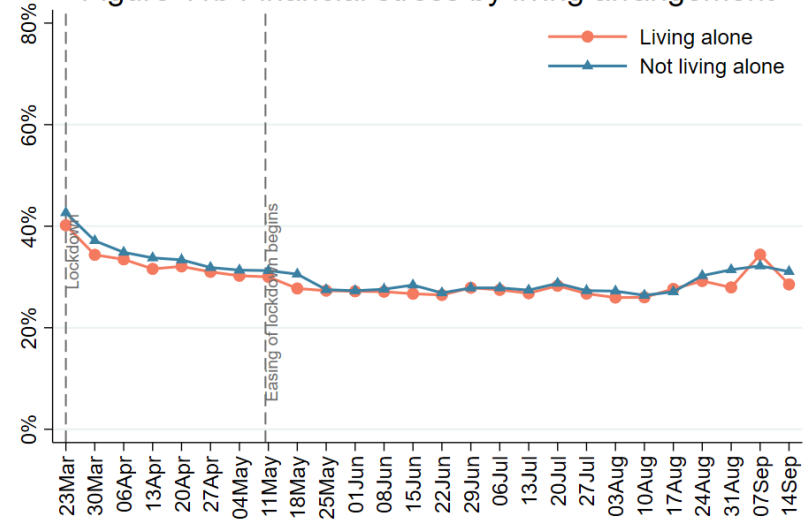


Figure 11c Financial stress by household income

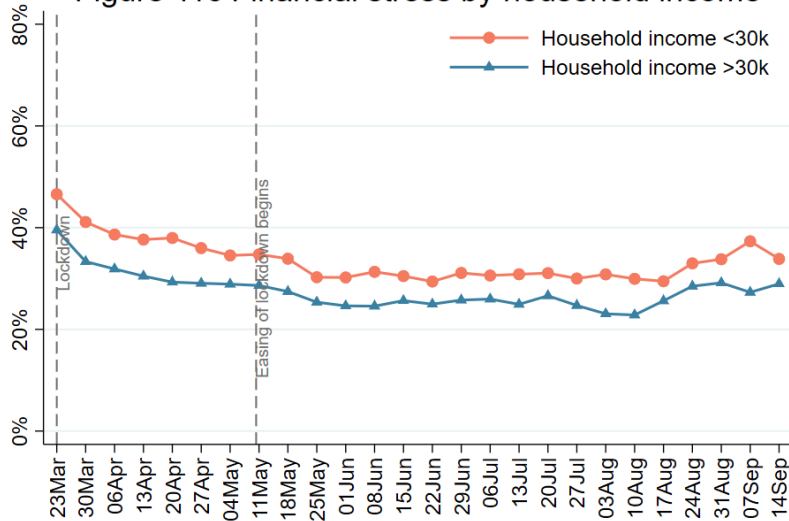


Figure 11d Financial stress by mental health diagnosis

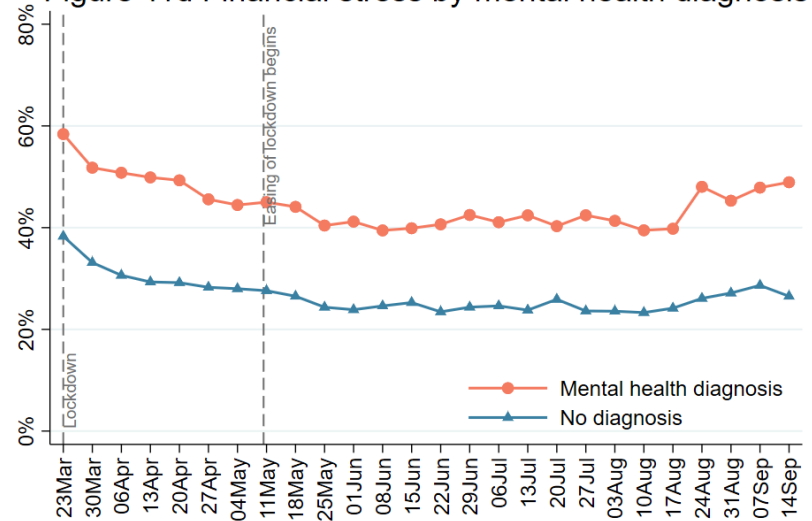


Figure 11e Financial stress by nations

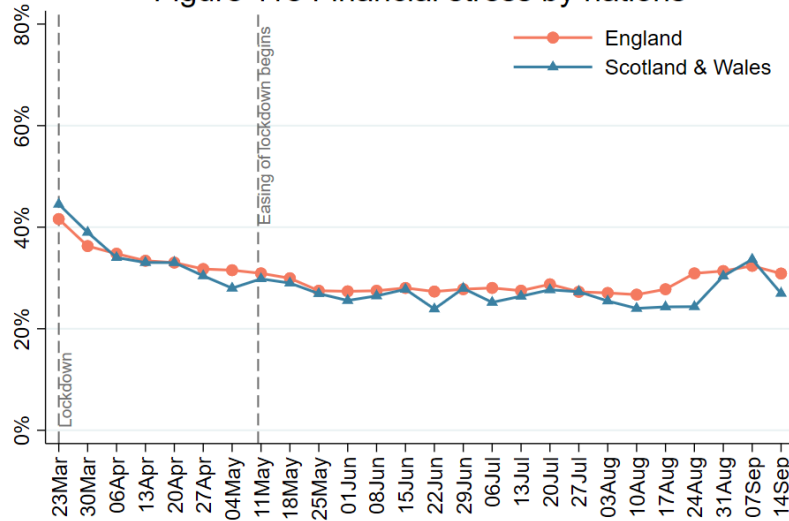


Figure 11f Financial stress by keyworker status

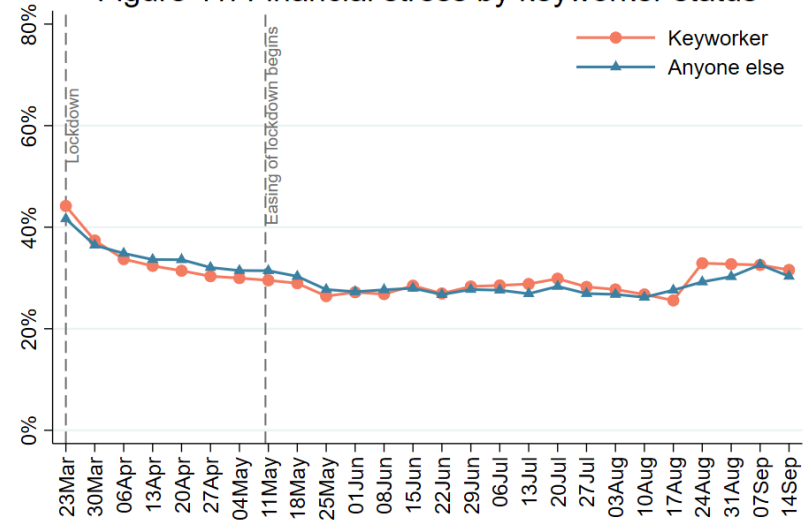


Figure 11g Financial stress by living with children

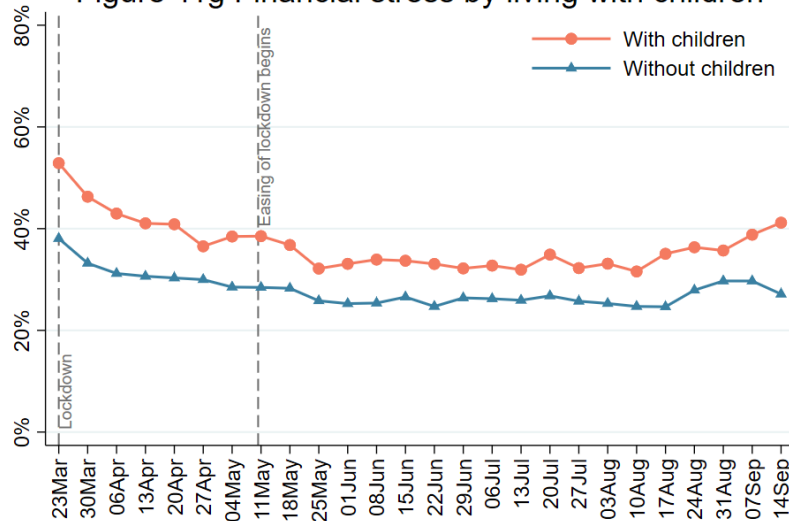


Figure 11h Financial stress by living area

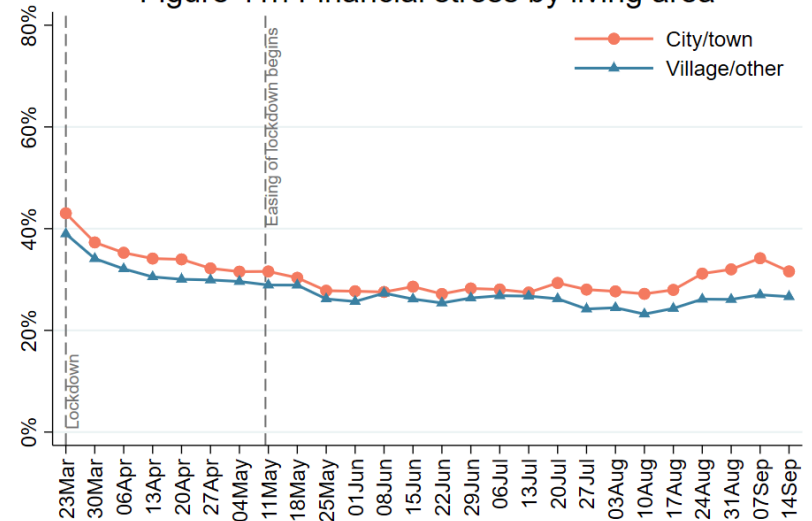


Figure 12a Food security stress by age groups

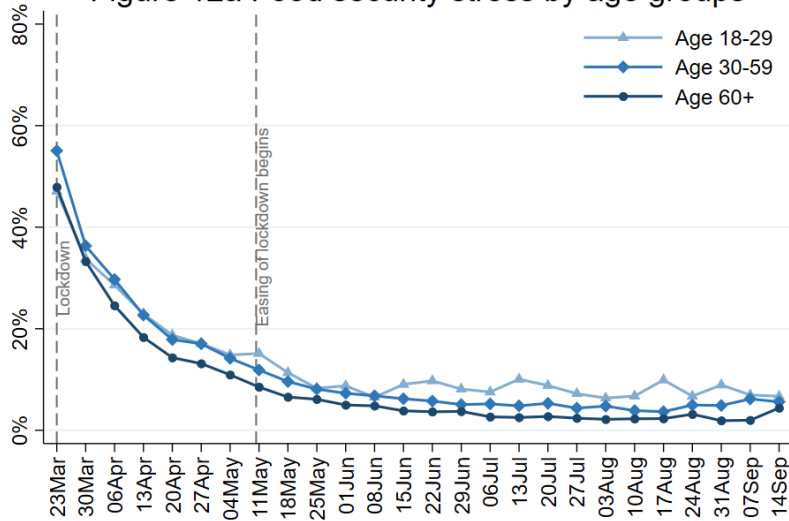


Figure 12b Food security stress by living arrangement

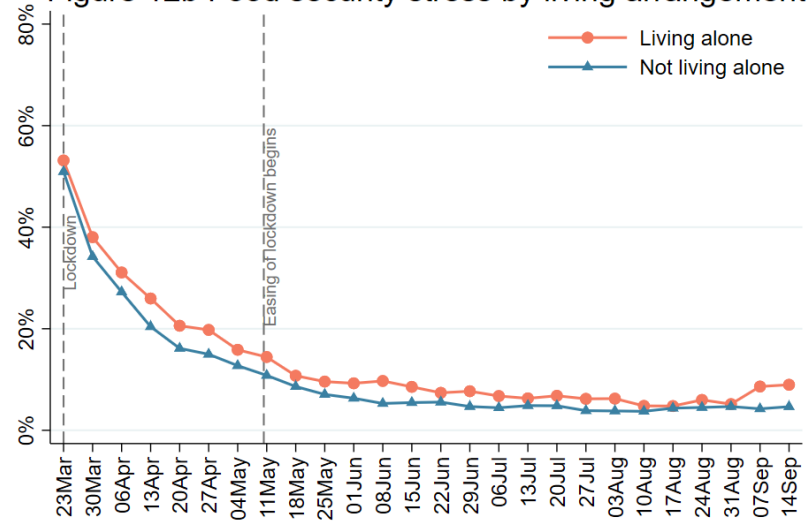


Figure 12c Food security stress by household income

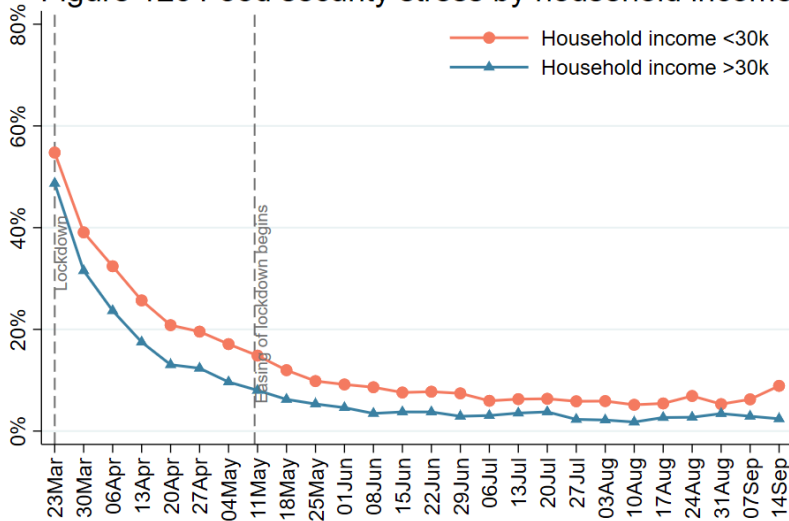


Figure 12d Food security stress by mental health

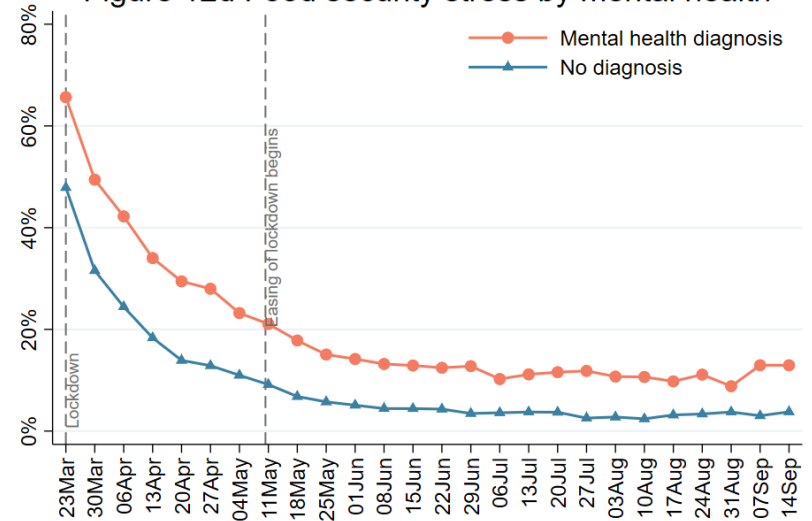




Figure 12e Food security stress by nations

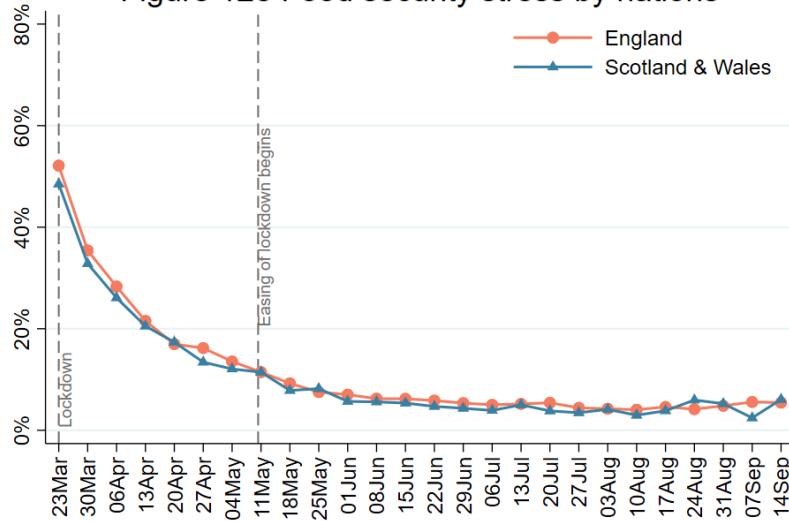


Figure 12f Food security stress by keyworker status

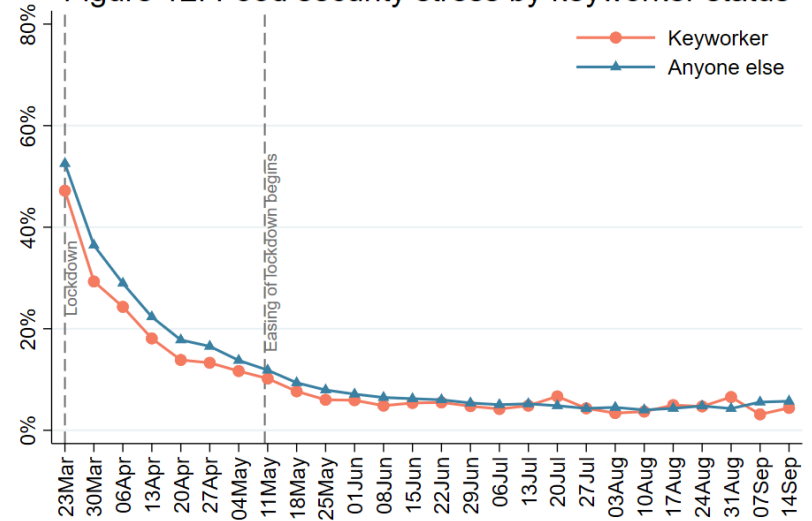


Figure 12g Food security stress by living with children

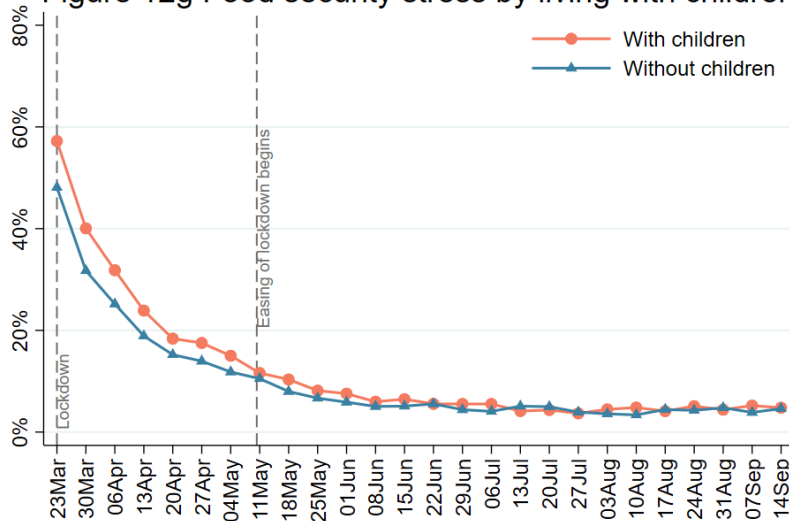
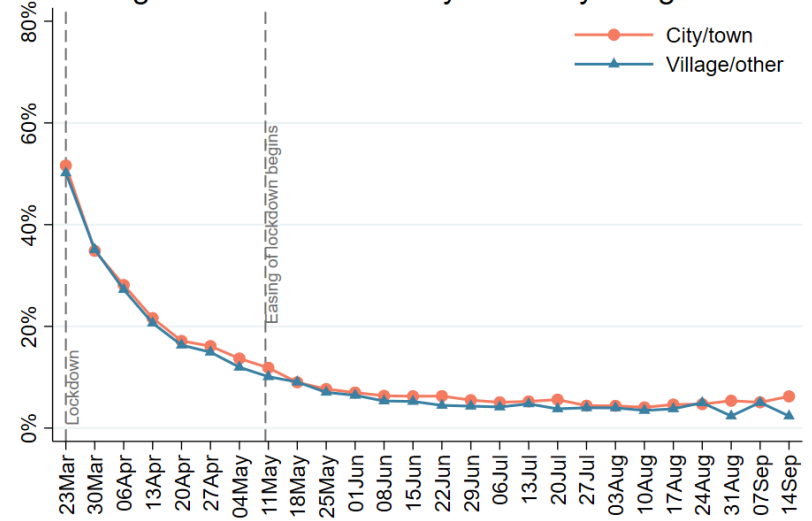
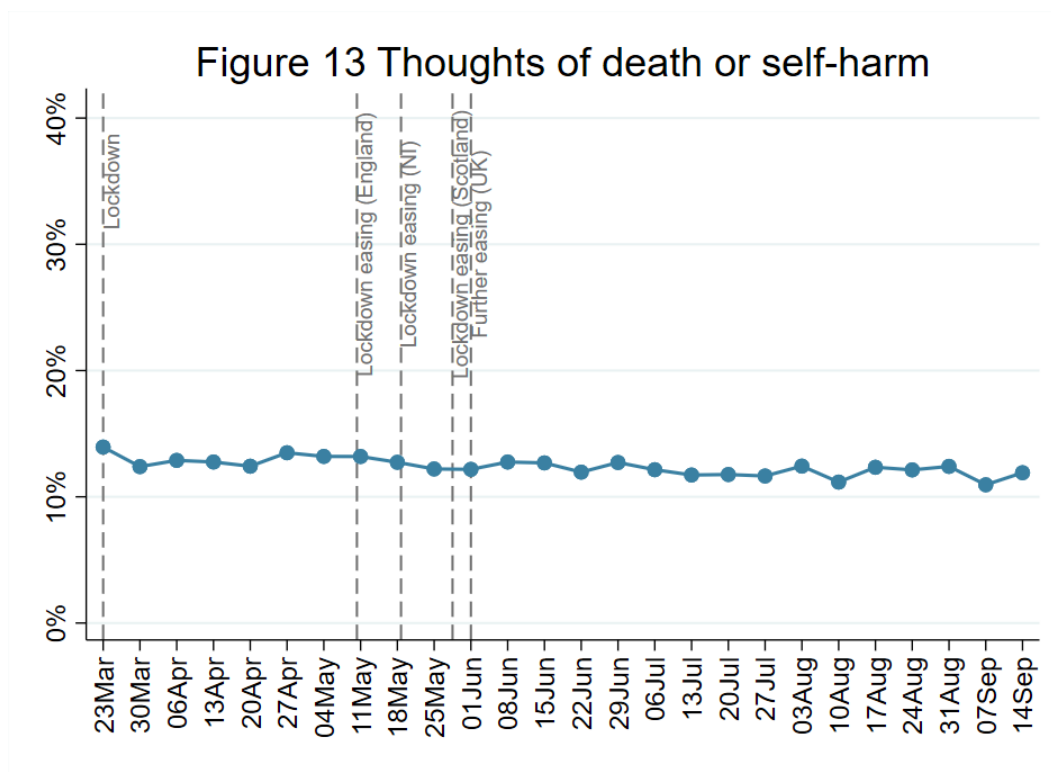


Figure 12h Food security stress by living area



### 3. Self-harm and abuse

#### 3.1 Thoughts of death or self-harm



#### FINDINGS

Thoughts of death or self-harm are measured using a specific item within the PHQ-9 that asks whether, in the last week, someone has had “thoughts that you would be better off dead or of hurting yourself in some way”. Responses are on a 4-point scale ranging from “not at all” to “nearly every day”. We focused on any response that indicated having such thoughts.

There continues to be no clear change in thoughts of death since the easing of lockdown was announced. Percentages of people having thoughts of death or self-harm have been relatively stable throughout the past 21 weeks. They remain higher amongst younger adults, those with lower household income, and people with a diagnosed mental health condition. They are also higher in people living alone and those living in urban areas.

Figure 14a Thoughts of death by age groups

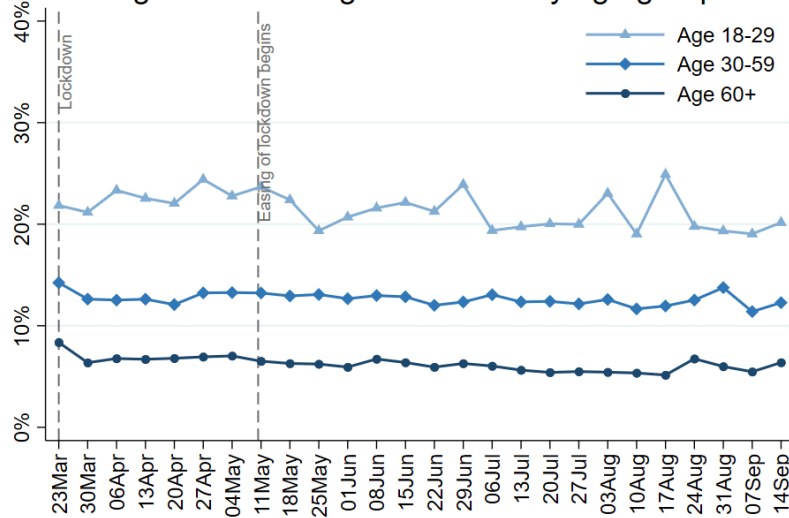


Figure 14b Thoughts of death by living arrangement

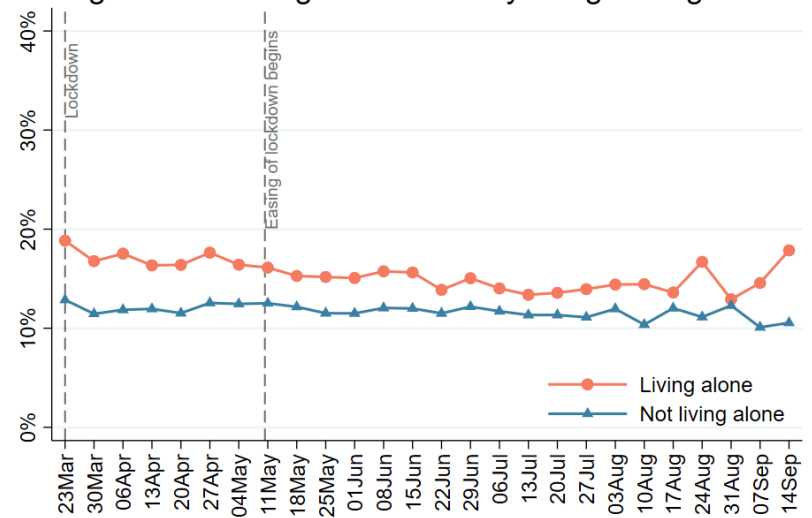


Figure 14c Thoughts of death by household income

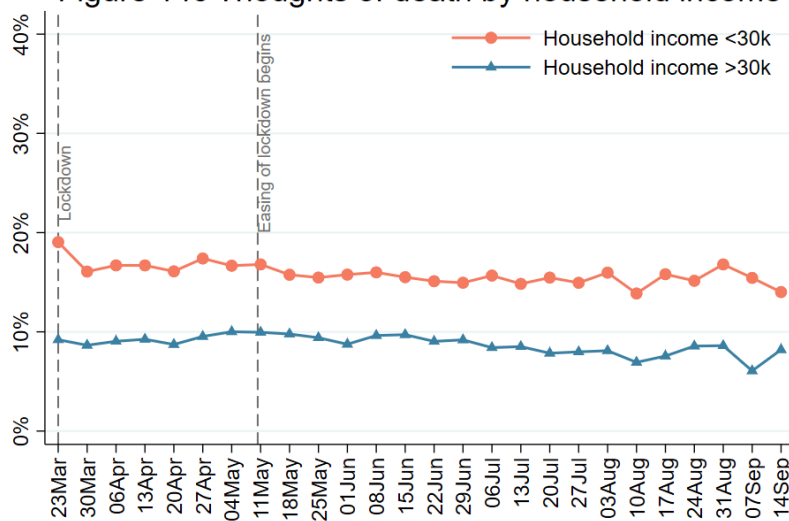


Figure 14d Thoughts of death by mental health diagnosis

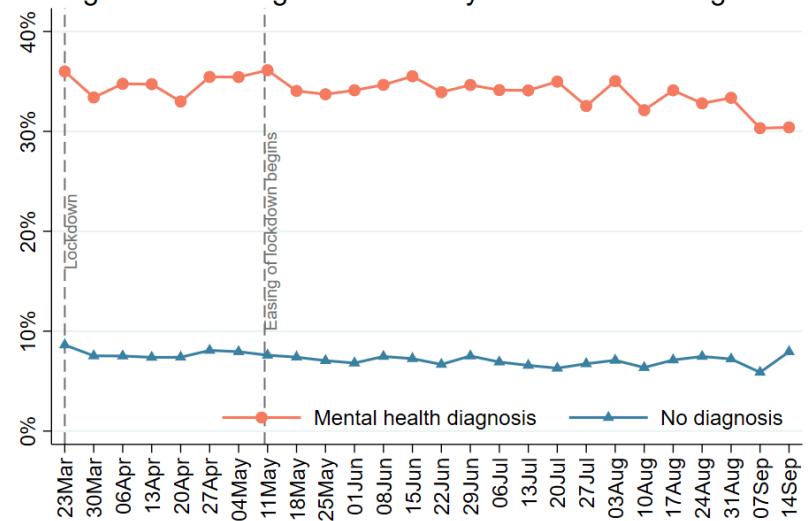


Figure 14e Thoughts of death by nations

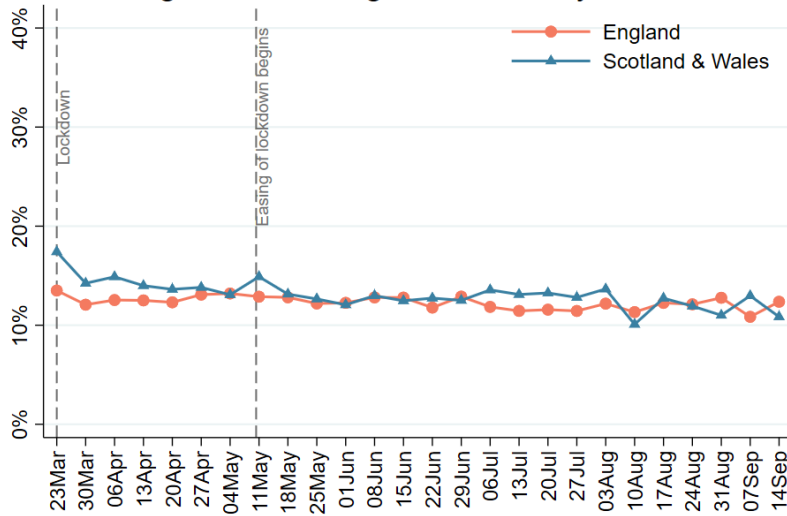


Figure 14f Thoughts of death by keyworker status

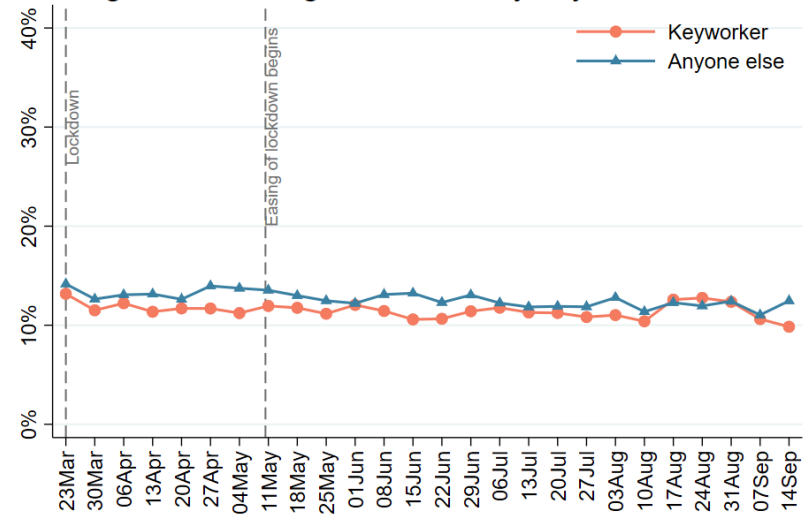


Figure 14g Thoughts of death by living with children

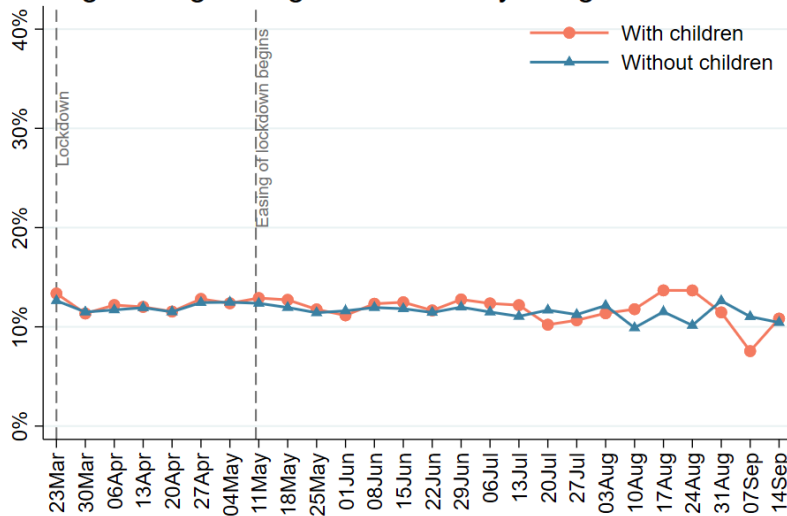
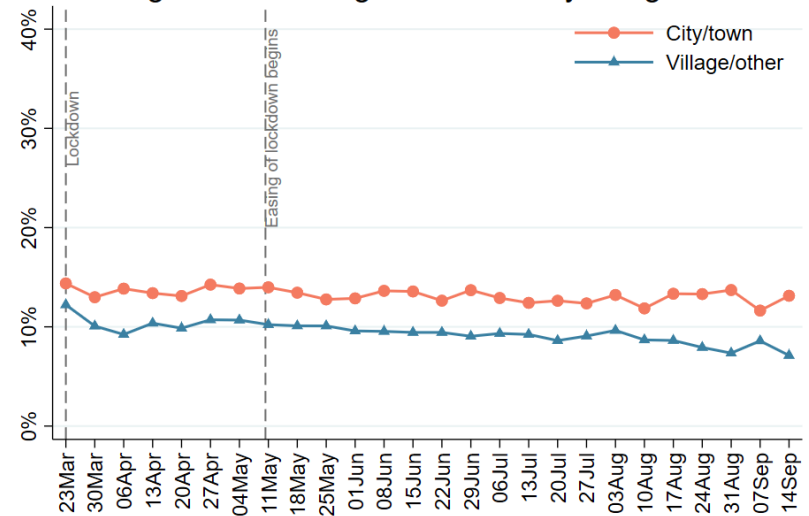
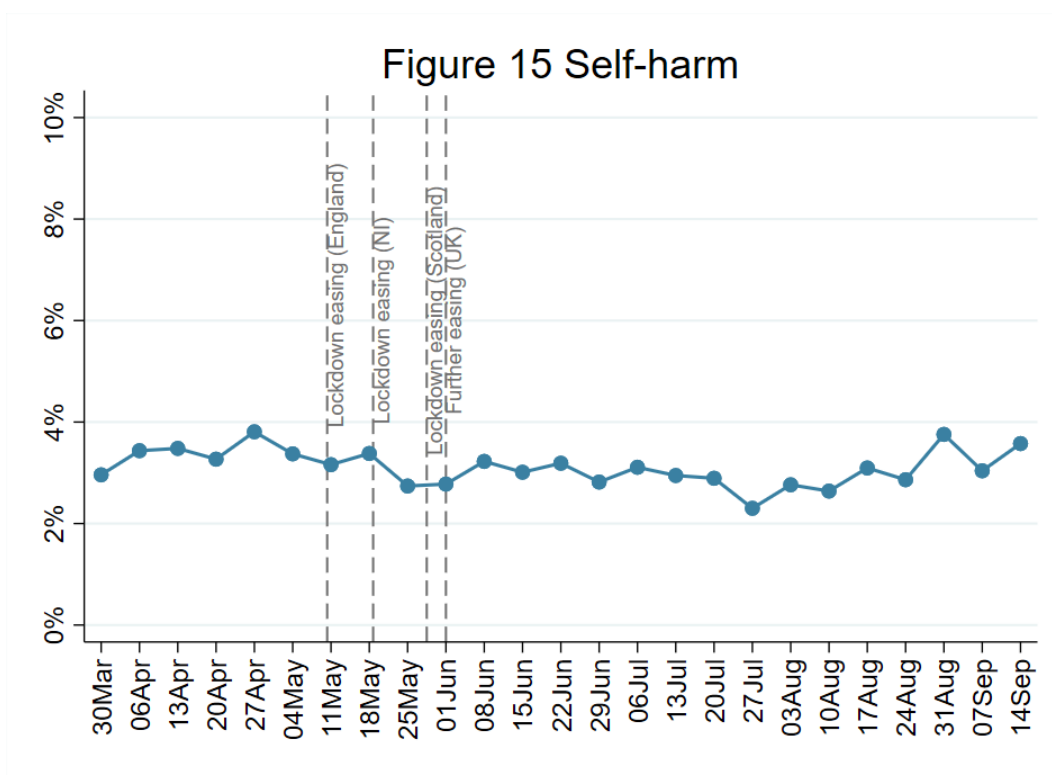


Figure 14h Thoughts of death by living area



### 3.2 Self-harm



#### FINDINGS

Self-harm was assessed using a question that asks whether someone in the last week has been “self-harming or deliberately hurting yourself”. Responses are on a 4-point scale ranging from “not at all” to “nearly every day”. We focused on any response that indicated any self-harming.

Self-harm has remained relatively stable since the easing of lockdown was announced. Consistently across lockdown, self-harm has been reported to be higher amongst younger adults, those with lower household income, and those with a diagnosed mental health condition. It is also slightly higher amongst people living in urban areas.

It should be noted that not all people who self-harm will necessarily report it, so these levels are anticipated to be an under-estimation of actual levels.<sup>5</sup>

<sup>5</sup> Spikes on particular days are likely due to variability in the data as opposed to indications of particularly adverse experiences on certain days.

Figure 16a Self-harm by age groups

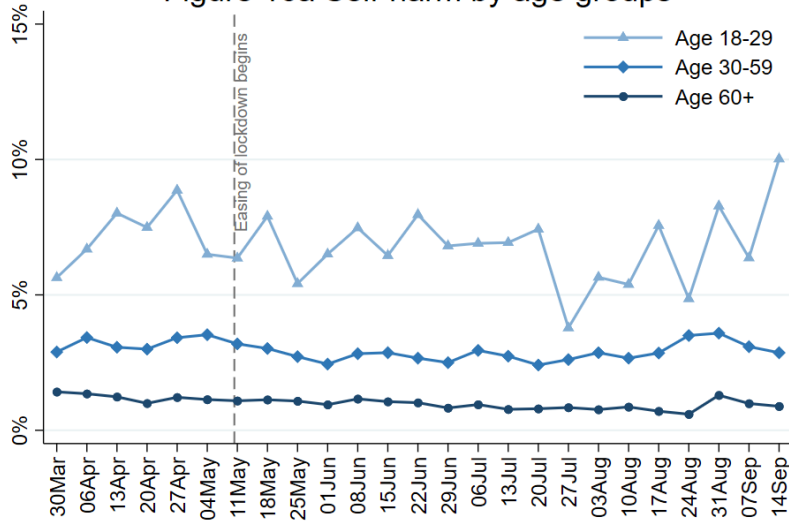


Figure 16b Self-harm by living arrangement

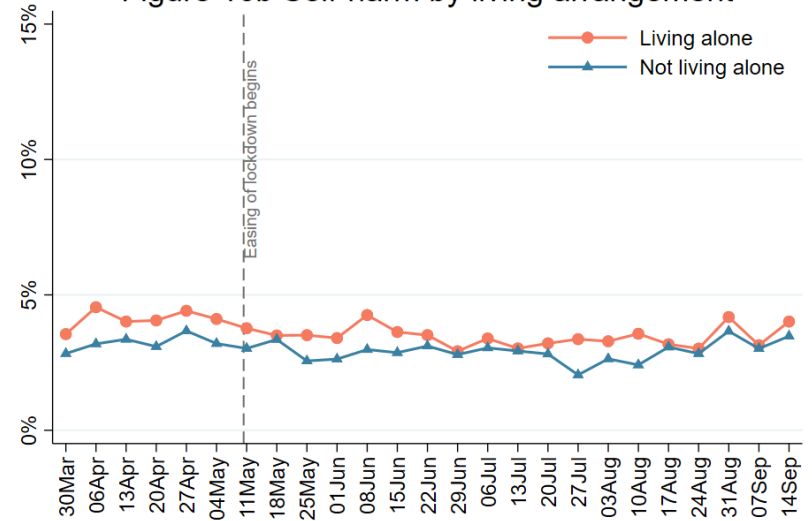


Figure 16c Self-harm by household income

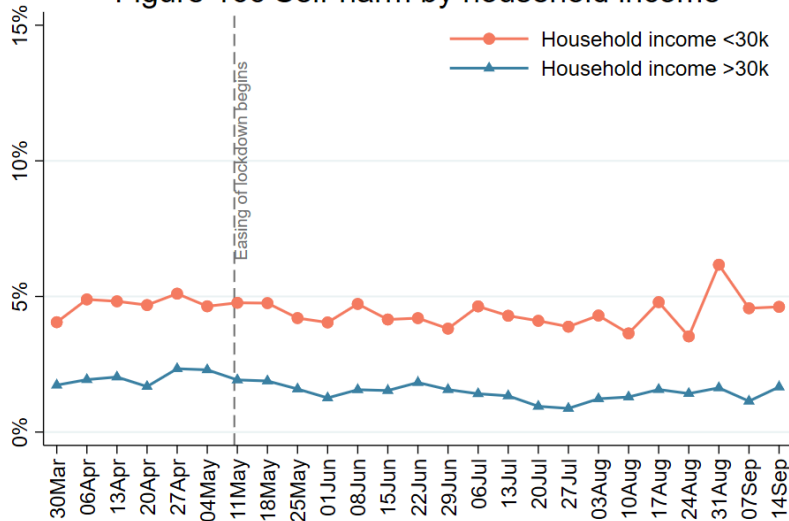


Figure 16d Self-harm by mental health diagnosis

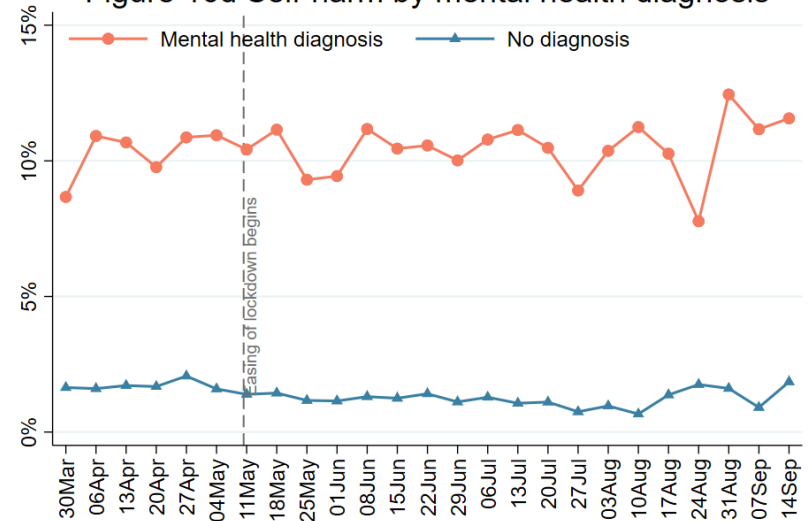


Figure 16e Self-harm by nations

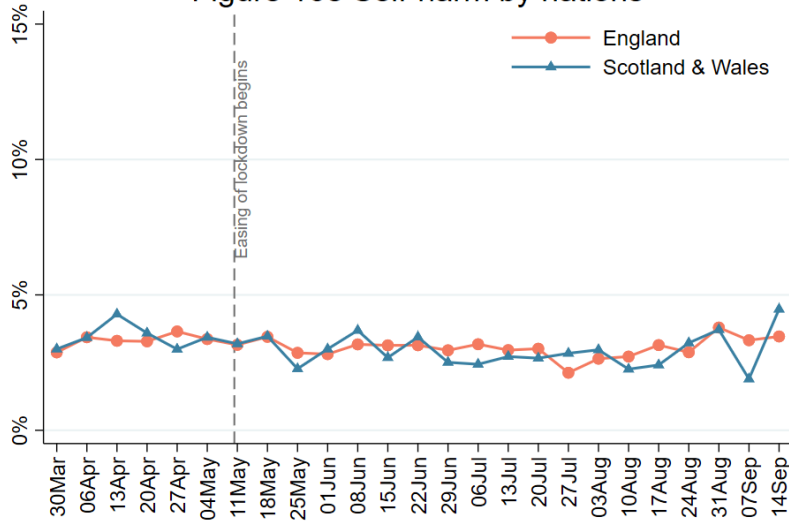


Figure 16f Self-harm by keyworker status

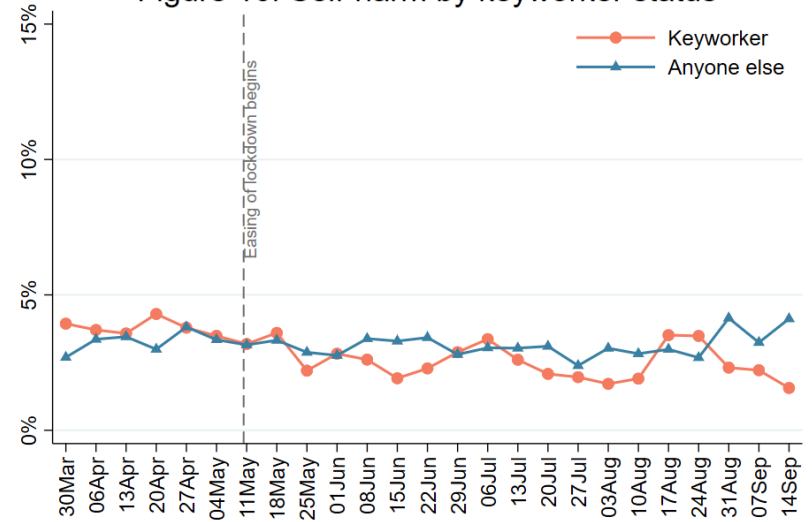


Figure 16g Self-harm by living with children

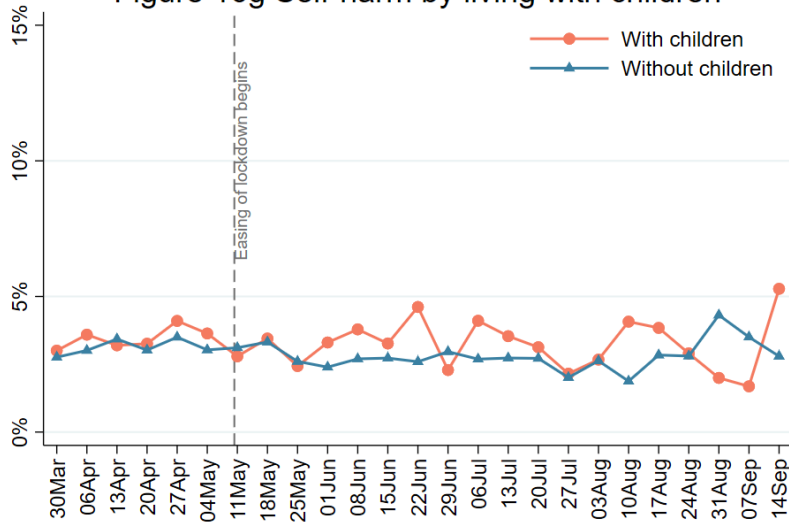
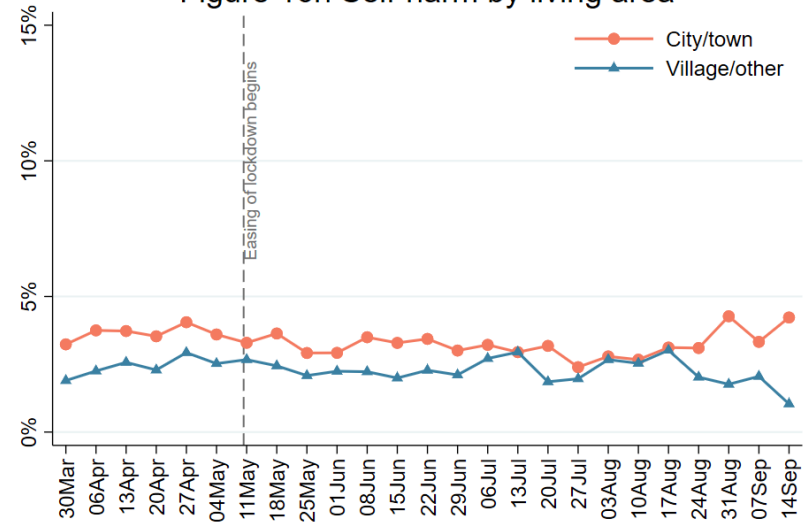
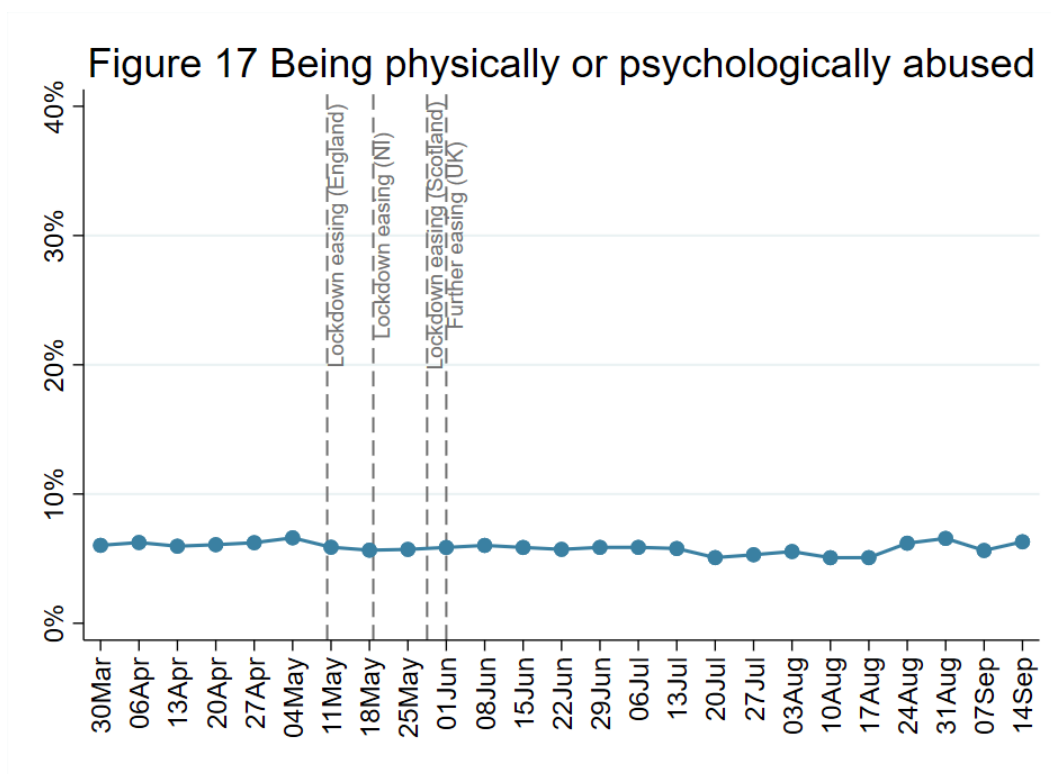


Figure 16h Self-harm by living area



### 3.3 Abuse



#### FINDINGS

Abuse was measured using two questions that ask if someone has experienced in the last week “being physically harmed or hurt by someone else” or “being bullied, controlled, intimidated, or psychologically hurt by someone else”. Responses are on a 4-point scale ranging from “not at all” to “nearly every day”. We focused on any response on either item that indicated any experience of psychological or physical abuse.

Abuse has remained relatively stable since the easing of lockdown was announced. Abuse has been reported to be higher amongst adults under the age of 60, those with lower household income and those with existing mental health conditions. It is also slightly higher in people living with children compared to those living with just other adults.

There appears to be a slight downward trend in reports since the start of lockdown, but this is only very small. Further, it should be noted that not all people who are experiencing abuse will necessarily report it, so these levels are anticipated to be an under-estimation of actual levels.



Figure 18a Abuse by age groups

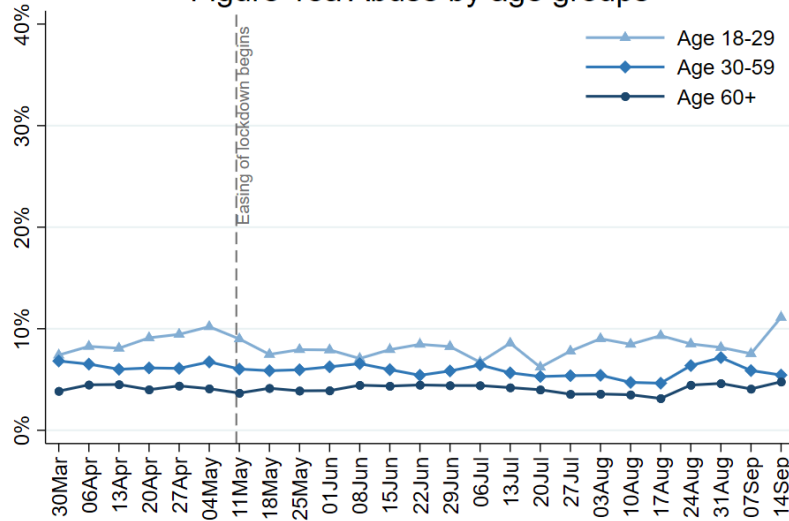


Figure 18b Abuse by living arrangement

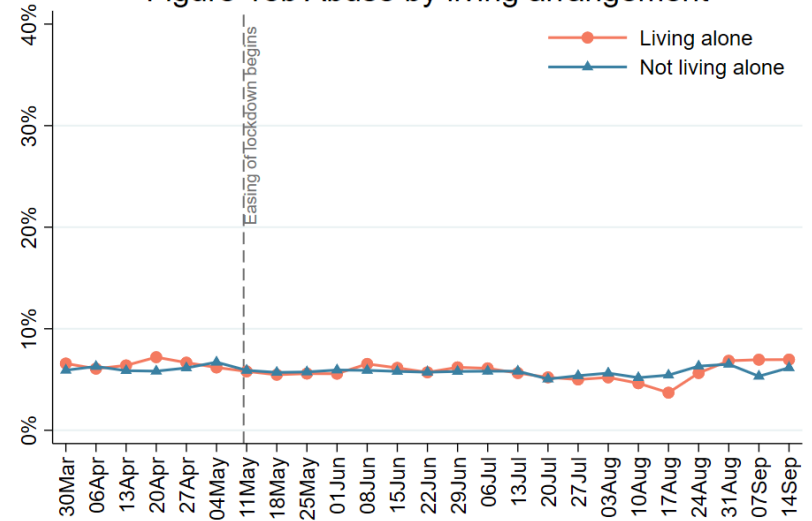


Figure 18c Abuse by household income

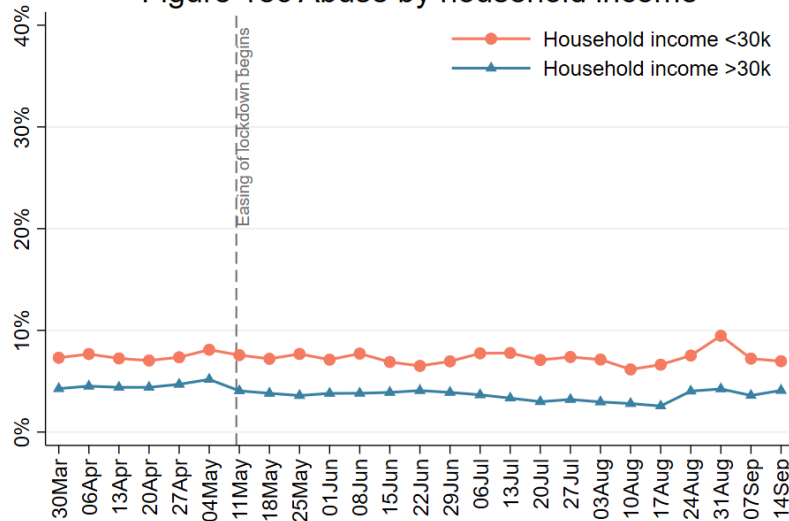


Figure 18d Abuse by mental health diagnosis

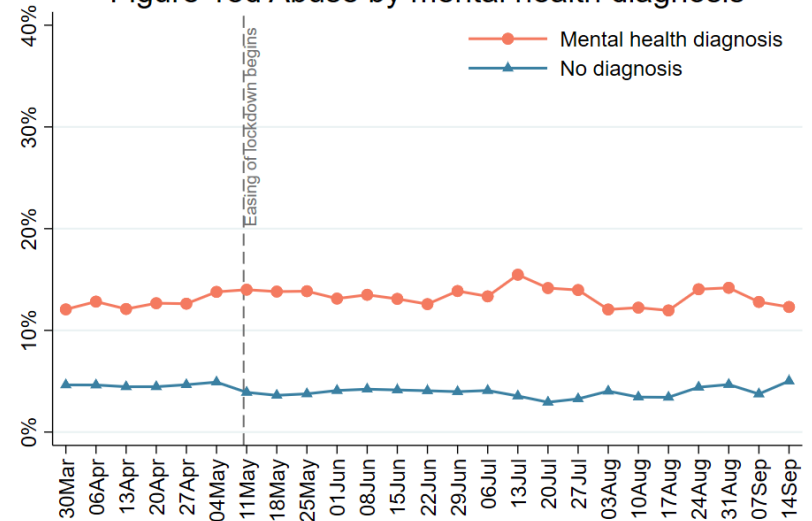


Figure 18e Abuse by nations

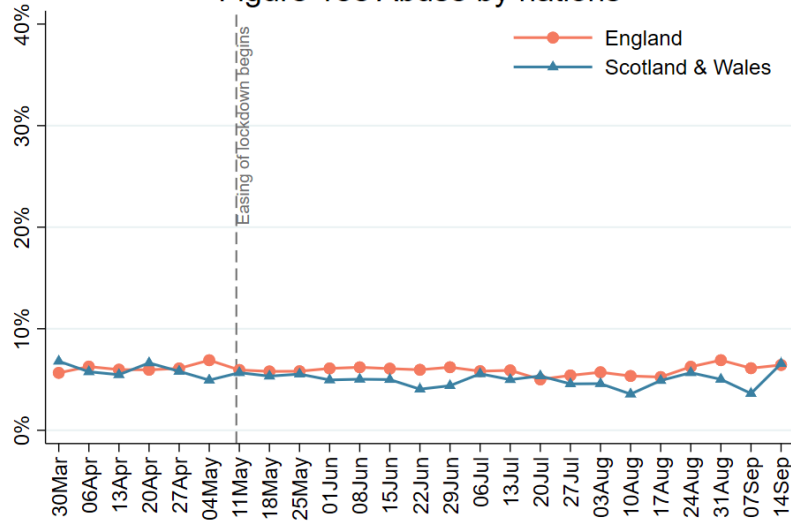


Figure 18f Abuse by keyworker status

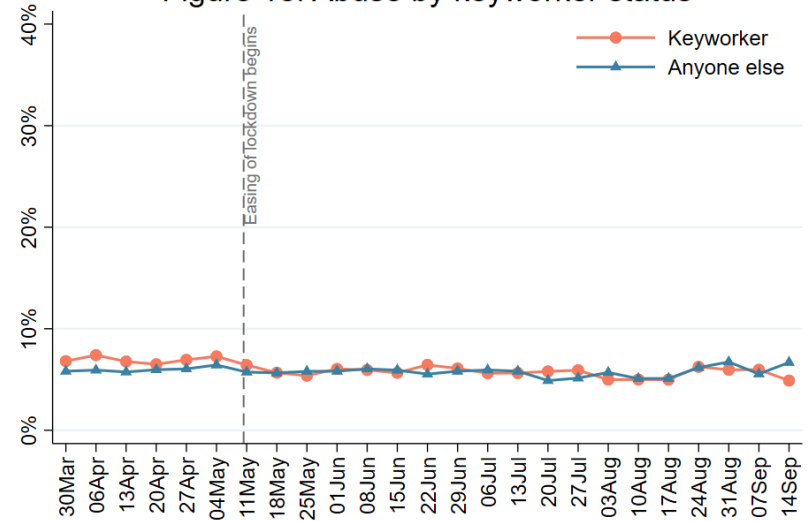


Figure 18g Abuse by living with children

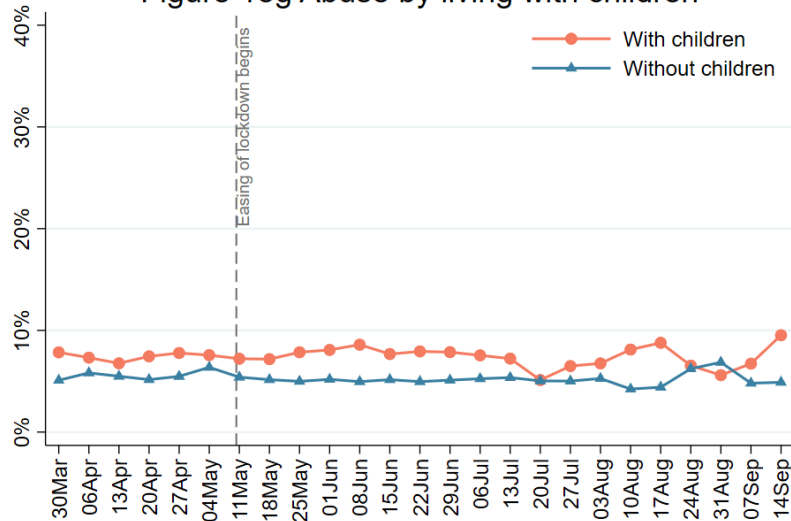
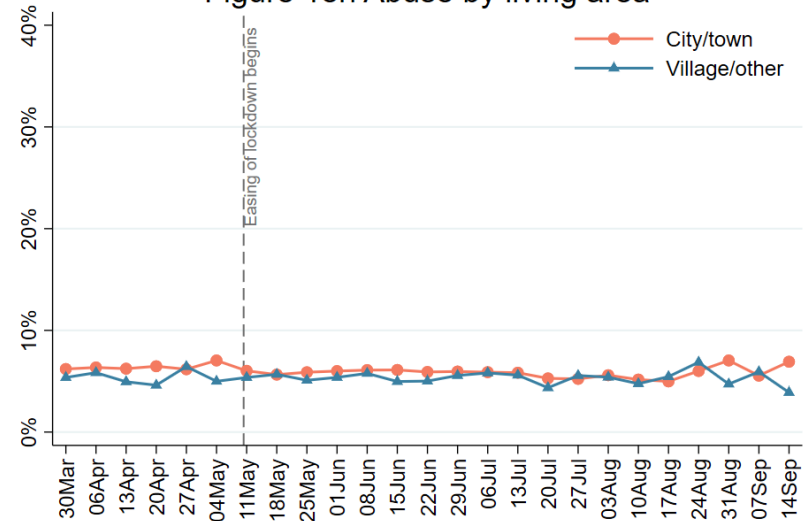
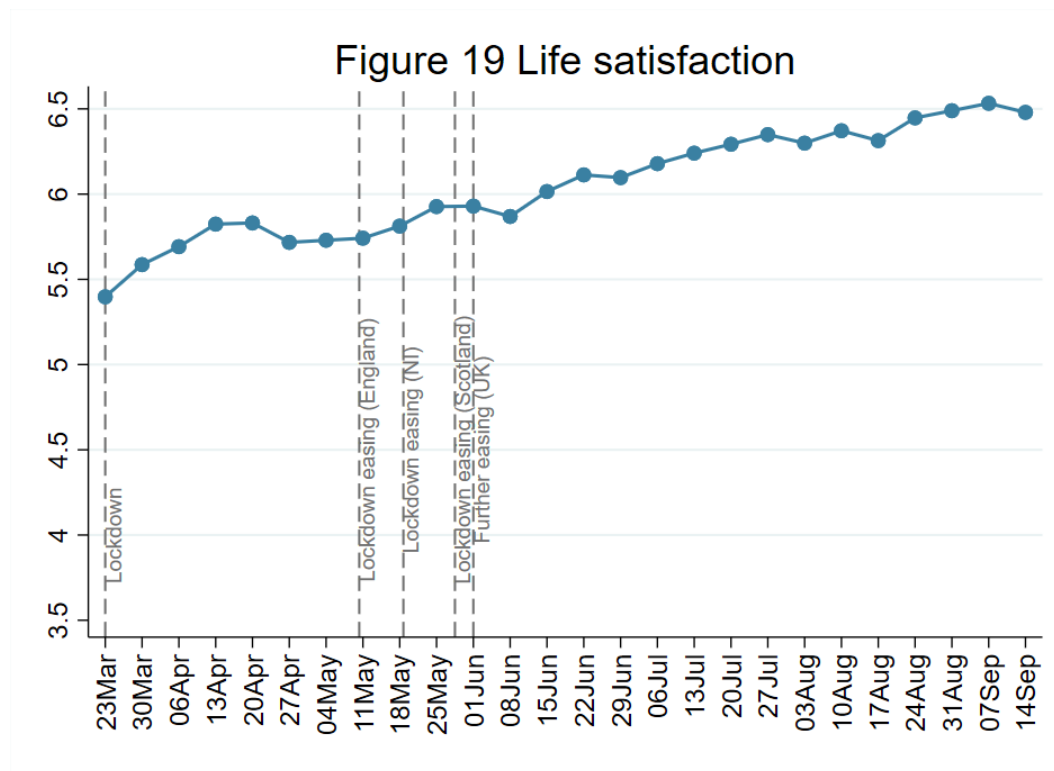


Figure 18h Abuse by living area



## 4. General well-being

### 4.1 Life satisfaction



#### FINDINGS

Respondents were asked to rate their life satisfaction during the past week using the ONS wellbeing scale, which asks respondents about how satisfied they are with their life, using a scale from 0 (not at all) to 10 (completely).

Life satisfaction is similar to levels two weeks ago, but this remains substantially higher than when lockdown came in. There is some indication that it has decreased slightly amongst younger adults in the past week, but this remains to be confirmed with future data. Whilst it was lower amongst people with children during lockdown, this difference has disappeared as lockdown has eased. It remains lowest in younger adults, people living alone, people with lower household income, people with a diagnosed mental health condition, and people living in urban areas (although the gap in differences between urban and rural areas has narrowed as further lockdown easing has taken place). It is similar across UK nations and amongst key workers.

Life satisfaction is still noticeably lower than for the past 12 months (where usual averages are around 7.7), and wellbeing more generally appears to have decreased substantially in the weeks preceding lockdown<sup>6</sup>.

<sup>6</sup> Layard R, Clark A, De Neve J-E, Krekel C, Fancourt D, Hey N, et al. When to release the lockdown: A wellbeing framework for analysing costs and benefits. Centre for Economic Performance, London School of Economics; 2020 Apr. Report No.: 49.

Figure 20a Life satisfaction by age groups

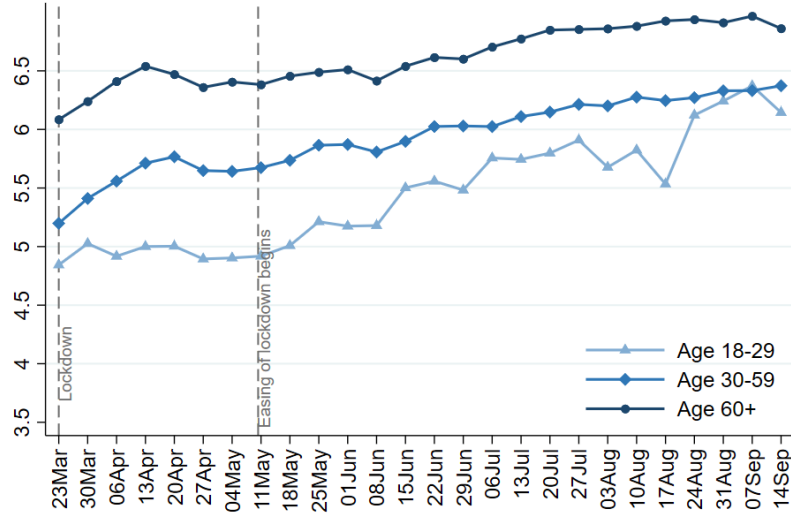


Figure 20b Life satisfaction by living arrangement

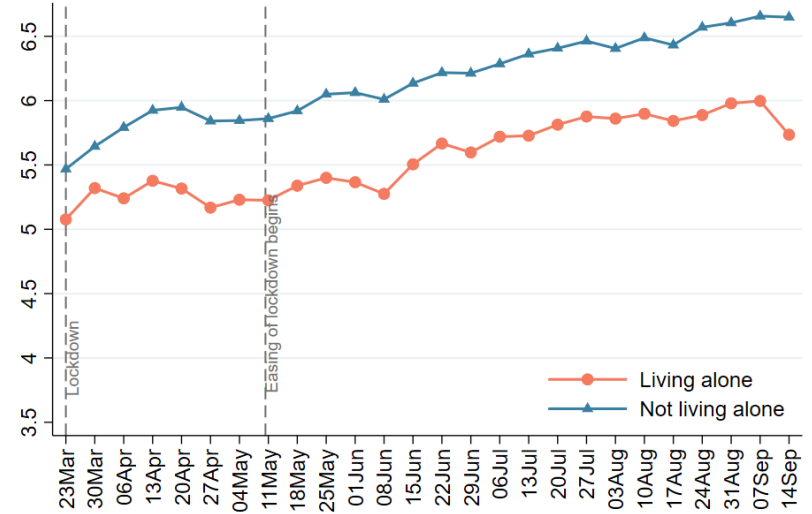


Figure 20c Life satisfaction by household income

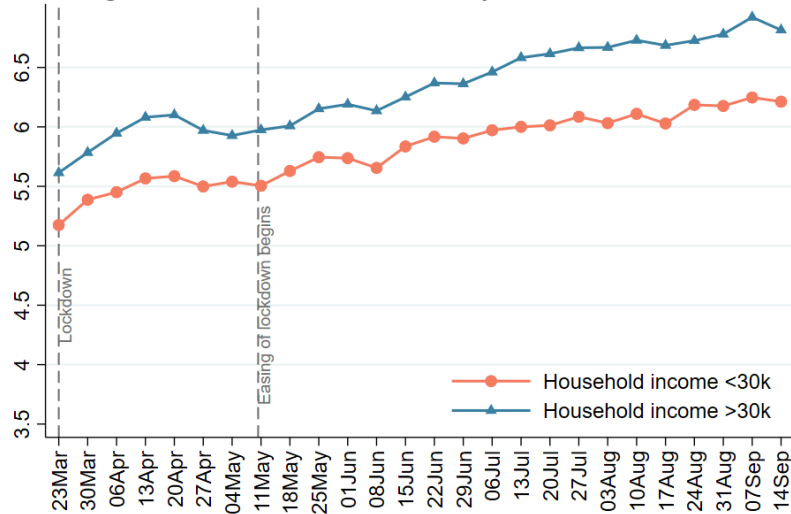


Figure 20d Life satisfaction by mental health diagnosis

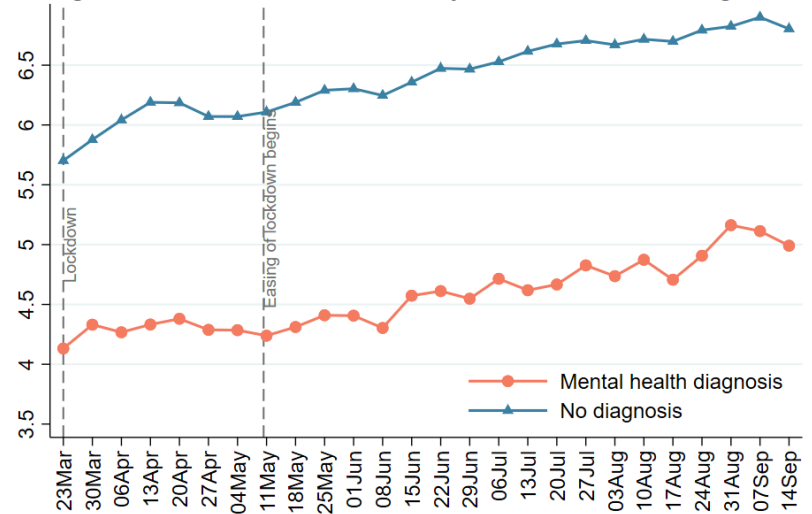


Figure 20e Life satisfaction by nations

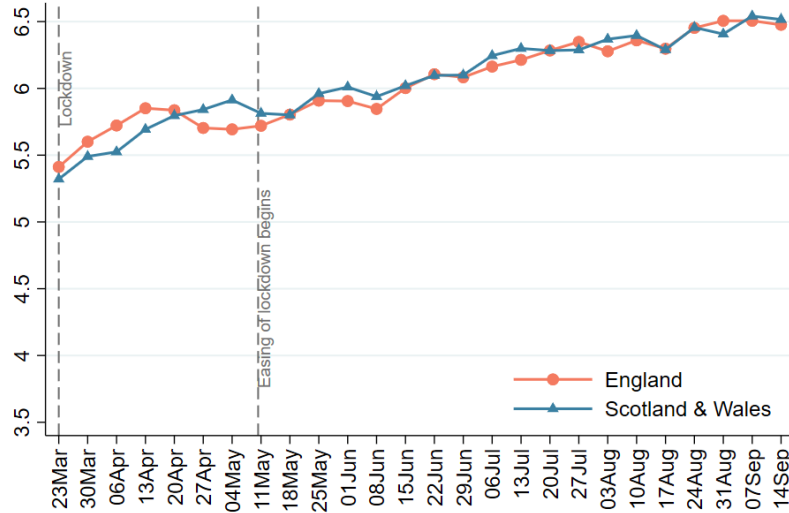


Figure 20f Life satisfaction by keyworker status

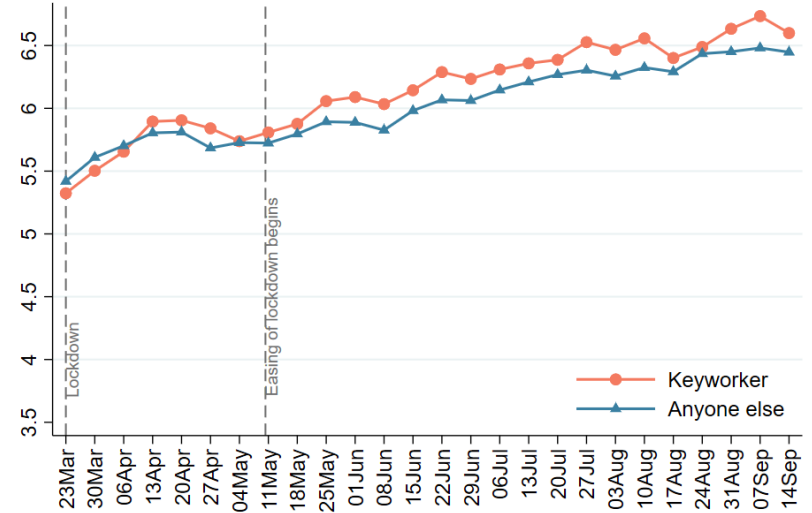


Figure 20g Life satisfaction by living with children

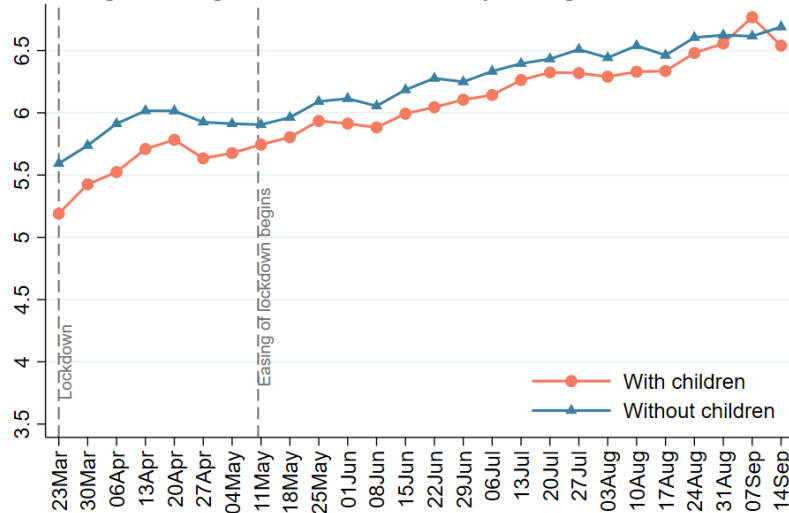
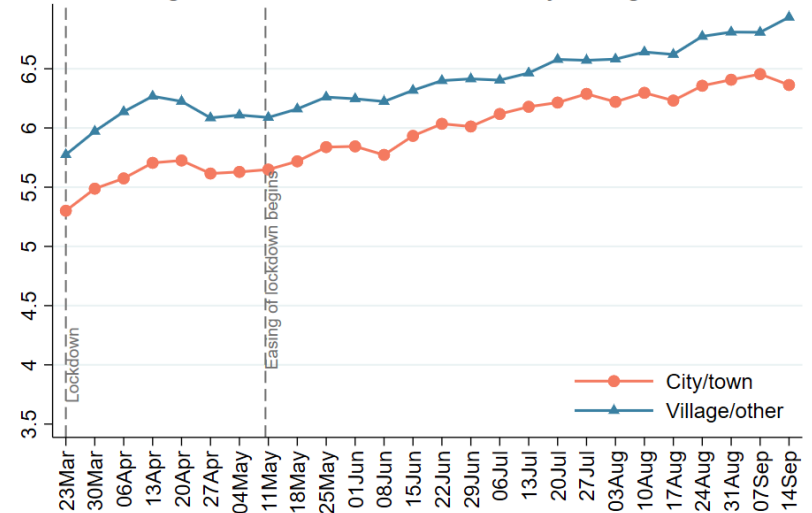
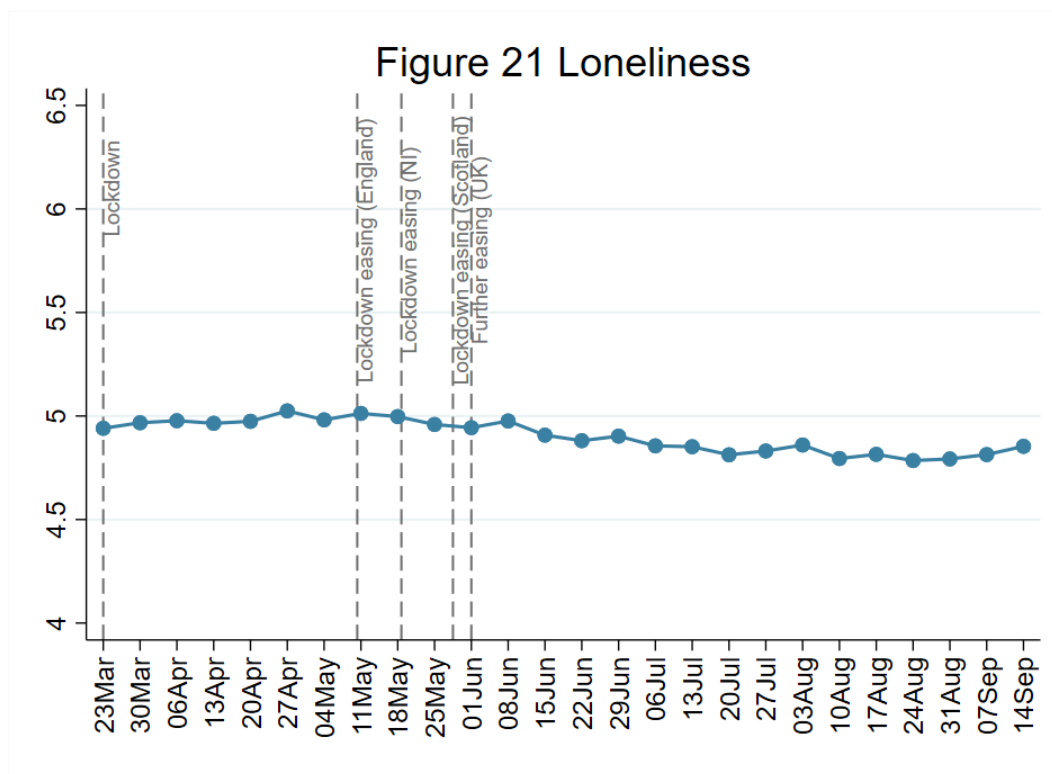


Figure 20h Life satisfaction by living area



## 4.2 Loneliness



### FINDINGS

Respondents were asked about levels of loneliness using the 3-item UCLA-3 Loneliness, a short form of the Revised UCLA Loneliness Scale (UCLA-R). Each item is rated with a 3-point rating scale, ranging from “never” to “always”, with higher scores indicating greater loneliness.

Loneliness levels have been stable in the past fortnight, but are noticeably lower than 22 weeks ago. Loneliness levels are still highest in younger adults, people living alone, people with lower household income, people living with children, people living in urban areas, and people with a diagnosed mental health condition.

Figure 22a Loneliness by age groups

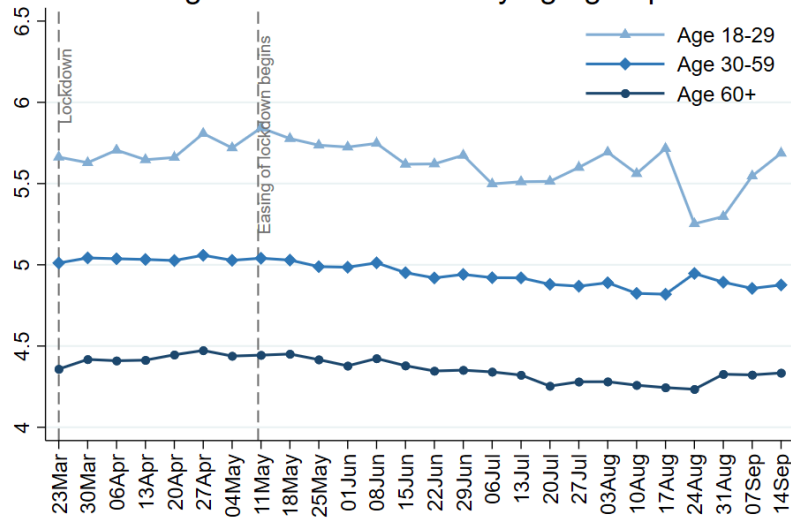


Figure 22b Loneliness by living arrangement

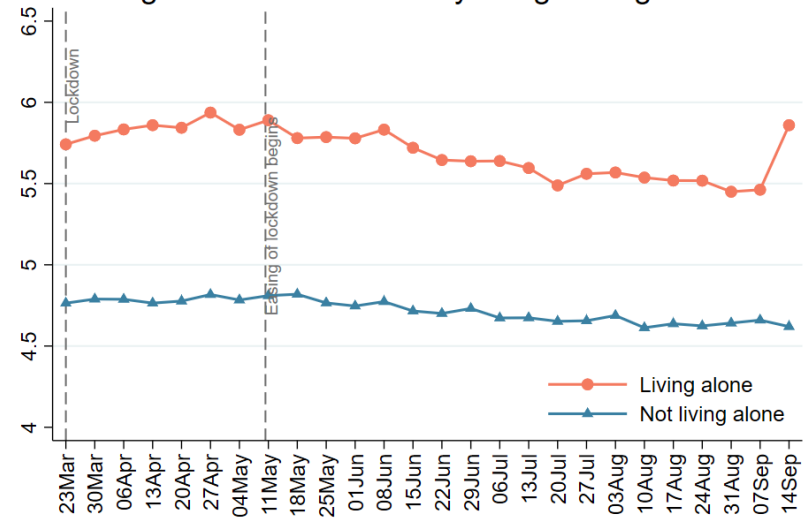


Figure 22c Loneliness by household income

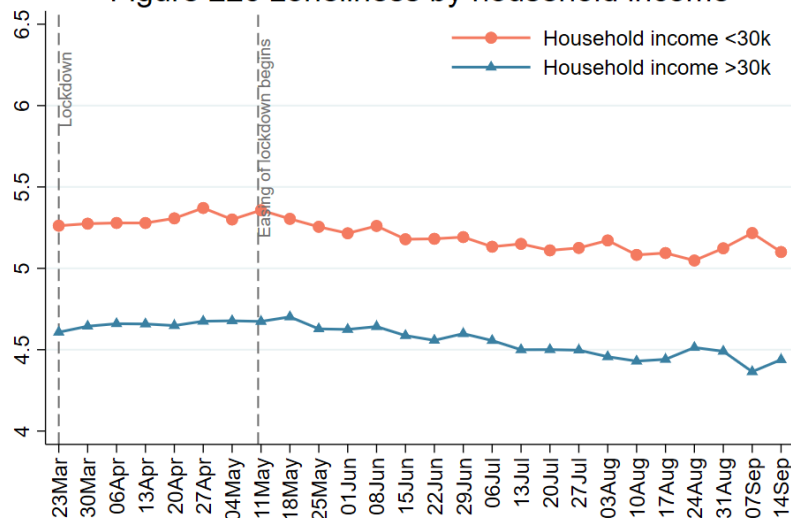


Figure 22d Loneliness by mental health diagnosis

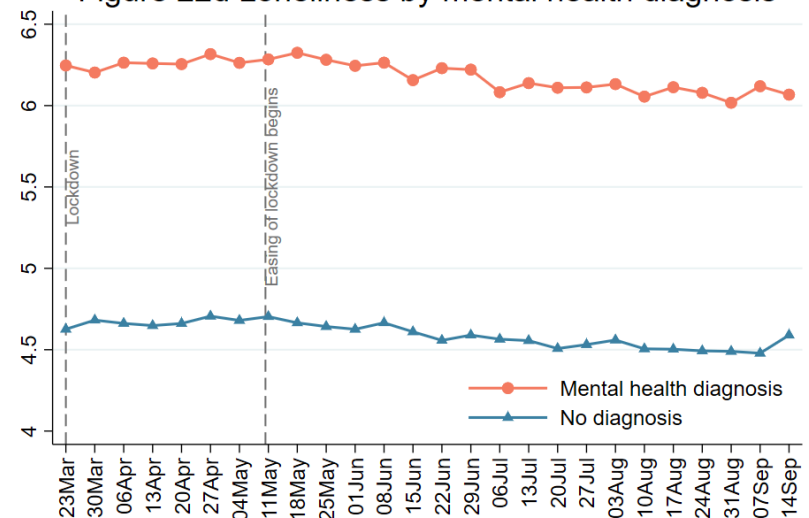


Figure 22e Loneliness by nations

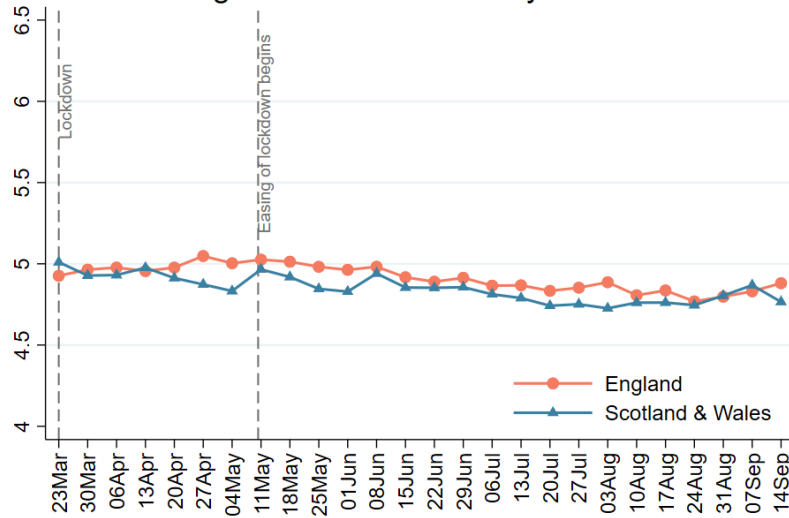


Figure 22f Loneliness by keyworker status

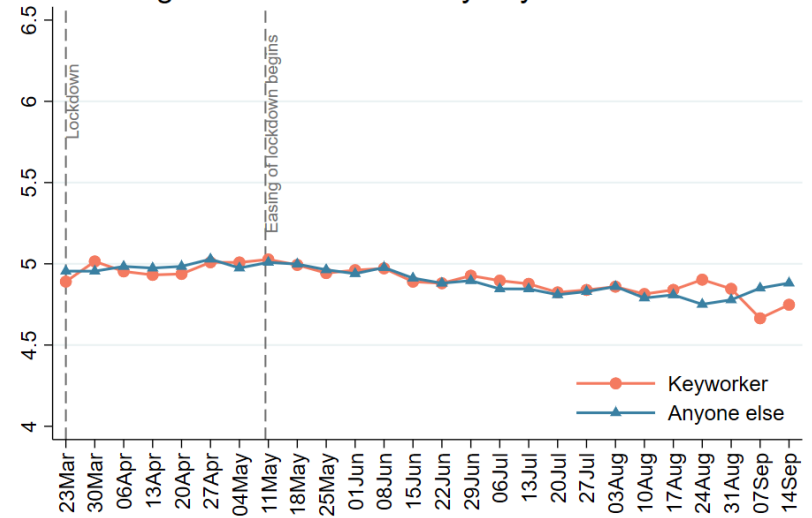


Figure 22g Loneliness by living with children

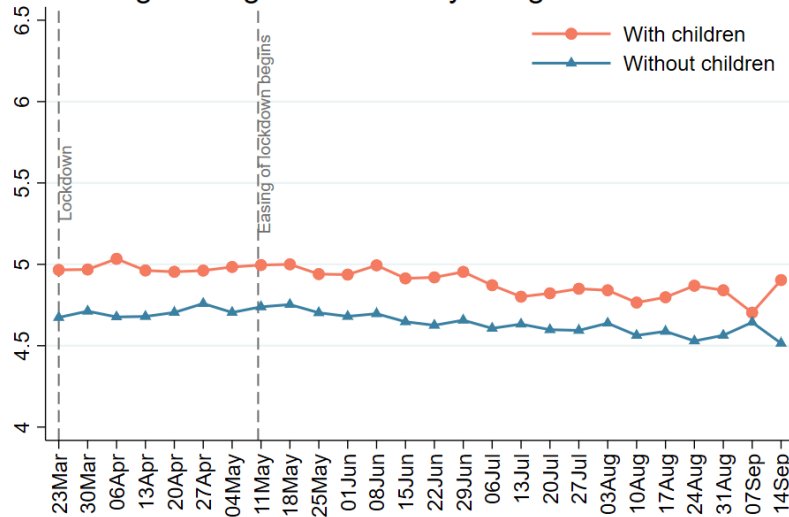
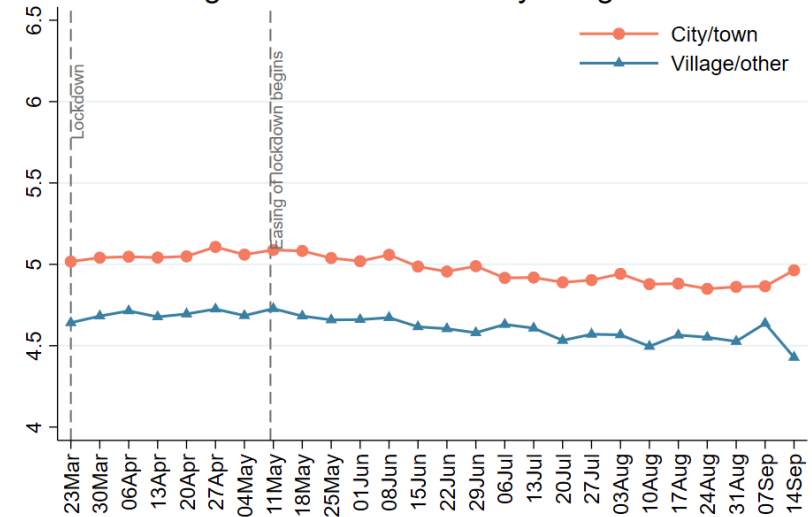
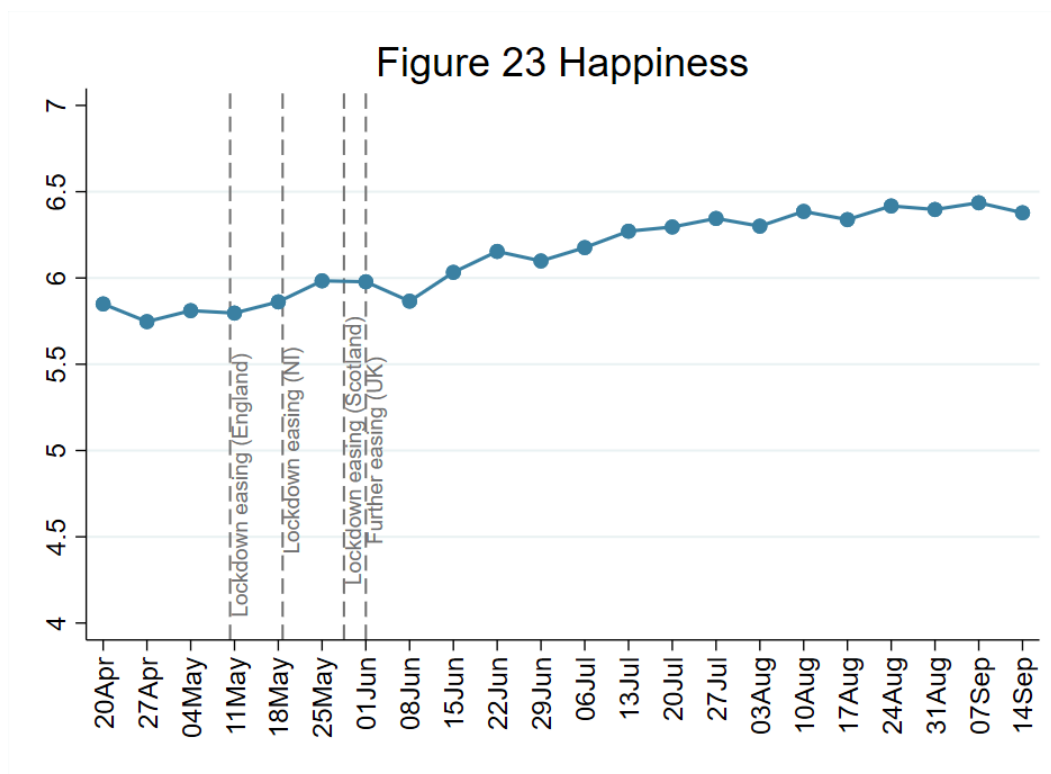


Figure 22h Loneliness by living area





### 4.3 Happiness



#### FINDINGS

Respondents were asked to rate to what extent they felt happy during the past week using the Office for National Statistics wellbeing scale on a scale from 0 (not at all) to 10 (completely). Happiness ratings are only available from 21<sup>st</sup> April onwards.

Happiness levels have remained stable in the past fortnight, but are still substantially higher than early in lockdown. There is some indication that happiness has decreased slightly amongst younger adults in the past two weeks, but this remains to be confirmed with future data. Happiness levels remain lowest amongst younger adults, those living alone, those with lower household income, people with a diagnosed mental health condition, and people living in urban areas.

Figure 24a Happiness by age groups

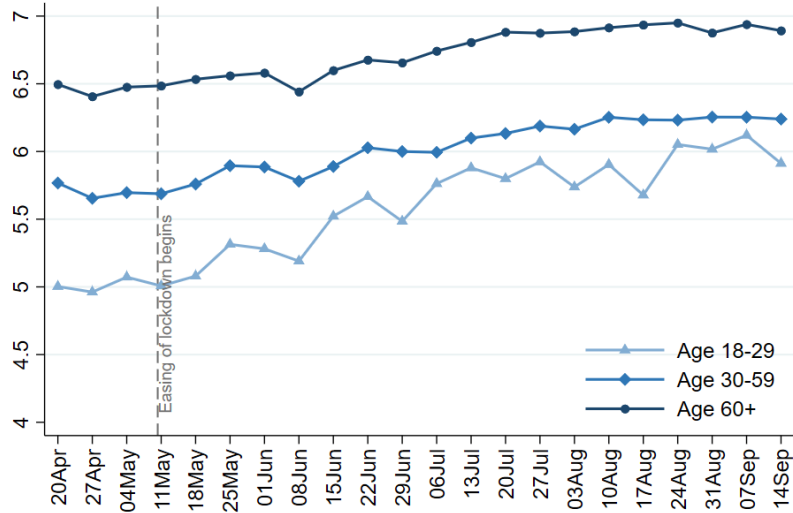


Figure 24b Happiness by living arrangement

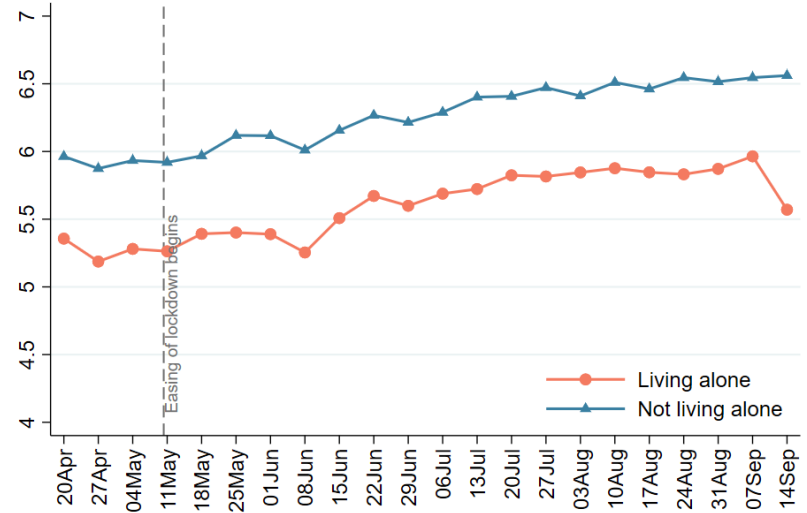


Figure 24c Happiness by household income

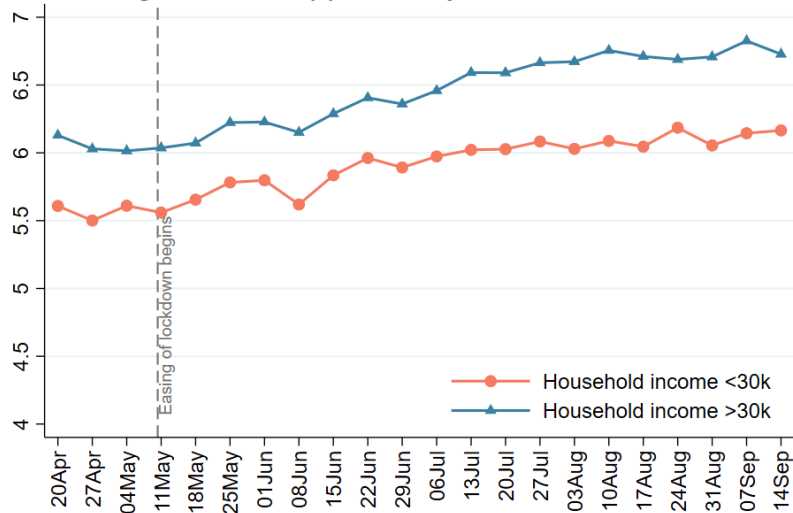


Figure 24d Happiness by mental health

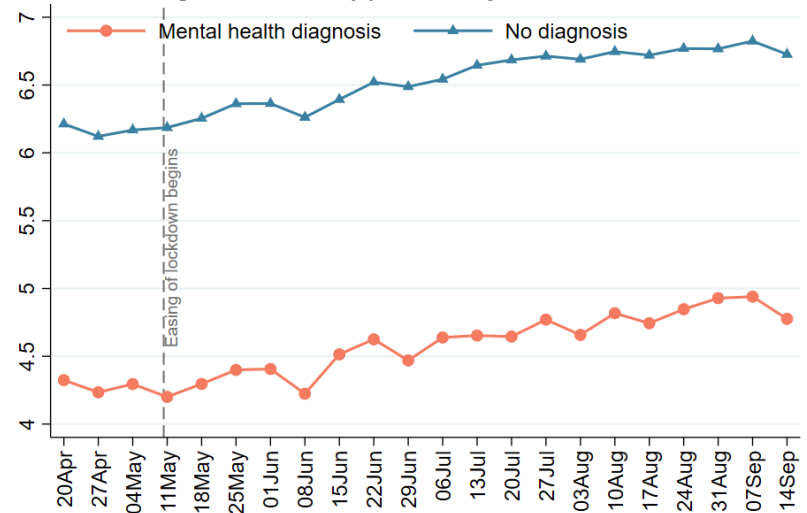


Figure 24e Happiness by nations

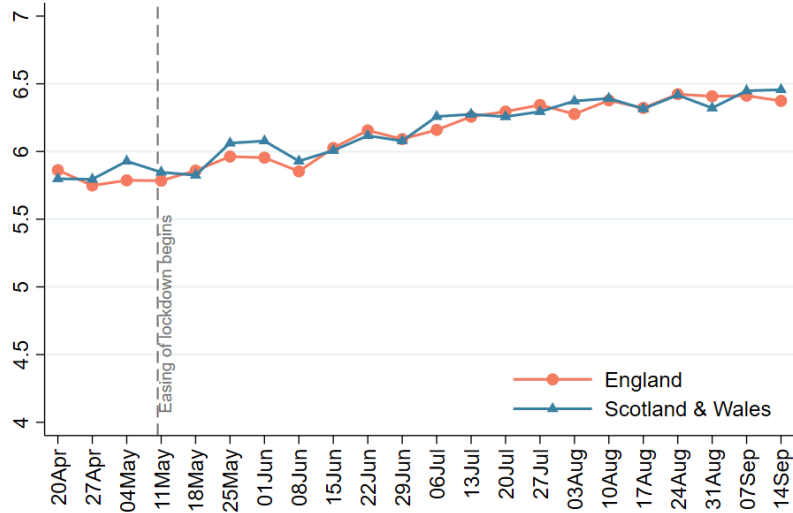


Figure 24f Happiness by keyworker status

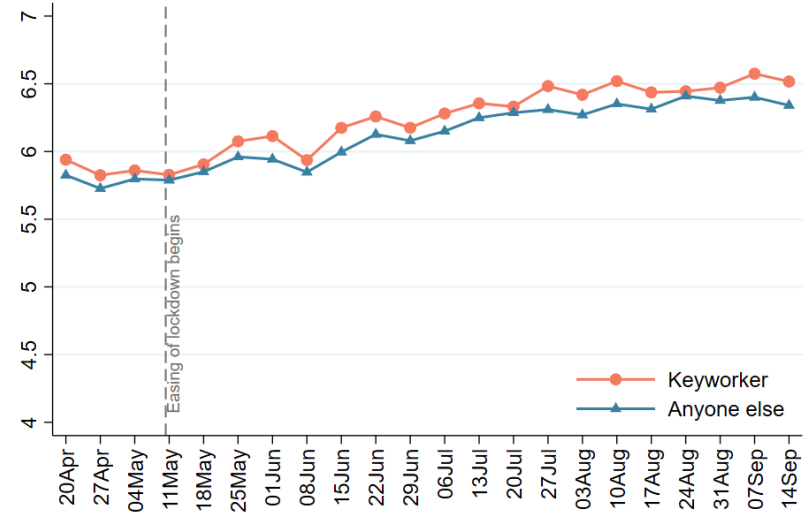


Figure 24g Happiness by living with children

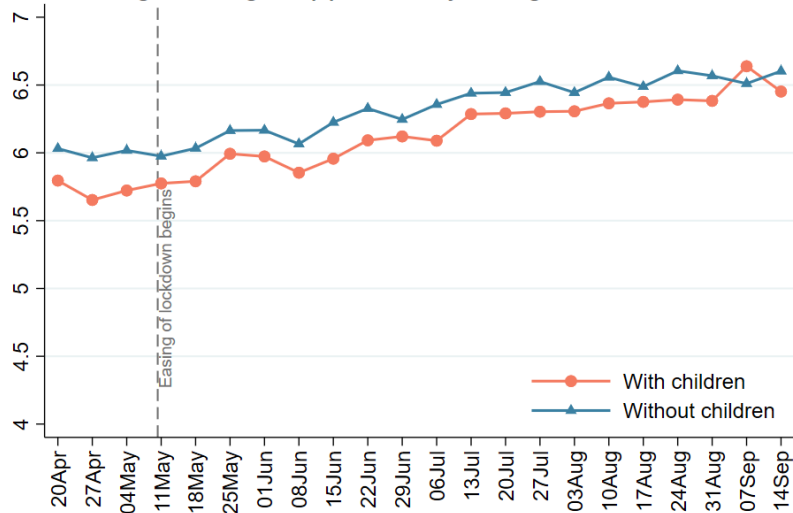
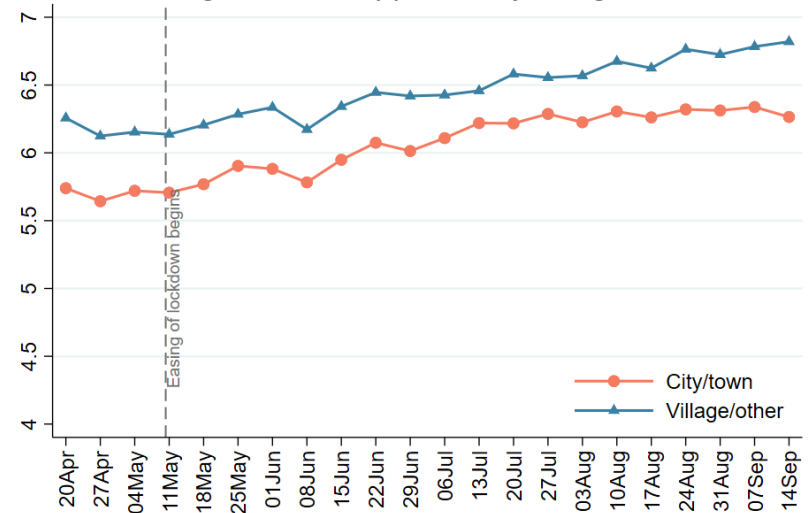


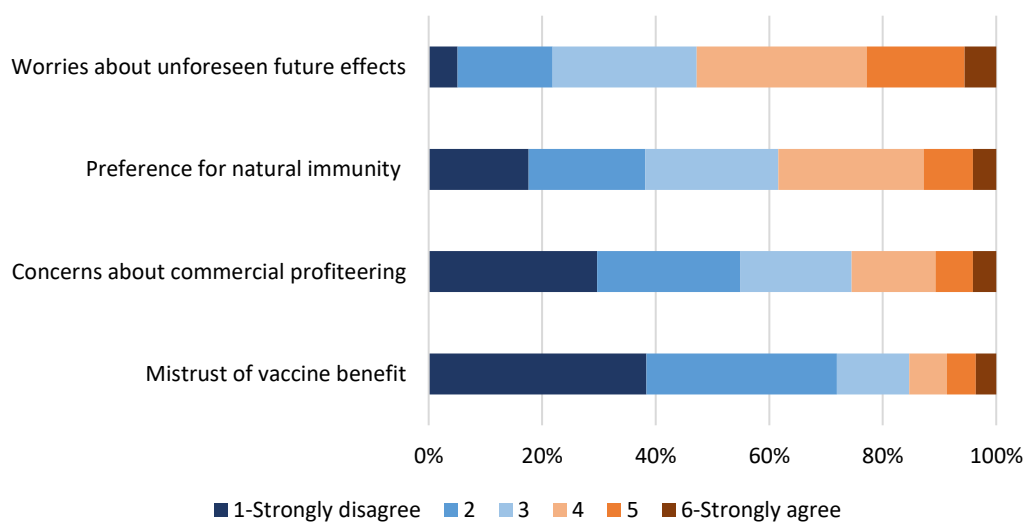
Figure 24h Happiness by living area



## 5. Vaccination

### 5.1 Vaccine attitudes

Figure 25 Vaccine attitudes



#### FINDINGS

We asked participants about their attitudes towards vaccines (focusing on vaccines in general rather than a Covid-19 vaccine specifically). Attitudes were measured using the 12-item Vaccination Attitudes Examination (VAX) Scale, with responses ranging from 1 “strongly agree” to 6 “strongly disagree.”<sup>7</sup> The scale contains four subscales covering the extent to which people agree or disagree with statements relating to mistrust of vaccine benefits, worries about unforeseen future effects, concerns about commercial profiteering, and preference for natural immunity. For each subscale, the average score was taken and rounded to the nearest whole number for descriptive reporting. More sophisticated analyses are currently underway.

47% of adults reported overall disagreeing that vaccines cause unforeseen effects (ranging from 5% strongly disagreeing, to 17% moderately disagreeing, to 25% slightly disagreeing). But 30% slightly agreed to statements that there could be unforeseen problems for adults or children in the future not yet discovered, 17% moderately agreed, and 6% strongly agreed.

62% of adults reported overall disagreeing that natural immunity is better than immunity from vaccines (ranging from 18% strongly disagreeing, to 21% moderately disagreeing, to 23% slightly disagreeing). But 26% slightly agreed to statements that natural immunity is safer and lasts longer, 9% moderately agreed, and 4% strongly agreed.

75% of adults reported overall disagreeing that vaccines are used for commercial profiteering (ranging from 30% strongly disagreeing, to 25% moderately disagreeing, to 20% slightly disagreeing). But 15% slightly agreed to statements that vaccination programmes are a con from pharmaceutical companies and authorities promote vaccination for financial gain, 7% moderately agreed, and 4% strongly agreed.

85% of adults reported overall agreeing that vaccines work (ranging from 38% strongly trusting vaccines, to 34% moderately trusting them, to 13% still showing trust on balance). But 7% reported not feeling completely sure that vaccines work and provide protection, 5% expressed more mistrust, and 4% strongly reported mistrusting vaccines.

Older adults were more likely to display worries about unforeseen effects, preferences for natural immunity, concerns about commercial profiteering, and mistrust of vaccine benefits, as were people from lower-income households. But there was no evidence of any differences by gender.

<sup>7</sup> Martin LR, Petrie KJ. Understanding the Dimensions of Anti-Vaccination Attitudes: the Vaccination Attitudes Examination (VAX) Scale. *ann behav med* 2017;51(5):652–60.

Figure 26a Vaccine attitudes amongst younger adults (aged 18-29)

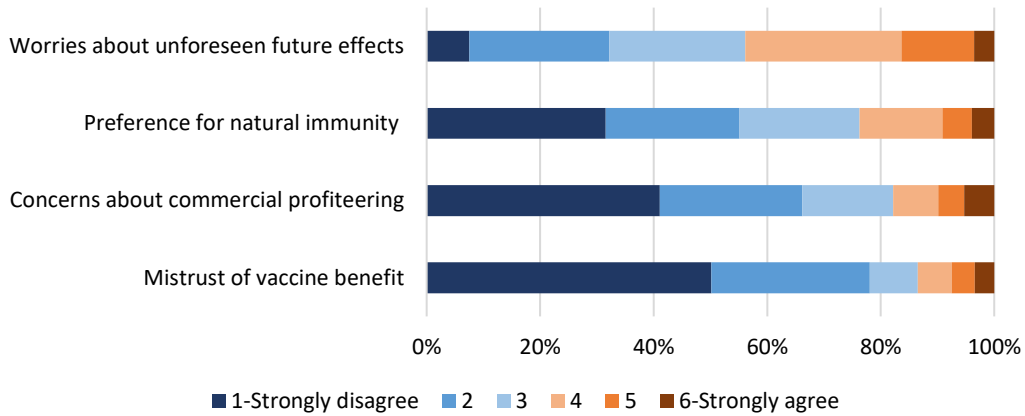


Figure 26b Vaccine attitudes amongst adults (aged 30-59)

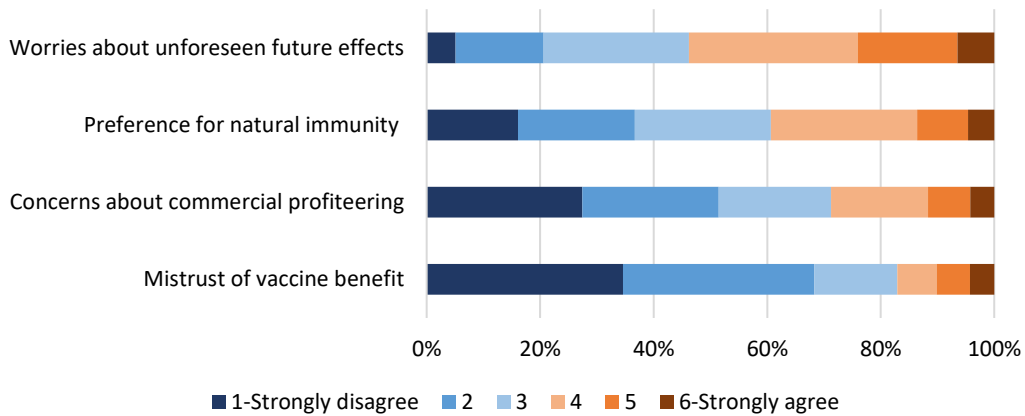


Figure 26c Vaccine attitudes amongst older adults (aged 60+)

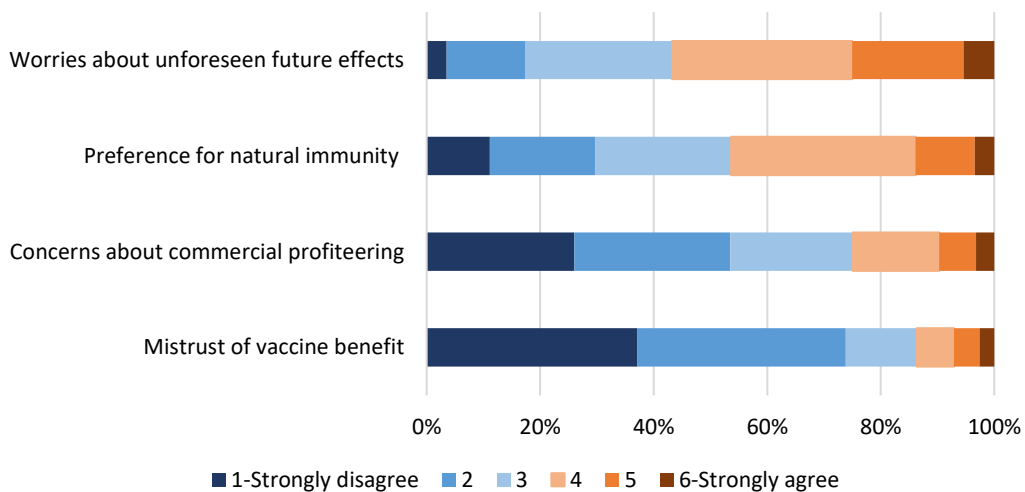


Figure 26d Vaccine attitudes amongst females

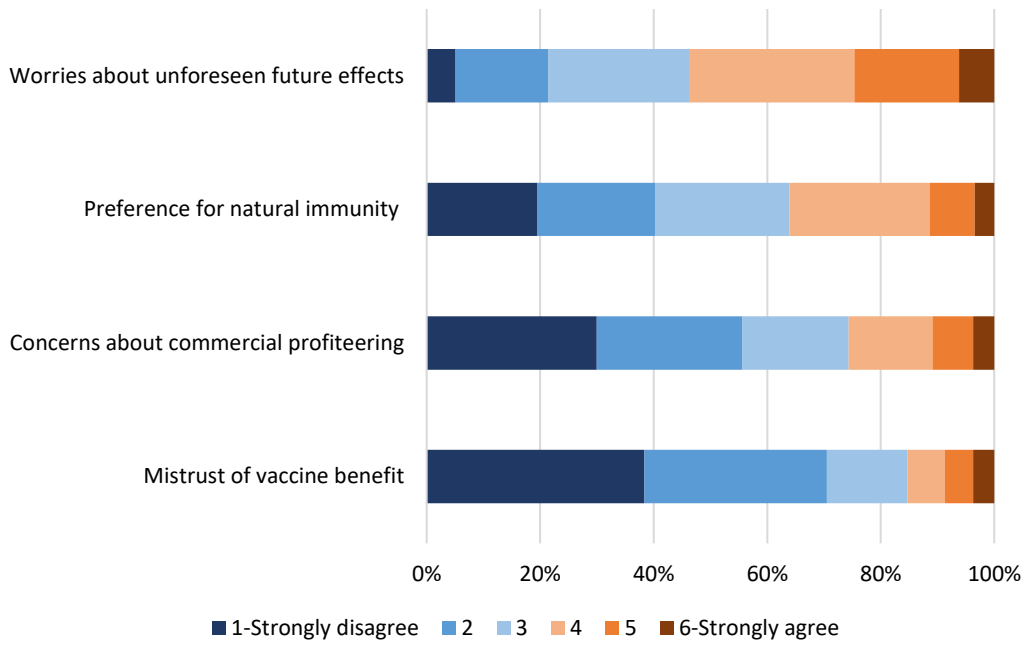


Figure 26e Vaccine attitudes amongst males

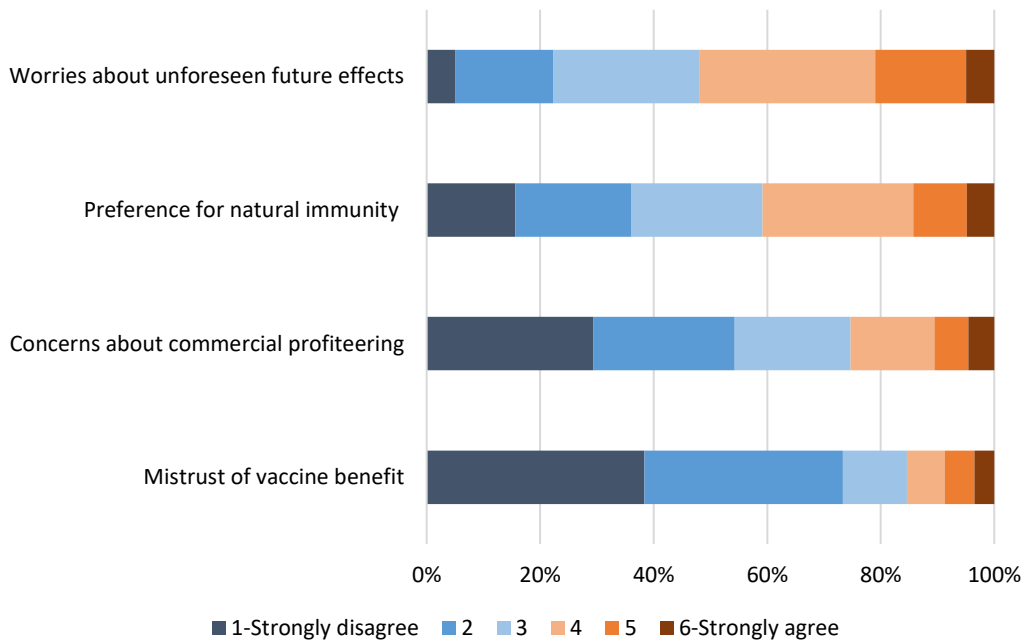


Figure 26f Vaccine attitudes amongst people with lower household income

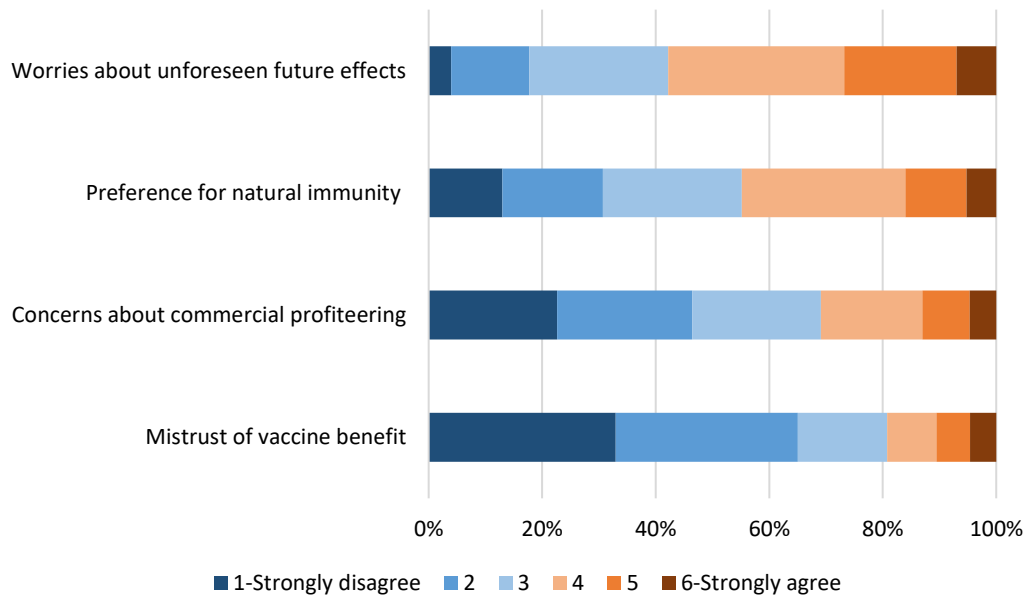
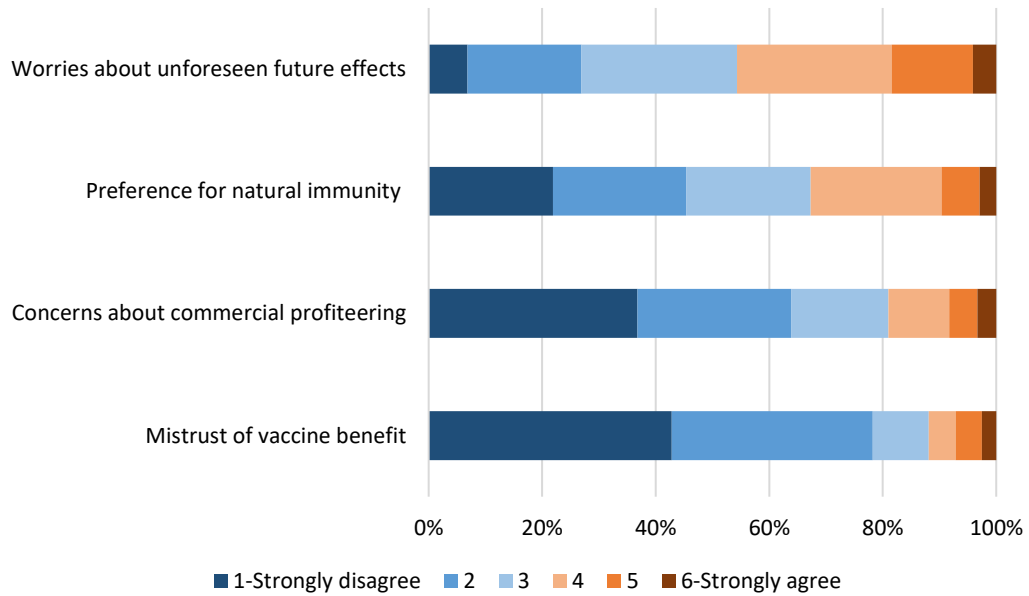
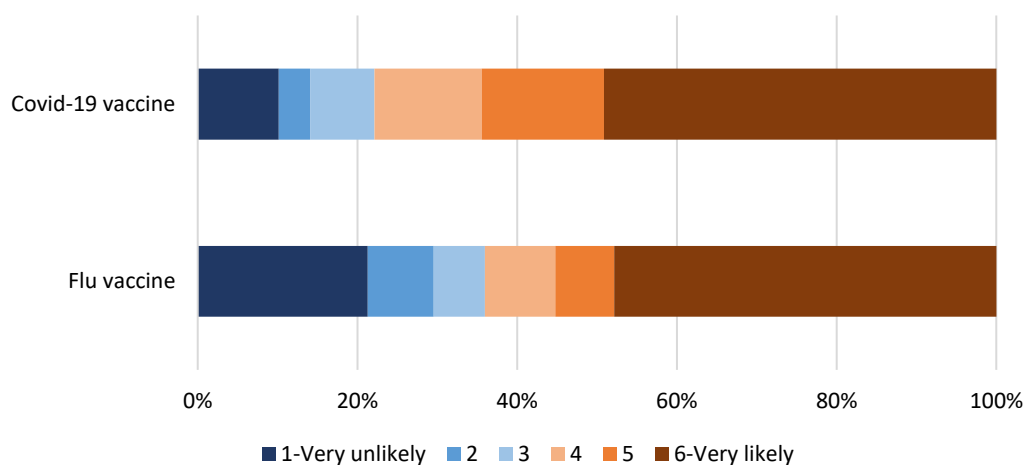


Figure 26g Vaccine attitudes amongst people with higher household income



## 5.2 Vaccine intentions

Figure 27 Vaccine intentions



### FINDINGS

Participants were asked about their intent to vaccinate either against the flu or against Covid-19 once a vaccine becomes available. The two questions asked “How likely to do you think you are to get a flu vaccine this year?” and “How likely to do you think you are to get a Covid-19 vaccine when one is approved?” Response options ranged from “1- very unlikely” to “6 – very likely”.

On balance, 78% of adults felt they were likely to get a Covid-19 vaccine when one is approved, with 49% saying they were very likely, 15% moderately likely and 13% on balance more likely than unlikely. But 8% felt they were on balance more unlikely than likely to get the vaccine, 4% felt they were moderately unlikely to get it, and 10% very unlikely.

People felt they were more likely to get a Covid-19 vaccine than a flu vaccine, with just 64% reporting that they would be likely to get a flu vaccine this winter. A similar proportion of people reported being very likely to get the flu vaccine (48%) to the Covid-19 vaccine, but twice as many people (21%) felt they were very unlikely to get the flu vaccine than the Covid-19 vaccine. Nevertheless, these figures are a potential increase on behaviours in the same sample of adults last year, when just 50% of the sample said they had had a flu vaccine.

Intending to get the flu vaccine was heavily patterned by age, with older adults nearly three times more likely to report strongly on intentions to get a flu vaccine (73% of over 60 year olds very likely vs 25% of 18-29 year olds; the same kind of patterning usually exhibited in the UK for the flu vaccine). However, there was not such a clear patterning by age for intention towards the Covid-19 vaccine, with adults aged 18-59 showing similar intentions (45-46%) and older adults only showing slightly higher levels (58%). Moreover, older adults felt they were more likely to get the flu vaccine (73%) than a Covid-19 vaccine (58%). But younger adults felt they were more likely to get the Covid-19 vaccine (46% vs 25% getting the flu vaccine).

Further, adults in lower income households were slightly more likely to show strong intentions towards getting the flu vaccine (51% under £30,000 vs 46% over £30,000), but less likely to show strong intentions towards a potential Covid-19 vaccine (46% under £30,000 vs 53% over £30,000). Keyworkers and people with children showed slightly lower likelihood of strong intentions towards getting either vaccine, which could be indicative of a belief of higher natural immunity through prior exposure. People in Scotland and Wales also showed slightly higher intentions than people in England (50% vs 47% for flu vaccination and 53% vs 49% for Covid-19 vaccination). There was little difference in intentions to get a Covid-19 vaccine based on living arrangement, presence of a diagnosed mental health condition, or geographical location.



Figure 28a Flu vaccine intentions by age groups

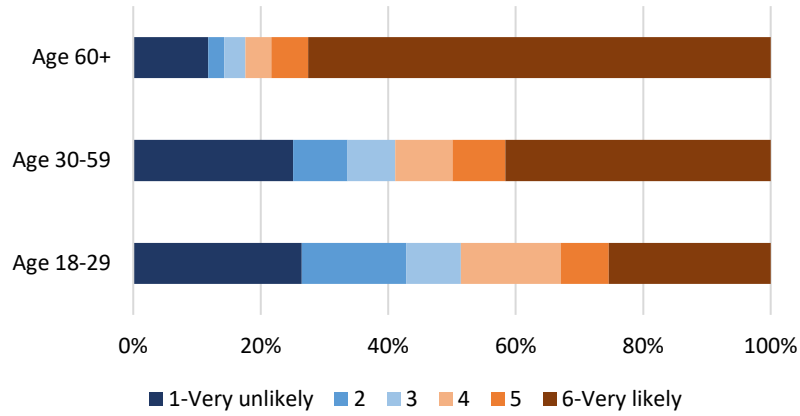


Figure 28b Flu vaccine intentions by living arrangement

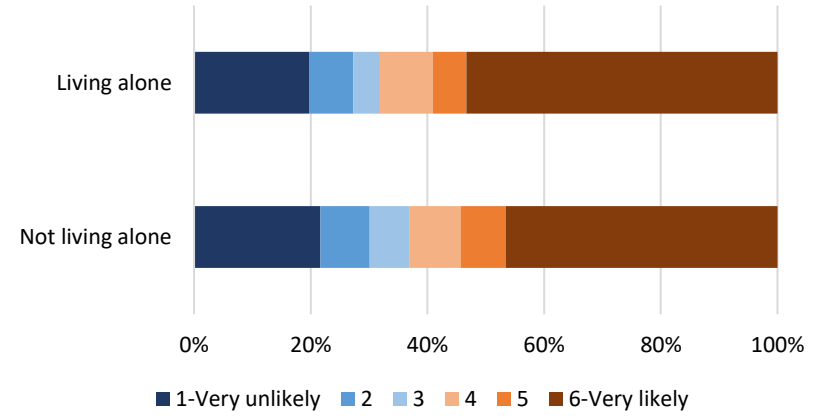


Figure 28c Flu vaccine intentions by household income

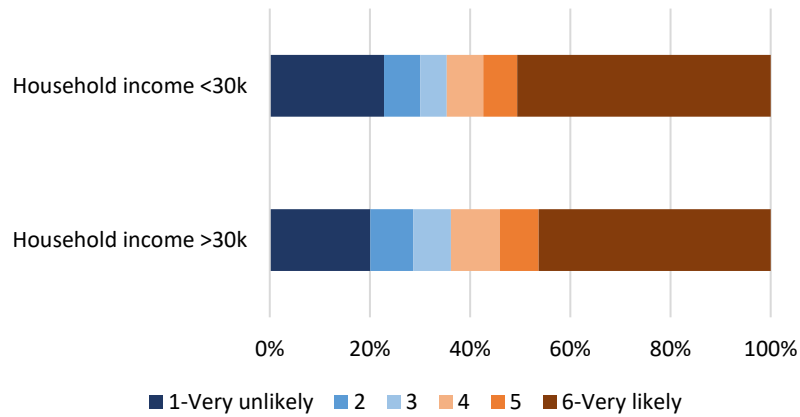


Figure 28d Flu vaccine intentions by mental health diagnosis

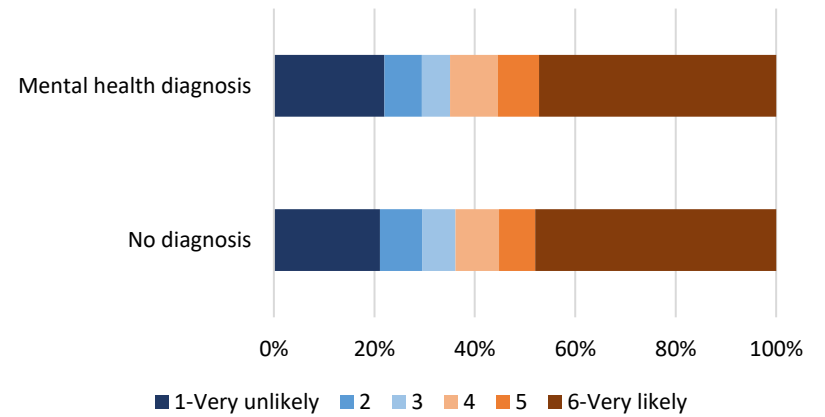


Figure 28e Flu vaccine intentions by nations

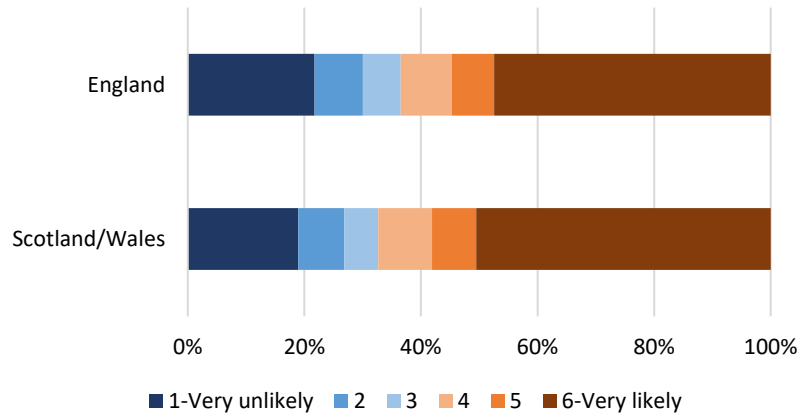


Figure 28f Flu vaccine intentions by keyworker status

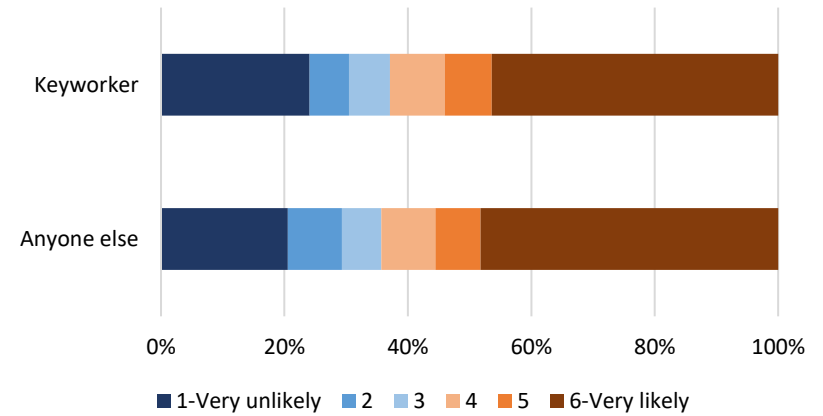


Figure 28g Flu vaccine intentions by living with children

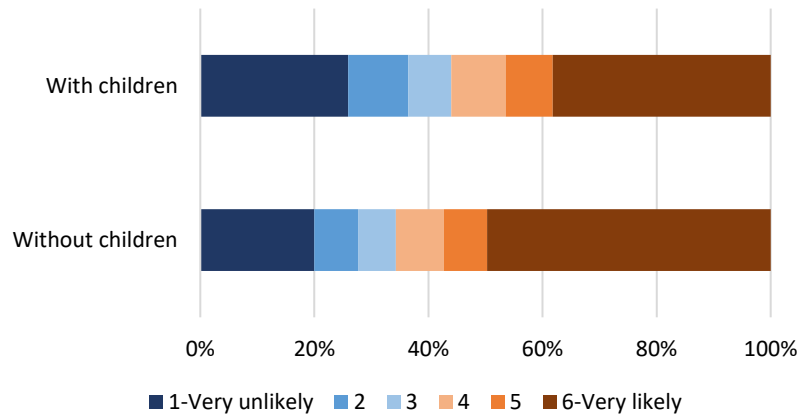


Figure 28h Flu vaccine intentions by living area

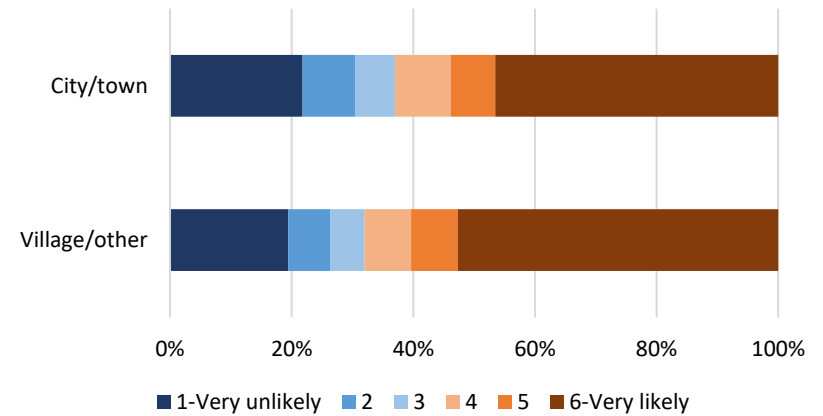


Figure 29a Covid-19 vaccine intentions by age groups

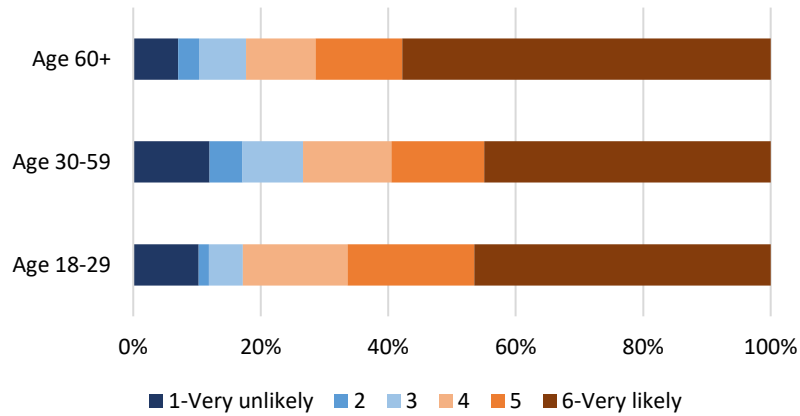


Figure 29b Covid-19 vaccine intentions by living arrangement

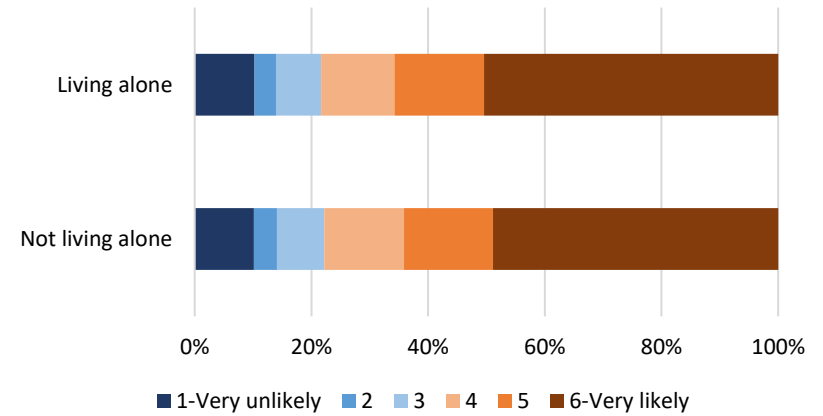


Figure 29c Covid-19 vaccine intentions by household income

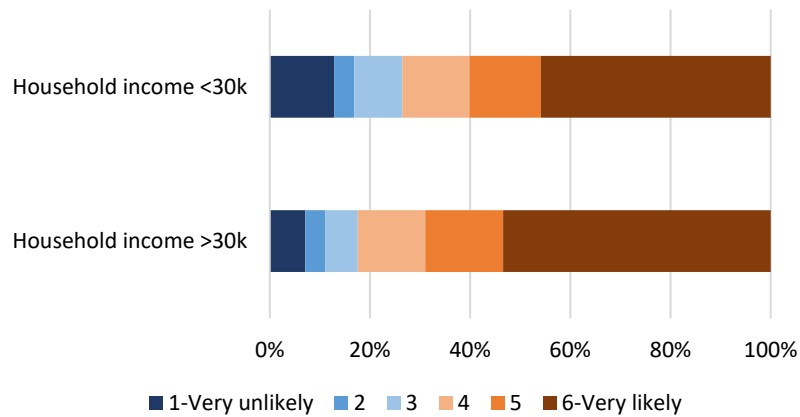


Figure 29d Covid-19 vaccine intentions by mental health diagnosis

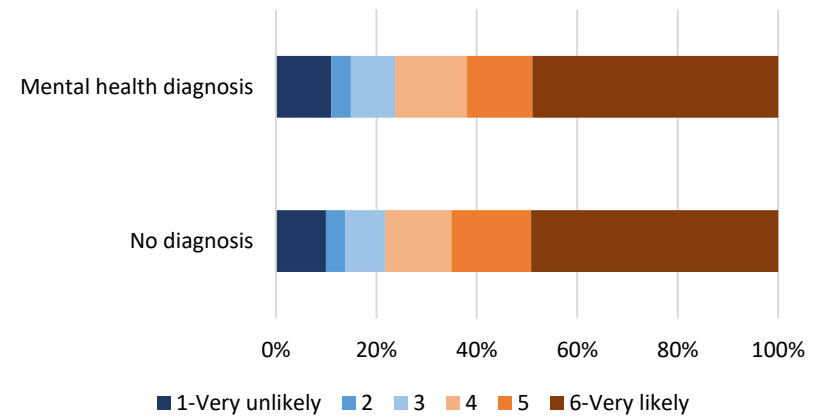


Figure 29e Covid-19 vaccine intentions by nations

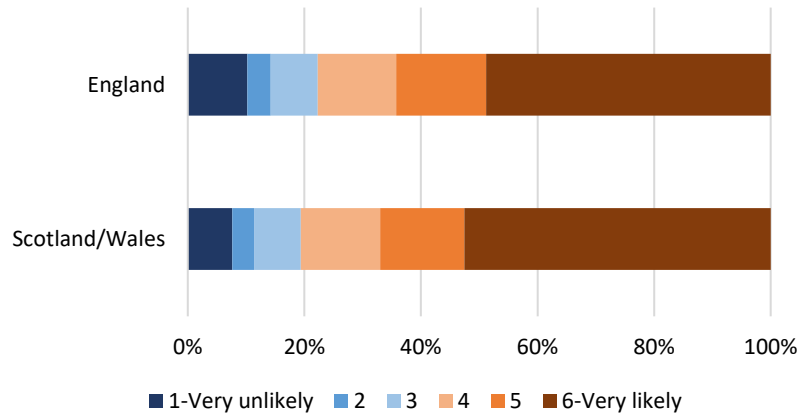


Figure 29f Covid-19 vaccine intentions by keyworker status

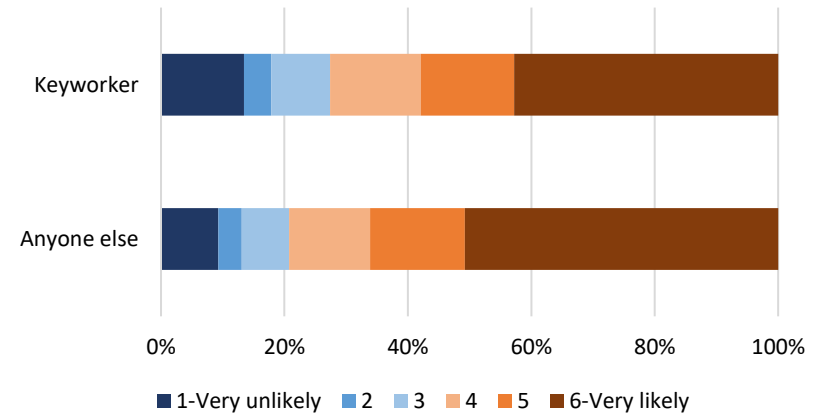


Figure 29g Covid-19 vaccine intentions by living with children

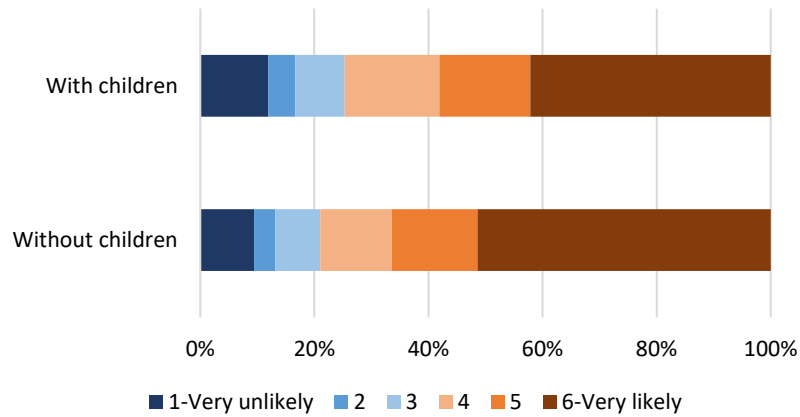
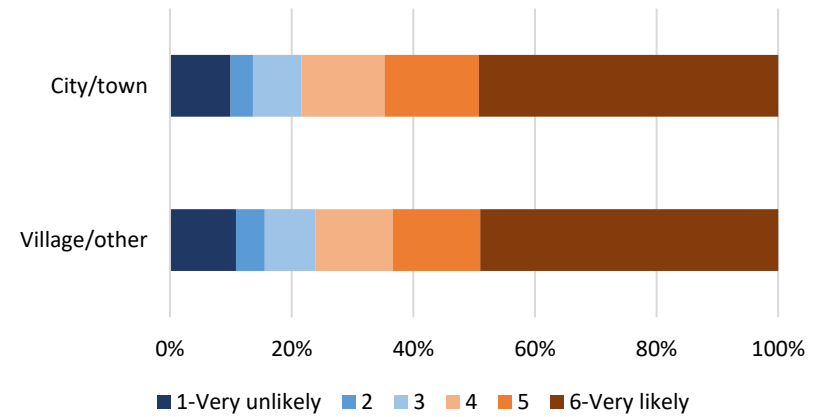


Figure 29h Covid-19 vaccine intentions by living area



## Appendix

### Methods

The Covid-19 Social Study is a panel study of the psychological and social experiences of adults in the UK during the outbreak of the novel coronavirus run by University College London and funded by the Nuffield Foundation, UKRI and the Wellcome Trust. To date, over 70,000 people have participated in the study, providing baseline socio-demographic and health data as well as answering questions on their mental health and wellbeing, the factors causing them stress, their levels of social interaction and loneliness, their adherence to and trust in government recommendations, and how they are spending their time. The study is not representative of the UK population, but instead it aims to have good representation across all major socio-demographic groups. The study sample has therefore been recruited through a variety of channels including through the media, through targeted advertising by online advertising companies offering pro-bono support to ensure this stratification, and through partnerships with organisations representing vulnerable groups, enabling meaningful subgroup analyses.

Specifically, in the analyses presented here we included adults in the UK. We used new cross-sectional data from individuals as they entered the study and also included weekly longitudinal data as participants received their routine follow-up. In this report, we treated the data as repeated cross-sectional data collected daily from the 21<sup>st</sup> March to the 20<sup>th</sup> September (the latest data available). Aiming at a representative sample of the population, we weighted the data for each day to the proportions of gender, age, ethnicity, education and country of living obtained from the Office for National Statistics (ONS, 2018). Where results for subgroups show volatility, this could be a product of the sample size being smaller so caution in interpreting these results is encouraged.

The study is focusing specifically on the following questions:

1. What are the psychosocial experiences of people in isolation?
2. How do trajectories of mental health and loneliness change over time for people in isolation?
3. Which groups are at greater risk of experiencing adverse effects of isolation than others?
4. How are individuals' health behaviours being affected?
5. Which activities help to buffer against the potential adverse effects of isolation?

The study has full ethical and data protection approval and is fully GDPR compliant. For further information or to request specific analyses, please contact Dr Daisy Fancourt [d.fancourt@ucl.ac.uk](mailto:d.fancourt@ucl.ac.uk). To participate or to sign up for the newsletter and receive monthly updates on the study findings, visit [www.COVIDSocialStudy.org](http://www.COVIDSocialStudy.org)

### Demographics of respondents included in this report

Table: Demographics of observations from participants in the pooled raw data (unweighted; **data are weighted for analyses**)  
For full demographics weighted to population proportions, see the User Guide at [www.covidsocialstudy.org/results](http://www.covidsocialstudy.org/results)

	Number of observations	%		Number of observations	%
<b>Age</b>			<b>Any diagnosed mental health conditions</b>		
<b>18-29</b>	43,393	6.14	<b>No</b>	586,746	83.0
<b>30-59</b>	393,768	55.7	<b>Yes</b>	120,200	17.0
<b>60+</b>	269,785	38.2	<b>Keyworker</b>		
<b>Gender</b>			<b>No</b>	557,920	78.9
<b>Male</b>	177,372	25.2	<b>Yes</b>	149,026	21.1
<b>Female</b>	526,715	74.8	<b>Living with children</b>		
<b>UK nations</b>			<b>No (excluding those who live alone)</b>	399,262	71.3
<b>England</b>	571,745	81.7	<b>Yes</b>	160,587	28.7
<b>Wales</b>	83,985	12.0	<b>Living area</b>		
<b>Scotland</b>	44,318	6.33	<b>Village/hamlet/isolated dwelling</b>	175,382	24.8
<b>Living arrangement</b>			<b>City/large town/small town</b>	531,564	75.2
<b>Not living alone</b>	559,849	79.2			
<b>Living alone</b>	147,097	20.8			
<b>Annual household income</b>					
<b>&gt;30k</b>	381,791	59.9			
<b>&lt;30k</b>	255,888	40.1			