COVID-19 Policy Responses & Subjective Wellbeing in Britain

Health Studies User Conference 2023
29 June 2023

Chris Deeming and Lateef Akanni
University of Strathclyde
chris.deeming@strath.ac.uk
lateef.akanni@strath.ac.uk
Study Aims & Methods
Study motivation

• There is a large literature on the health and wellbeing impacts of the COVID-19 pandemic globally and in Britain (e.g. Foa et al 2022, ONS 2020a/b, 2021a/b).

• But there is a major knowledge gap on the effects of the protective measures and institutional policies taken to stop the spread of the virus (cf. Brodeur et al 2021).

➢ Our study contributes to the literature from at least two perspectives:

• Assesses the impact of COVID-19 on subjective wellbeing in Britain, tracking wellbeing in the periods before, during, and after the pandemic.

• Evaluates the differential impacts of major pandemic-induced policy responses on different dimensions of subjective wellbeing.
## Study design

<table>
<thead>
<tr>
<th>COVID-19 social impacts study design</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional policy responses</strong></td>
</tr>
<tr>
<td>Micro OPN/USoc*</td>
</tr>
<tr>
<td>COVID-19 policies (e.g. furlough, homeworking, Homeschooling)**</td>
</tr>
<tr>
<td>Social indicators (e.g. loneliness, financial situation, job security, satisfaction, worthwhile, happiness, depressed, anxious)</td>
</tr>
<tr>
<td>Individual-level Wellbeing measures</td>
</tr>
<tr>
<td>Macro OxCGRT/Ingest</td>
</tr>
<tr>
<td>COVID-19 policy indices (e.g. containment index, stringency index)***</td>
</tr>
<tr>
<td>Wellbeing indices (e.g. composite measures, SWB, General Health Questionnaire, GHQ)</td>
</tr>
<tr>
<td>Aggregate-level Wellbeing measures</td>
</tr>
</tbody>
</table>

*Here we spotlight OPN work in 10 mins, exclude USoc.

**Working population – furlough vs not on furlough; homeworking vs not homeworking; wchool population – those homeschooling vs those not homeschooling.

***COVID-19 counterfactuals in this study are very challenging if not impossible to determine, “if it weren’t for the virus?”, or “what if Government hadn’t provided support?”
## Methods: Data/Variables

<table>
<thead>
<tr>
<th>Period</th>
<th>Dates</th>
<th>Waves</th>
<th>Sample*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study</td>
<td>1 January 2018 to 22 January 2023</td>
<td>111</td>
<td>323,146</td>
</tr>
<tr>
<td>Pre</td>
<td>1 January 2018 to 26 January 2019</td>
<td>3</td>
<td>2,734</td>
</tr>
<tr>
<td>Covid**</td>
<td>20 March 2020 to 20 March 2022</td>
<td>87</td>
<td>272,025</td>
</tr>
<tr>
<td>Post</td>
<td>23 March 2023 to 22 January 2023</td>
<td>21</td>
<td>48,387</td>
</tr>
</tbody>
</table>

*Sample includes 5,976 respondent’s on furlough; 54,978 respondent’s working from home; 3,805 households with home-schooling activities due to Covid; 833 respondent’s personally homeschooling.

**The UK government had lifted all COVID-19 restrictions and regulations by the end of March 2022.

### Dependent variables
- Satisfaction
- Worthwhile
- Happiness
- Anxious
- Composite wellbeing
- Impacts (indicators)

### Policy context
- Furlough (CJRS)
- Homeworking
- Homeschooling
- Stringency (Oxford CGRT)

### Controls
- Age
- Gender
- Ethnicity
- Income
- Education
- Marital status
- Number of dependent children
- Country

OPN

- ✔
- ✔
- ✔
- ✔
- ✔
- ✔
- ✔
- ✔
- ✔
- ✔
1. Results
Wellbeing in Britain Before, During and After the Coronavirus Pandemic
Average happiness scores and key coronavirus events

- **Pre-pandemic mean**
- **1st lockdown**
- **Easing lockdown**
- **2nd and 3rd lockdown announced**
- **Schools reopen**
- **Stay at home ends**
- **Fastest growth in Covid cases, stick to Plan B without lockdown**
- **Zero Covid-related deaths, since March 2020**
- **End of Covid restrictions**

Source: OPN
Mean wellbeing scores before, during and after the coronavirus pandemic

<table>
<thead>
<tr>
<th></th>
<th>Pre-pandemic [0.280]</th>
<th>Pandemic [-0.013]</th>
<th>Post-pandemic [0.059]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>7.66</td>
<td>7.83</td>
<td>7.47</td>
</tr>
<tr>
<td>Worthwhile</td>
<td>6.98</td>
<td>7.40</td>
<td>7.45</td>
</tr>
<tr>
<td>Happiness</td>
<td>7.47</td>
<td>7.03</td>
<td>7.20</td>
</tr>
<tr>
<td>Anxious</td>
<td>3.89</td>
<td>3.77</td>
<td>2.86</td>
</tr>
</tbody>
</table>

Note: figures in square brackets are the composite SWB means.

Source: OPN
## Differences in means before, during and after the pandemic

<table>
<thead>
<tr>
<th></th>
<th>Before/During</th>
<th>During/After</th>
<th>Before/After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>-0.68***</td>
<td>0.15***</td>
<td>-0.53***</td>
</tr>
<tr>
<td></td>
<td>(0.0339)</td>
<td>(0.0097)</td>
<td>(0.0348)</td>
</tr>
<tr>
<td>Worthwhile</td>
<td>-0.44***</td>
<td>0.06***</td>
<td>-0.38***</td>
</tr>
<tr>
<td></td>
<td>(0.0346)</td>
<td>(0.0101)</td>
<td>(0.0356)</td>
</tr>
<tr>
<td>Happiness</td>
<td>-0.45***</td>
<td>0.17***</td>
<td>-0.28***</td>
</tr>
<tr>
<td></td>
<td>(0.0410)</td>
<td>(0.0109)</td>
<td>(0.0420)</td>
</tr>
<tr>
<td>Anxious</td>
<td>1.03***</td>
<td>-0.12***</td>
<td>0.91***</td>
</tr>
<tr>
<td></td>
<td>(0.0558)</td>
<td>(0.0151)</td>
<td>(0.0573)</td>
</tr>
<tr>
<td>SWB</td>
<td>-0.293***</td>
<td>0.072***</td>
<td>-0.221***</td>
</tr>
<tr>
<td></td>
<td>(0.0160)</td>
<td>(0.0049)</td>
<td>(0.0165)</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses; Significance levels: *=10%; **=5%; ***=1%. Source: OPN
2. Micro Results
COVID-19 Policy Responses & Wellbeing
<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Worthwhile</th>
<th>Happiness</th>
<th>Anxious</th>
<th>SWB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furlough</td>
<td>-0.314***</td>
<td>-0.282***</td>
<td>-0.147***</td>
<td>0.053</td>
<td>-0.100***</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.062)</td>
<td>(0.051)</td>
<td>(0.051)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>Homeworking</td>
<td>-0.194***</td>
<td>-0.259***</td>
<td>-0.244***</td>
<td>0.133***</td>
<td>-0.085***</td>
</tr>
<tr>
<td></td>
<td>(0.020)</td>
<td>(0.023)</td>
<td>(0.020)</td>
<td>(0.019)</td>
<td>(0.008)</td>
</tr>
<tr>
<td>Homeschooling</td>
<td>-0.249*</td>
<td>0.056</td>
<td>-0.225*</td>
<td>0.236*</td>
<td>0.009</td>
</tr>
<tr>
<td></td>
<td>(0.140)</td>
<td>(0.142)</td>
<td>(0.133)</td>
<td>(0.130)</td>
<td>(0.088)</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses; Significance levels: * = 10%; ** = 5%; *** = 1%.

Sources: OPN
Impacts and outcomes experienced by those on furlough, compared to those not on furlough

- Health affected
  - Mental health
- Wellbeing affected
- Stressed or anxious
- Feeling worried
- Feeling bored
- Feeling lonely
- No one to talk to
- Too much time alone
  - " with others
- Burden on others
- Relationships
  - Personal relationships
  - Work relationships
- Lack of freedom
- Exercise affected
  - Unable to exercise
- HH finances
  - Groceries
- Access to care
  - " treatment
  - Caring resp.
- Schools affected
  - Transport
  - Personal travel
  - Work travel
- Events affected
  - Unable to plan
  - Worried job loss
  - " travel to work
  - " finding a job
  - " return to work

Source: OPN
Wellbeing outcomes experienced by females, compared to males

- **Furlough**
  - Satisfaction
  - Worthwhile
  - Happiness
  - Anxiety
  - SWB

- **Homeworking**
  - Satisfaction
  - Worthwhile
  - Happiness
  - Anxiety
  - SWB

- **Homeschooling**
  - Satisfaction
  - Worthwhile
  - Happiness
  - Anxiety
  - SWB

Source: OPN
Wellbeing outcomes experienced by those with median or below median income, compared to those with above median income

Furlough
- Satisfaction
- Worthwhile
- Happiness
- Anxiety
- SWB

Homeworking
- Satisfaction
- Worthwhile
- Happiness
- Anxiety
- SWB

Homeschooling
- Satisfaction
- Worthwhile
- Happiness
- Anxiety
- SWB

Source: OPN
3. Macro Results
Stringency & Wellbeing
## Wellbeing conditional on OxCGRT Stringency Index

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Worthwhile</th>
<th>Happiness</th>
<th>Anxious</th>
<th>SWB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Britain</td>
<td>-0.006***</td>
<td>-0.000</td>
<td>-0.003***</td>
<td>0.002***</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.013)</td>
</tr>
<tr>
<td>England</td>
<td>-0.006***</td>
<td>-0.001</td>
<td>-0.004***</td>
<td>0.002***</td>
<td>-0.015***</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Wales</td>
<td>-0.015**</td>
<td>0.002</td>
<td>0.002</td>
<td>0.011*</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.007)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.119)</td>
</tr>
<tr>
<td>Scotland</td>
<td>-0.005</td>
<td>0.001</td>
<td>-0.003</td>
<td>0.003</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.016)</td>
</tr>
</tbody>
</table>

Notes: Standard errors in parentheses; Significance levels: *=10%, **=5%, ***=1%.

Sources: OPN
Additional impacts and outcomes conditional on OxCGRT Stringency

Mental health
- Stressed or anxious
- Feeling worried
- Feeling bored
- Feeling lonely
- No one to talk to
- Too much time alone
- " with others
- Burden on others

Personal relationships
- Unable to exercise
- Worried job loss
- " travel to work
- " finding a job
- " return to work

Loneliness
- Feeling lonely
- No one to talk to
- Too much time alone

Financial situation
- Feeling worried
- Feeling bored
- Feeling lonely
- No one to talk to
- Too much time alone

Job security
- Feeling worried
- Feeling bored
- Feeling lonely
- No one to talk to
- Too much time alone

Financial security
Conclusion

• We consider the differential effects of Covid-related economic and social interventions on people’s wellbeing during the pandemic.

• We find that average subjective wellbeing scores were lowest during the pandemic, and have not returned to their pre-pandemic levels.

• We found being furloughed, working from home and home-schooling during the pandemic are significantly associated with subjective wellbeing.
Limitations

• The study considers the outcomes associated with policy responses rather than claims any causal inference (see Bhrolcháin and Dyson 2007).

• COVID-19 counterfactuals are challenging if not impossible to determine, “if it weren’t for the virus?”, or “what if Government hadn’t provided support?”.

• Disentangling “pandemic effects” from “policy effects” here is also challenging given similar/same temporal context (see Foa et al 2022).
Permissions & Acknowledgements

• The study is supported by ESRC grant reference ES/W001187/1 (UKRI COVID-19 award): ‘Understanding the Social Impacts of Coronavirus Under Different Health Restrictions: A Pooled Analysis of the ONS OPN Covid-19 Survey’.

• The ONS material used in this study is Crown Copyright and has been used with relevant permissions: COVID-19 Social Impacts Project, Project ID: 238122, registered at the UK Data Service

• The project is registered with the ONS Secure Research Service (SRS), Project Reference No. 2001318.

• Project 2001318 is accredited by the Research Accreditation Panel (RAP), UK Statistics Authority (UKSA).

• Dr Chris Deeming ONS Accredited Researcher No. 34168.

• Mr Lateef Akanni ONS Accredited Researcher No. 35345.

• We are grateful to the Tim Vizard and the OPN survey team for the help and support we have received on this project.
Thank you for listening!

Questions?