Chapter 4: Happiness and unhappiness in the UK during the COVID-19 pandemic

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4.1 Introduction

This chapter aims to describe what we know about psychological wellbeing in the United Kingdom during the coronavirus pandemic of 2020–21, with a particular focus on the young. Although academic economics has sometimes been slow to recognise it, human feelings are of crucial importance. They shape our behaviour and are the ultimate bottom line in our lives. Money, personal relationships, health, jobs, safety and a sustainable environment — all are merely a means to an end. Happiness and mental wellbeing are not a means to an end. They are the end.

Key findings

- The evidence suggests, consistent with common sense, that UK adults experienced a large rise in anxiety and a substantial fall in psychological wellbeing with the onset of the coronavirus pandemic. Measures such as happiness, life satisfaction and anxiety in the UK exhibited their most severe movements in recent history. We know this thanks to the UK government's systematic collection of wellbeing data for over nearly a decade now.

- These movements in wellbeing are so large that they are comparable to the changes observed for major events in individuals' lives such as divorce, unemployment or serious health problems. Weekly data shows that wellbeing in the UK has varied with the severity of social-distancing policies, with a persistent gap in wellbeing relative to pre-pandemic levels in summer 2021. The changes in wellbeing during the pandemic are also notably unevenly distributed, with the young (aged 16–29) experiencing a particularly sharp increase in anxiety relative to the old (those aged over 70).

- It is known from previous research that humans are often able to bounce back psychologically from extremely sad events such as bereavement. However, as explained later this is not a guarantee in the face of all of life's shocks, and particularly not in the case of pandemic-induced unhappiness.

The young suffered in a marked way that may still not be fully grasped by politicians and some citizens. Although there are now grounds for optimism in our country, at the time of writing (in autumn 2021) the UK is still far short of psychological recovery. Wellbeing indicators reached their lowest point in the winter of 2020/21, when a second major lockdown was implemented, and the subsequent 'recovery' has only restored levels to those seen in the early phase of the pandemic.

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4.2 Wellbeing and the pandemic in a historical context

A natural source of reliable information on wellbeing is the regular surveys run by the UK Office for National Statistics (ONS). Since 2012, the ONS has collected a set of official estimates of happiness, life satisfaction, anxiety and worthwhileness of life (The Personal Wellbeing in the UK survey). These come from large random samples of the population and allow us to put the effects of the pandemic on wellbeing into context.

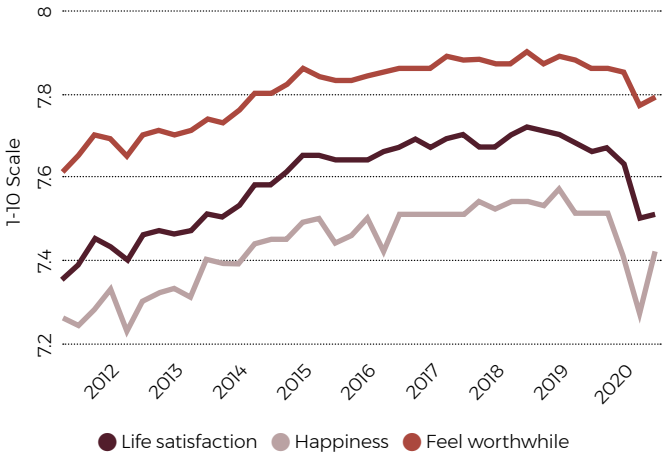
Figure 1(a) reports quarterly levels of indicators for life satisfaction, happiness and feeling worthwhile since 2011 using this survey. Figure 1(b) then plots information for the anxiety indicator separately as it is a 'negative' indicator of wellbeing, with variation at the opposite end of the 1–10 measurement scale relative to the other 'positive' indicators. It is clear that the pandemic is associated with large, unprecedented changes in wellbeing, with anxiety levels in particular rising from 2018 by 15–20% on the vertical axis of Figure 1(b). Prior to 2020 there had been no abrupt change in any of the average wellbeing levels in Figure 1(a) anywhere close to the 0.3 point drop observed in happiness between 2019 and 2020. Overall, Figure 1 also shows that the pandemic appears to have reversed the gradual trend gains in UK wellbeing that occurred during the 2010s.

A drop in observed happiness of 0.3 points may seem small; however, it is important to understand the context for these changes in wellbeing. If looking at the detailed ups and downs of people's lives (using regression equations) it is typically found that becoming unemployed or having one's marriage break up, which are enormous life events, are associated with a movement of approximately 0.5 points on a happiness or life satisfaction scale. Daniel Gilbert, a psychologist at Harvard who specialises in topics such as human happiness, has explained that when people talk about changes as 'small' it is useful to remember the temperature of the human body. He pointed out that a normal safe temperature for the human body is typically 98.6˚F (37˚C). If you have a temperature of 100.5˚F (38˚C), you have a fever. If your temperature rises just a further 2 degrees, there is a fair chance you will die if you do not get to hospital. Hence, small changes can matter a lot depending on the system being analysed.

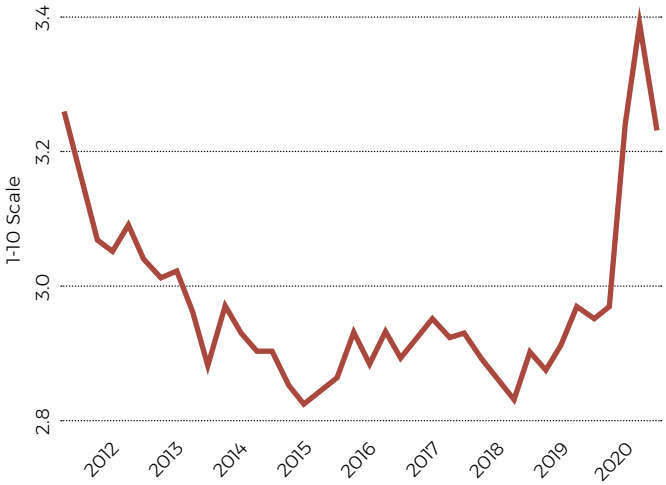
Furthermore, as explored below, this average 0.3 point change in happiness is not evenly distributed across individuals, which means that the pandemic is bound to figure as a major wellbeing life event for a significant group of people.

Figure 1: Quarterly well-being indicators, 2011-2020

a) Satisfaction, happiness and feeling worthwhile



b) Anxiety



Note: All indicators are measured on a 1—10 scale. The data source is the ONS Personal Wellbeing in the UK Survey.

4.3 Tracking psychological wellbeing during the pandemic

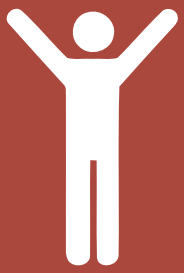
The ONS has further collected weekly and monthly data on wellbeing during the pandemic via the Opinions and Lifestyle (OPN) Survey. It is not ideal, in a statistical sense, to create average values from what, when viewed more accurately, are effectively ordinal data. But this has been undertaken for the purposes of this chapter, and is what the ONS itself often does when presenting wellbeing statistics.

ONS Opinion and Lifestyle Survey (OPN)

Life satisfaction

Q1.
Overall, how satisfied are you with your life nowadays?

Happiness



Q2.
Overall, how happy did you feel yesterday?

Worthwhile

Q3.
Overall, to what extent do you feel that the things you do in your life are worthwhile?

Anxiety

Q4.
Overall, how anxious did you feel yesterday?

THE OPINIONS AND LIFESTYLE Survey (OPN) is a weekly survey of 4,000–6,000 adults conducted by the ONS that is designed to collect information useful to the pandemic response. OPN information on remote work trends was used earlier in the report, and data from the Personal Well-Being module of questions is used here. There are four main questions in this module focused on life satisfaction, feelings of a worthwhile life, happiness and anxiety. The questions are designed to be compatible with the format of questions from existing ONS surveys of wellbeing (eg: Measures of National Well-Being Dashboard). Although the survey only begins in late March 2020, the ONS has calculated pre-pandemic benchmark measures for each of these indicators.

Source: ONS (2021). Personal Well-being in the UK, Quarterly: April 2011–September 2020.

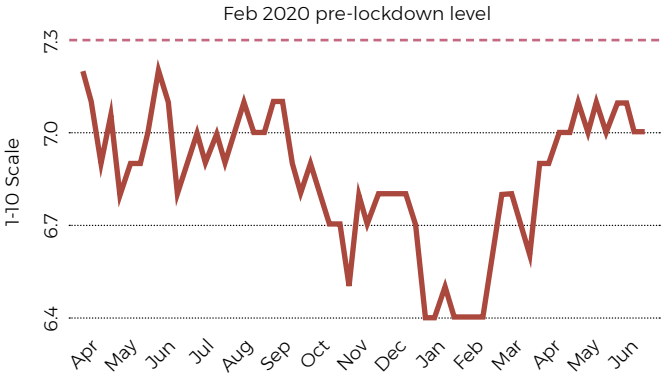
Figure 2 gives time-series patterns for various wellbeing measures from March 2020 to July 2021. These are means across the population. In each graph, the baseline pre-lockdown level, from February 2020, is marked as a dotted line. Note here that the OPN survey was specifically implemented to provide information for the management of the pandemic, hence the weekly data only beginning in late March.

Figure 2(d) illustrates the remarkable spike in UK anxiety at the start of the national lockdown (Prime Minister Boris Johnson addressed the nation via television on the evening of 23 March 2020). There was substantial improvement by the summer of 2020, the anxiety score in July 2021 remains roughly where it was in late spring a year earlier.

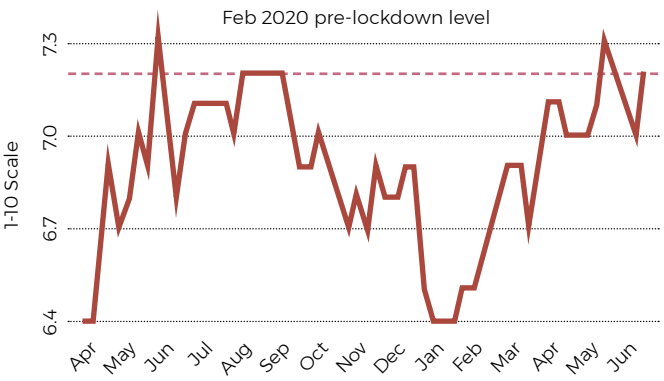
The life satisfaction and happiness levels in Figures 2(a) and 2(b) show similar patterns, as would perhaps be expected, and it is noticeable that there was a strong mini-recovery, in both series, from early January 2021 up to July 2021. That mini-recovery seems likely to have been triggered by the discovery and distribution of several vaccines. Hence, a notable feature of the weekly changes is that wellbeing is responsive to short-run policy changes, and that this may be especially the case for younger age groups.

Figure 2: Weekly changes in wellbeing, all persons, November 2020 – July 2021

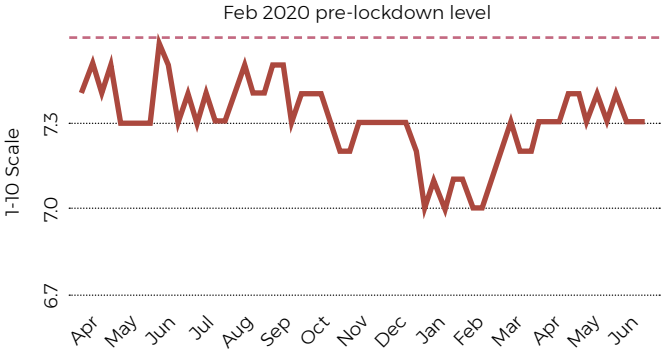
a) Life satisfaction



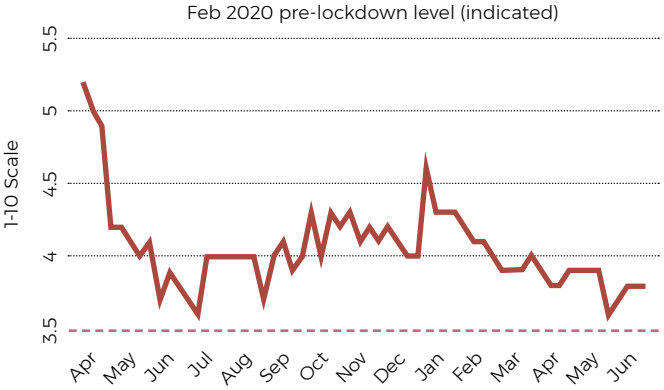
b) Happiness



c) Worthwhile



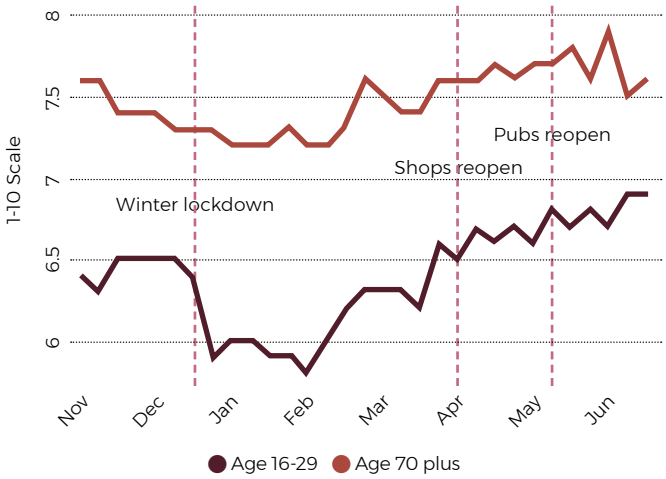
d) Anxiety



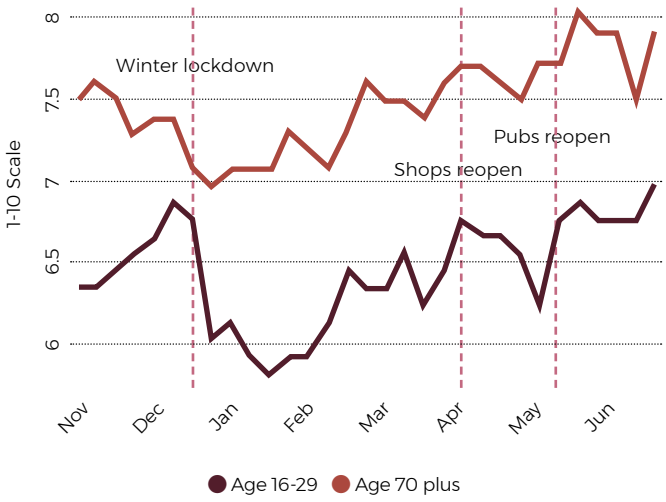
Note: All indicators are measured on a 1-10 scale. The data source is the ONS Opinion and Lifestyles (OPN) survey. The dotted lines represent pre-lockdown levels of these indicators.

Figure 3: Age differences in wellbeing, weekly, November 2020 – July 2021

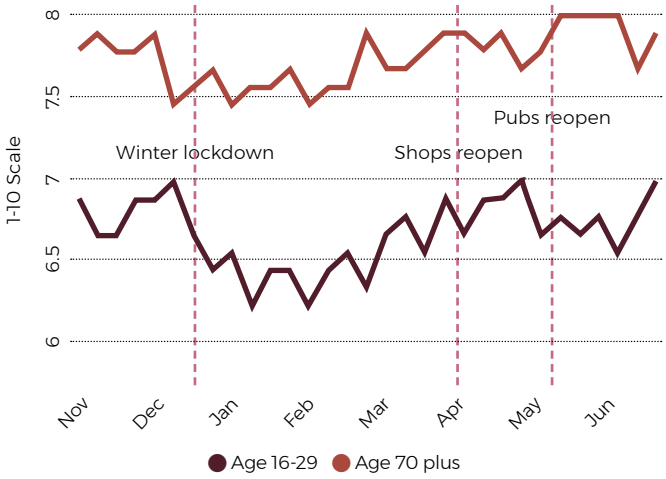
a) Life satisfaction



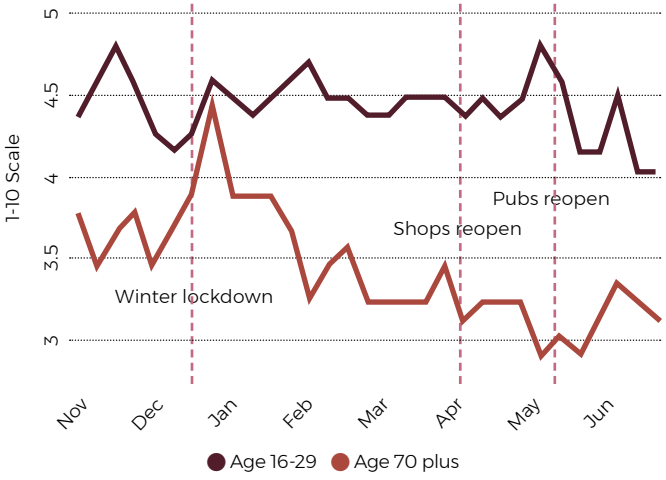
b) Happiness



c) Worthwhile



d) Anxiety



Note: All indicators are measured on a 1-10 scale. The data source is the ONS Opinion and Lifestyles (OPN) survey.

Figure 3 compares weekly indicators of wellbeing across the 16–29 and 70+ age groups, where it can be seen that the old are far happier than the young. (Note that this breakdown is only consistently available for the period since November 2020.) This data reveals how unpleasant this period of history has been for young UK citizens. The 'positive' indicators of wellbeing (life satisfaction, happiness and feeling worthwhile) fell more sharply for younger age groups around major events such as the winter 2020/2021 lockdown. Indeed, it is noticeable how rapidly wellbeing alters in the face of social-distancing policies, with clear recoveries in wellbeing also apparent in periods when non-essential retail shops and pubs/restaurants have been open. That said, the recovery in wellbeing levels for the young is far from complete. In particular, there is a persistent, large age gap in anxiety levels still evident by early July 2021. A key question for the future is how this additional wellbeing shock experienced by the young might persist and affect long-term life chances. As explained later, a body of research on wellbeing both before and during the pandemic provides some guidance here.

4.4 Other recent work based on microdata

Some of the broad findings noted above have already been explored, generally using survey data, in recent journal publications. An important aspect of this work is that it has utilised individual microdata rather than aggregated information. Hence, this work is able to control for the influence of multiple characteristics at the same time, for example, it can tease out the effects of being young from other compositional characteristics (e.g. gender, race, socio-economic group). Where panel data is available (i.e. observations on the same individuals across time) it has also been possible to compare wellbeing before and during the pandemic.

Banks and Xu (2020) evaluated the effects of the COVID-19 pandemic on mental health in the UK. They used the UK Household Longitudinal Study (UKHLS) and studied the period 2009–20. This long window allowed them to control for pre-existing trends in mental health, and construct individual-specific counterfactual predictions for April 2020 using linear regression methods. These predictions were then compared to the observed COVID-19 mental health outcomes, specifically focused on General Health Questionnaire (GHQ-12) scores.[1] Their analysis reveals large effects at the population level. As a benchmark, the effects are approximately equal to the pre-pandemic differences between the top and bottom quintiles of the income distribution. However, within this average population effect there are much bigger effects found for young adults[2] and for women. Since these groups already had lower levels of mental health before COVID-19, the pandemic has had the effect of exacerbating inequality.

Pierce et al. (2020) also studied changes in adult mental health in the UK during periods of lockdown, again using the GHQ-12 and the UKHLS. In line with the approach of Banks and Xu (2020), they exploited the longitudinal structure of the UKHLS but also focused on a repeated cross-sectional analysis to study time trends. They found that the prevalence of clinically significant levels of mental distress rose substantially in April 2020 and that the average GHQ-12 score also went up over time. Increases in GHQ-12 distress scores were at their highest for young people (aged 18–24), women, and people living with young children. There was also a worsening of GHQ-12 scores for the general population of workers already in employment at the start of the pandemic.

Fancourt et al. (2021) explored anxiety and depression trends over the first 20 weeks of lockdown in England from 21 March 2020 using the University College London (UCL) COVID-19 Social Study. This data has the advantage of being weekly and longitudinal, with a sample of 70,000 individuals who have at least three repeated observations across the course of the data collection. The tracked outcomes are centred on anxiety measures and depressive symptoms. Anxiety and depression levels worsened, with the fastest changes occurring during the 'strict' lockdown period (between weeks 2 and 5) and the indicators flattening as lockdown easing measures were introduced (between weeks 16 and 20). The risk factors are in line with the studies discussed above: women, the young, those with lower educational attainment or income, individuals with pre-existing conditions, and people living alone all experienced larger changes. Finally, while some inequalities in experiences were reduced as lockdown continued (and as individuals adapted), differences were still evident 20 weeks after the start of lockdown.

The key variable studied by Bu et al. (2020) was reported loneliness. The authors examined socio-demographic predictors of loneliness before and during the COVID-19 pandemic using cross-cohort analyses of data from UK adults surveyed both before the pandemic (again in the UKHLS) as well as during (in the UCL COVID-19 Social Study). Those with a higher risk of being lonely were: young adults, women, people with lower levels of education or income, the economically inactive, people living alone and urban residents. Presumably because of isolation, being a student emerged as a greater risk factor than typically seen in historical data.

Niedzwiedz et al. (2021) used the UKHLS to look at a broad set of health behaviours (eg. smoking, alcohol consumption) and mental health indicators. Psychological distress increased markedly by one month into lockdown. The people most adversely affected included: women, young adults, people from an Asian background and those with a university degree. In contrast to Bu et al. (2020), feelings of loneliness in this study remained steady. Smoking rates fell and the proportion of people drinking four or more times per week increased noticeably.

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Proto and Quintana-Domeque (2021) focused especially on different ethnic groupings in the UK in the UKHLS, again exploiting longitudinal information. Using the criterion of 'within person' changes in GHQ-12 scores, they confirmed the previously documented average deterioration in mental health in the UK. Women — regardless of their ethnicity — and Black, Asian and minority ethnic (BAME) men experienced a greater average worsening in mental distress than the average white British man. These ethnic/gender-specific alterations in wellbeing persisted after controlling for other personal characteristics.

4.5 Is there any reason for optimism now?

What will the future bring? There does seem to be cause for optimism. At the time of writing in 2021, vaccines have been widely distributed and are working. The main background concerns for the immediate future of happiness in the UK appear to be twofold. The first is the possibility of dangerous virus mutations, and the second is the consequences — particularly the possibility of 'super austerity' — of the large accumulated exchequer debts that have built up.

The younger generation, however, deserves our special consideration. First, and on the negative side, it is known, for example from Kahn (2010), that if young people start their working lives in a bad economy, there are lasting deleterious consequences through life for them. Second, on the positive side, humans as a species have an ability to bounce back, psychologically, from serious and sad events in life (in the research literature this is called 'hedonic adaptation'). However, this kind of psychological bounce-back is sometimes only partial (as explored in Oswald and Powdthavee 2008, who study disability) and seems to be almost non-existent in the case of the unhappiness and mental ill-health caused by job loss itself (see Clark and Georgellis 2013). At the aggregate level, moreover, there is little scientific knowledge about how much — in the very long run — it is possible for people to recover their original happiness levels after a pandemic. The UK's younger citizens have endured a huge drop in happiness and wellbeing, and will presumably be the ones, at some point in the future, who will have to pay for the debts built up by the government's furlough and other spending programmes.

If I had to make a prediction, it would be that the older part of the population will recover their pre-lockdown levels of wellbeing by 2022. It is harder to say whether young adults will be able to do the same. On average, they have had a miserable time since March 2020, and, whether the young are aware of it or not, it is their generation who will be saddled with the exchequer costs of COVID-19. Thus they may have to put up with years of austerity if public services are cut to offset the background debt caused by the 2020–21 coronavirus support policies.

In my own view, which may be unconventional, younger women and men in the UK have arguably — to date — not been treated well by policymakers. Severe risks remain for the future wellbeing of our younger citizens. A genuinely caring society would wish to design some type of conscious programme of post-pandemic intervention to stop the wellbeing shock to the young from persisting through their lives. Whether the old care enough about what has happened to the young, or have actually thought through the fact that the younger generation will pay off most of the tax bills run up to support the health of older citizens,[3] is hard to say. It appears to me, and I hope to others, that there is a moral case for intergenerational redress of some kind.

[1] A so-called GHQ score is, put loosely, a measure of mental distress. It is created by summing the integer answers to 12 questions about whether the person has been feeling depressed, sleeping poorly, etc.

[2] The literature has highlighted disputes about the desirability of lockdowns and about whether the young (who are relatively little-affected by the virus) should have been 'released'. See for example Fujiwara et al. (2020); Layard et al. (2020); Miles et al. (2020); Oswald and Powdthavee (2020); Reddy (2020); Rowthorn and Maciejowski (2020); Van Rens and Oswald (2020). A recent and very interesting paper by Foa et al. (2020) argues that lockdown itself was desired by, and helpful psychologically to, the majority of the UK population.

[3] It should be recalled that young people were far, far less at risk from the virus than the old. The latest data reveals that almost 99% of coronavirus deaths have been in those aged over 45, and that deaths among those under 30 were particularly unusual.

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