

Statistical bulletin

Personal well-being in the UK, quarterly: April 2011 to September 2020

Quarterly estimates of life satisfaction, feeling that the things done in life are worthwhile, happiness and anxiety at the UK level, created using the Annual Population Survey (APS).

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To be announced

Notice

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There was an error in the previously published data for Quarter 3 (July to Sept) 2020 in which a small number of cases were excluded from the analysis.

This happened because of human error. We apologise for any inconvenience caused.

This error has been corrected in the [October 2021 to March 2022 editions of the datasets](#), in addition to methodological improvements including reweighting on the latest population estimates.

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1 . Main points

- All measures of personal well-being significantly worsened in Quarter 2 (Apr to June) 2020 compared with the same quarter in 2019; a similar picture emerged comparing Quarter 3 (July to Sept) 2020 with the same quarter in the previous year.
- With the beginning of the first COVID-19 lockdown in the UK, average ratings of life satisfaction fell by 1.8% between Quarter 1 (Jan to Mar) and Quarter 2 of 2020, with average ratings declining from 7.63 out of 10 in the first quarter of the year to 7.50 out of 10 in the second quarter.
- Quarter 2 2020 saw the highest average rating of anxiety recorded since 2011 when we began collecting well-being data; the average anxiety rating of 3.39 out of 10 was 4.5% higher than for the previous quarter (3.24) and a 12.5% increase on the same quarter a year earlier (2.97).
- The increase in average anxiety was driven by a rise in people reporting "high" levels of anxiety, which increased by 3.8 percentage points between Quarter 1 and Quarter 2 of 2020 (from 21.0% to 24.8%, respectively).
- Average ratings of anxiety and happiness both improved in Quarter 3 2020 compared with the previous quarter, perhaps indicating a sense of relief as initial lockdown restrictions were eased; however, levels still remained significantly worse than before the pandemic.
- Average ratings of happiness significantly increased by 2.1% in Quarter 3 2020, while average ratings of anxiety significantly fell by 4.8% compared with the previous quarter.

These data come from the Annual Population Survey, a different source to the weekly well-being figures in the Coronavirus and the social impact on Great Britain bulletin, which use Opinions and Lifestyle Survey (OPN) data. They will differ slightly for methodological reasons, but overall trends are the same. See [Measuring the data](#) for more detail.

2 . Personal well-being time series

Figure 1: All four measures of well-being had significantly worsened in Quarter 2 (Apr to June) 2020, when compared with the same quarter in 2019

Average (mean) ratings of personal well-being in the UK, Quarter 2 (Apr to June) 2011 to Quarter 3 (July to Sept) 2020

Notes:

1. Chart axis has a break in it.
2. Data are weighted mean averages.
3. Respondents were asked: "Overall, how satisfied are you with your life nowadays?", "Overall, to what extent do you feel the things you do in your life are worthwhile?", "Overall, how happy did you feel yesterday?" and "Overall, how anxious did you feel yesterday?", respondents answer on a scale of 0 "not at all" to 10 "completely".
4. The data have been seasonally adjusted – see Personal well-being quarterly estimates technical report for more information.
5. Because of the coronavirus (COVID-19) pandemic, it was necessary for the Labour Force Survey (LFS) to shift from face-to-face and telephone interviewing to solely telephone interviewing from March 2020. An article on [Data collection changes due to the pandemic and their impact on estimating personal well-being](#) considers to what extent this operational change has influenced estimates of personal well-being. Results suggest that the shift in mode may have caused a slight exaggeration to average scores of anxiety.
6. Results from the article also found that, because of data collection differences such as mode of collection, frequency and geographic coverage, personal well-being is reported more favourably on the Annual Population Survey when compared with published estimates from the Opinions and Lifestyle Survey.

[Download the data](#)

3 . Changes to personal well-being during Quarter 2 and Quarter 3 2020

To provide some context, the UK went into its first national lockdown on 23 March 2020 and the first wave of the coronavirus (COVID-19) peaked in April 2020. This month saw prime minister Boris Johnson admitted to hospital with COVID-19, the airline industry cutting 90% of European flights and the number of COVID-19 deaths reaching 1,073 in a 24-hour period. These events coincided with a sharp rise in anxiety and overall worsening of all four well-being measures in this period. While [some restrictions began to ease across May and June 2020](#), the UK by the most part remained under lockdown conditions until the beginning of July 2020.

Quarter 2 (Apr to June) 2020 saw both life satisfaction and anxiety worsen significantly compared with Quarter 1 (Jan to Mar) 2020 (7.50 and 3.39 out of 10 compared with 7.63 and 3.24 out of 10, respectively).

Anxiety saw an increase of 4.5% in this period, rising from an average rating of 3.24 in Quarter 1 2020 to 3.39 in Quarter 2 2020. This is the highest average rating of anxiety recorded on the Annual Population Survey (APS) since we began collecting well-being data in 2011. When comparing with the same quarter a year earlier, this equates to a 12.5% increase in average reported anxiety.

The high anxiety seen in Quarter 2 2020 is driven by a significant rise in the proportion of respondents rating their anxiety as "high". The proportion rating their anxiety this way increased by 3.8 percentage points in Quarter 2 2020 to 24.8% of respondents, from 21.0% in the previous quarter.

List of contextual events during the COVID-19 pandemic in 2020

Quarter 2 (April to June) 2020

- 23 March: Beginning of first national lockdown announced just before Quarter 2 2020.
- 8 April: COVID-19-related deaths reach first peak of 1,073 in a 24-hour period.
- 10 May: Prime Minister announces plans for easing of first lockdown.
- 28 May: Contact tracing systems go live in England and Scotland.
- 1 June: Primary schools re-open in England and groups of up to six can meet outside.
- 10 June: Those living alone can create a "support bubble" with one other household.
- 29 June: First local lockdown announced in Leicester.

Quarter 3 (July to September) 2020

- 3 July: Travel corridors are announced, and people encouraged to go on holiday.
- 4 July: Pubs, restaurants, hotels, hair salons and more re-open in the UK.
- 17 July: Use of public transport for non-essential matters now allowed.
- 24 July: Face coverings become mandatory in most indoor spaces in England.
- 1 August: Those shielding since the first lockdown told they no longer must.
- 3 August: Government Eat Out to Help Out initiative begins.
- 14 September: "Rule of six" introduced.
- 22 September: New measures introduced as highest daily cases seen since May.

On 3 July 2020, travel corridors were opened, and the following day pubs, restaurants, hair salons and places of worship re-opened in England. On 1 August 2020, those who had been shielding since the first lockdown were told this was no longer required. In Quarter 3 (July to Sept 2020), average ratings of anxiety significantly improved compared with the previous quarter. They decreased by 4.8% to 3.23 in Quarter 3 2020, from 3.39 in the previous quarter.

Similarly, average ratings of happiness improved significantly in the same period. Ratings increased by 2.1% to 7.42 in Quarter 3 2020 from 7.27 in the previous quarter. Respondents reporting "very high" happiness increased by 3.7 percentage points to 32% in Quarter 3 2020, up from 28.3% in the previous quarter.

This "bounce back" in well-being for anxiety and happiness coincides with the easing of lockdown measures. This signalled a return to more aspects of normal life, while a reduction in cases of the coronavirus, hospitalisations and deaths provided a sense that things were less dangerous and therefore less worrying.

However, even though well-being bounced back significantly since the low point in Quarter 2 2020, all four measures of well-being were still significantly worse in Quarter 3 2020 than they were in the same quarter the previous year.

Average ratings of anxiety were up by 9.5% in Quarter 3 2020 compared with Quarter 3 of 2019, with average anxiety ratings of 3.23 out of 10 in 2020 compared with 2.95 in 2019. The other well-being measures saw smaller but still significant deterioration compared with the previous year. Life satisfaction, happiness and feeling that the things done in life are worthwhile ratings were down by 2.0%, 1.1% and 1.0% respectively compared with Quarter 3 2019.

4 . Quarterly personal well-being in the UK data

[Quarterly personal well-being estimates - seasonally adjusted](#)

Dataset | Released 4 February 2021

Seasonally adjusted quarterly estimates of life satisfaction, feeling that the things done in life are worthwhile, happiness and anxiety in the UK.

[Quarterly personal well-being estimates - non-seasonally adjusted](#)

Dataset | Released 4 February 2021

Non-seasonally adjusted quarterly estimates of life satisfaction, feeling that the things done in life are worthwhile, happiness and anxiety in the UK.

[Quality information for quarterly personal well-being estimates](#)

Dataset | Released 4 February 2020

Confidence intervals and sample sizes for quarterly statistics of life satisfaction, feeling that the things done in life are worthwhile, happiness and anxiety in the UK.

5 . Glossary

Personal well-being

Our personal well-being measures ask people to evaluate, on a scale of 0 to 10, how satisfied they are with their life overall, whether they feel they have meaning and purpose in their life, and about their emotions (happiness and anxiety) during a particular period.

Thresholds

Thresholds are used to present dispersion in the data. For the life satisfaction, feeling that things done in life are worthwhile and happiness questions, ratings are grouped in the following way:

- 0 to 4 (low)
- 5 to 6 (medium)
- 7 to 8 (high)
- 9 to 10 (very high)

For the anxiety question, ratings are grouped differently to reflect the fact that higher anxiety is associated with lower personal well-being. The ratings for anxiety are grouped as follows:

- 0 to 1 (very low)
- 2 to 3 (low)
- 4 to 5 (medium)
- 6 to 10 (high)

6 . Measuring the data

These quarterly personal well-being estimates are from the Annual Population Survey (APS), which is a continuous household survey, covering the UK, with the aim of providing estimates between censuses of important social and labour market variables at a local area level.

The figures in this bulletin have been rounded. Accompanying percentage changes are based on the unrounded data.

The data in this releases come from the APS, which is a different source to that used for the weekly well-being figures given in the [Coronavirus and the social impacts on Great Britain](#) bulletin. Data for the weekly well-being figures come from the Opinions and Lifestyle Survey (OPN), which allows for much more current results. The APS data use a larger sample size and allow for comparison with the back series of data starting in 2011. The estimates will therefore differ slightly for methodological reasons, but the overall trends are the same.

An article has been published alongside this release to provide information on data collection changes because of the coronavirus (COVID-19) pandemic and their impact on estimating personal well-being. The article also outlines why estimates of personal well-being differ between the OPN and the APS.

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Personal well-being in the UK QMI](#). For more information on personal well-being, please see the [Personal well-being user guidance](#) and [Harmonised principles of personal well-being](#).

7 . Strengths and limitations

Data quality

We first published quarterly data for the personal well-being figures in November 2019 as Experimental Statistics. The aim is to use the quarterly data to explore short-term changes in personal well-being by looking at fluctuation over the years and comparisons over quarters one year apart.

Seasonal adjustment

The data published for our quarterly personal well-being figures are all seasonally adjusted (although non-seasonally adjusted estimates are also available). This aids interpretation by removing recurring fluctuations caused, for example, by holidays or other seasonal patterns.

The [regARIMA](#) model used to correct the series before applying moving average filters to the seasonal adjustment was reviewed at the end of 2020. There was a slight change to the model, which will be updated in the [Personal well-being quarterly estimates technical report](#) in due course.

From reviewing the model, it was found that two series were identified as having an Easter effect, these were part of the happiness sub-group. The effect was negative for the mean and positive for the low happiness threshold series. The implication is that happiness seems to decrease in the period immediately before Easter. All the seasonally adjusted series have been identified as having outliers or level shifts for Quarter 1 (January to March) 2020, for Quarter 2 (April to June) 2020, or for both. More information on this modelling can be found in the [Seasonal adjustment](#) methodological note.

Annual Population Survey data reweighting

Weighting answers to survey questions ensures that estimates are representative of the target population. Each person in the survey data has a "weight", the number of people that person represents in the population, which is used to produce estimates for the population. More accurate weighting is based on the latest available population estimates for that time period. When new population estimates become available, data can be reweighted to ensure better representation and so precision of estimates.

There has been some data collection changes to the method used for the Annual Population Survey in response to the coronavirus (COVID-19) pandemic. As a result, the data for Quarter 2 and Quarter 3 (July to September) 2020 have introduced a new weighting based on housing tenure. Further information on this can be found in [Data collection changes because of the coronavirus \(COVID-19\) pandemic and their impact on estimating personal well-being](#).

Statistical significance

Please note that:

- any changes mentioned in this publication are "statistically significant"
- comparisons have been based on unrounded data
- the statistical significance of differences noted within the release are determined based on non-overlapping confidence intervals in the unadjusted data
- if a change is considered significant in the unadjusted data, we translate this as significant in the seasonally adjusted data

8 . Related links

[Data collection changes because of the coronavirus \(COVID-19\) pandemic and their impact on estimating Personal Well-being](#)

Article | Released 4 February 2021

During the coronavirus (COVID-19) pandemic, the Office for National Statistics has published estimates of personal well-being using both the Annual Population Survey and the weekly module of the Opinions and Lifestyle Survey. This article considers the impact that the pandemic has had on data collection, to what extent this has influenced estimates of personal well-being and reviews the comparability of these estimates.

[Personal and economic well-being in Great Britain: January 2021](#)

Bulletin | Released 21 January 2020

Estimates looking across multiple sources for personal and economic well-being to understand the impact of the coronavirus (COVID-19) pandemic on people and households in Great Britain. Covers the period from March 2020 to December 2020.

[Coronavirus and the social impacts on Great Britain](#)

Bulletin | Released 22 January 2021

Indicators from the Opinions and Lifestyle Survey covering the period 13 to 17 January 2021 to understand the impact of the coronavirus (COVID-19) pandemic on people, households and communities in Great Britain.

[Coronavirus and anxiety, Great Britain: 3 April 2020 to 10 May 2020](#)

Article | Released 15 June 2020

The number of people reporting high levels of anxiety has sharply elevated during the coronavirus (COVID-19) pandemic. Provides insights into which socio-demographic and economic factors were most associated with high levels of anxiety during the first weeks of lockdown.

