

Article

# Understanding well-being inequalities: Who has the poorest personal well-being?

Analysis of the characteristics and circumstances associated with the poorest life satisfaction, feeling the things done in life are worthwhile, happiness and anxiety in the UK, from 2014 to 2016.

Contact:  
Edward Pyle; Silvia Manclossi  
qualityoflife@ons.gov.uk  
+44 (0)1633 582486

Release date:  
11 July 2018

Next release:  
To be announced

## Table of contents

1. [Main points](#)
2. [Statistician's comment](#)
3. [Things you need to know about this release](#)
4. [Who has the poorest personal well-being?](#)
5. [What affects poorest personal well-being most?](#)
6. [How do personal characteristics and circumstances combine among people with poorest personal well-being?](#)
7. [Next steps](#)
8. [Acknowledgments](#)

# 1 . Main points

- Between January 2014 and December 2016, around 1% of people in the UK (over half a million people) were estimated to report low ratings across all four personal well-being questions.
- Self-reported very bad or bad health was the strongest factor associated with the poorest personal well-being.
- Those self-reporting a disability were almost twice as likely to have the poorest personal well-being as those who said they were not disabled.
- Students were found to have the lowest likelihood of the poorest personal well-being while unpaid family workers had the highest.

People with the poorest personal well-being were most likely to have at least one of the following characteristics or circumstances:

- self-report very bad or bad health
- be economically inactive with long-term illness or disability
- be middle-aged
- be single, separated, widowed or divorced
- be renters
- have no or basic education

Three groups of people at particular risk of having the poorest personal well-being were identified as:

- unemployed or inactive renters with self-reported health problems or disability
- employed renters with self-reported health problems or disability
- retired homeowners with self-reported health problems or disability

## 2 . Statistician's comment

"There are inequalities in our society beyond the purely economic ones. Today, for the first time, we have identified some of the factors common to the half a million people in the UK with the lowest level of personal well-being. Improving how people feel about their lives is important for the health of our society in so many ways – not least the social and economic implications. Today's findings will help target services to support those in most need."

Silvia Manclossi, Head of Quality of Life Team, Office for National Statistics

### 3 . Things you need to know about this release

To increase the value of our work for decision makers and in keeping with our aspiration to “[leave no one behind](#)”, work has been undertaken to identify the characteristics and circumstances associated with the poorest personal well-being in the UK. The “leave no one behind” agenda is part of the UK’s commitment to the [Sustainable Development Goals](#), a set of ambitious goals and supporting targets aiming to eliminate poverty, reduce inequalities and halt climate change by 2030.

This publication uses the three-year dataset from the [Annual Population Survey](#) (APS), covering the period January 2014 to December 2016, to allow for more in-depth analysis. The four personal well-being questions are:

- 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?
- Overall, how anxious did you feel yesterday?

The responses to all four questions are measured on a 0 to 10 scale where 0 is “not at all” and 10 is “completely”. Personal well-being for life satisfaction, worthwhile and happiness is deemed to be “poor” if there is a score of 4 or less, while for anxiety, a score of 6 or more is deemed to be “poor” (as it indicates higher anxiety). Our [previous initial analysis](#) suggested that people rating their life satisfaction, worthwhile and happiness as 4 or below on the scale are much more likely to have the characteristics and circumstances typically associated with poor personal well-being than those rating these aspects of well-being even one point higher (5 or above).

In this article, “poorest personal well-being” is used to refer to those individuals who gave “poor” ratings of their personal well-being across all four questions. In looking at all four measures together, rather than each separately, a more complete picture of who has the poorest personal well-being has been provided. “Higher personal well-being” is used to refer to those individuals who did not report “poorest personal well-being”. It should be noted that this category also includes people who gave “poor” ratings of personal well-being for some of the four questions, but not all of them.

It is important to note that the data in this article were taken from a household survey to help understand the personal well-being of those living in private residential households. People living in communal establishments (such as care homes) or other non-household situations are not represented in the APS. This may be important in interpreting the findings as we could possibly be excluding some of those more likely to have the poorest personal well-being.

Any differences mentioned in this publication are “statistically significant” and based on non-overlapping 95% confidence intervals.

### 4 . Who has the poorest personal well-being?

Between January 2014 to December 2016, around 1% of people in the UK (over half a million people) were estimated to report low ratings across all four personal well-being questions. Descriptive analysis was carried out to shed light on how personal characteristics and circumstances are associated with the poorest personal well-being. This provides an important basis for the more detailed analysis that follows and the results are consistent with [previous findings](#), with self-reported health, economic activity, age, marital status, housing tenure and education representing the most prominent differences between those with the poorest personal well-being and those who reported higher ratings.

## People with the poorest personal well-being are most likely to report very bad or bad health

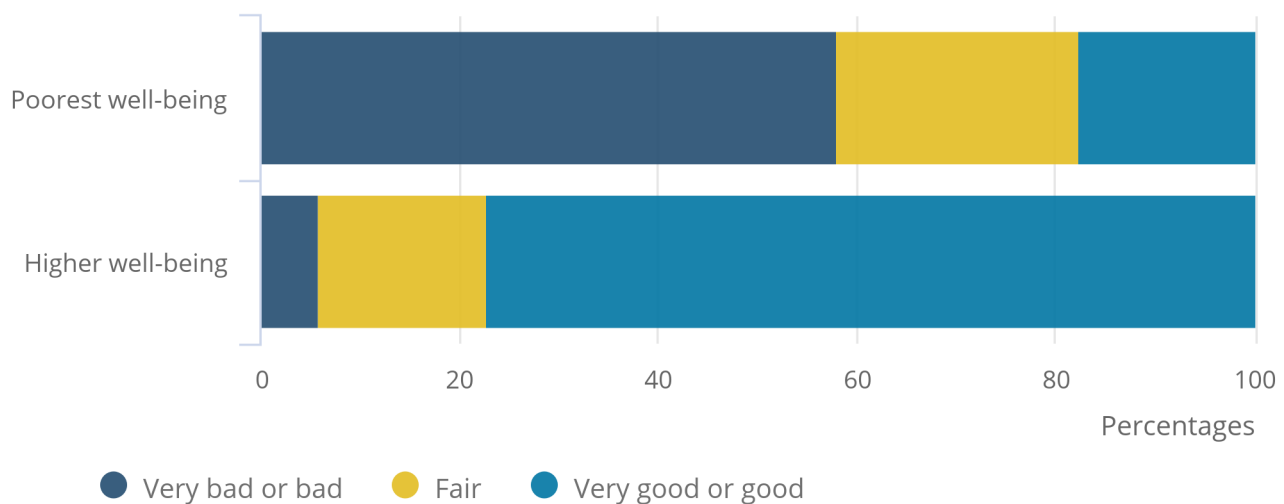
Self-reported health is strongly associated with how people rate their personal well-being. Over half (58.0%) of those with the poorest personal well-being rated their health as very bad or bad compared with only 6.0% of those reporting higher well-being. On the other hand, only 17.7% of those with the poorest personal well-being rated their health as good or very good compared with 77.1% of those with higher well-being.

**Figure 1: Personal well-being by self-reported health, 2014 to 2016**

UK

Figure 1: Personal well-being by self-reported health, 2014 to 2016

UK



Source: Annual Population Survey

Notes:

1. "Self-reported general health" is not an objective health measure but is based on the individual's own subjective assessment.

## People with poorest personal well-being are most likely to be economically inactive

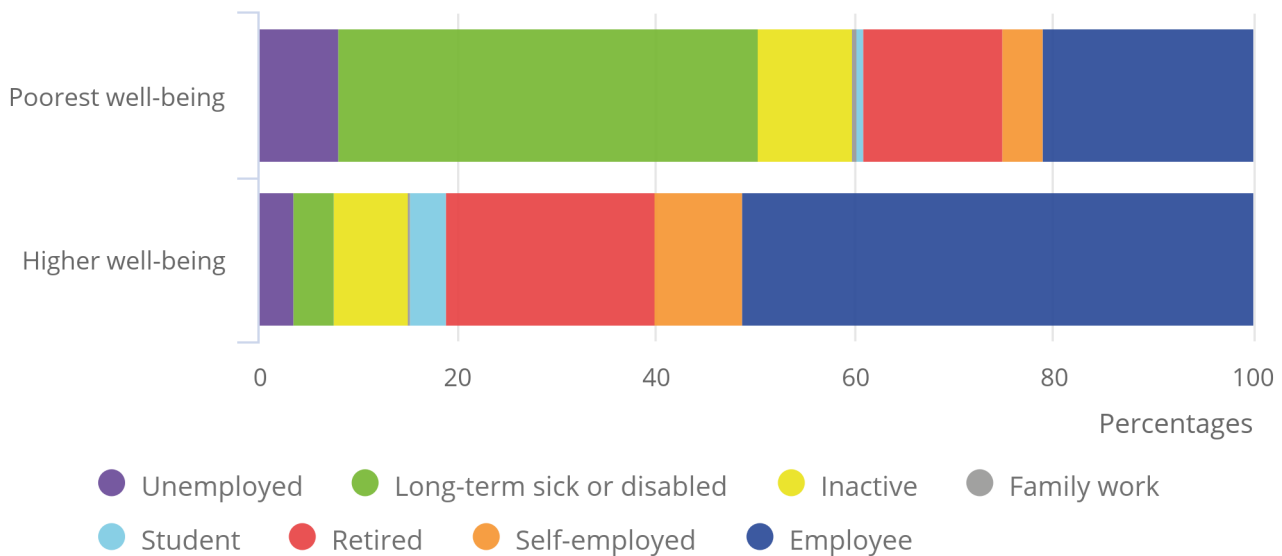
People with the poorest personal well-being were most likely to be economically inactive because of self-reported long-term illness or disability. Of those reporting the lowest personal well-being, 42.3% were economically inactive and reported long-term illness or disability compared with 4.0% of those reporting higher well-being. Similarly, of the poorest personal well-being group, 8.2% were unemployed compared with 3.7% of those with higher well-being.

**Figure 2: Personal well-being by economic activity, 2014 to 2016**

UK

Figure 2: Personal well-being by economic activity, 2014 to 2016

UK



Source: Annual Population Survey

Notes:

1. The Equality Act 2010 definition of disability is used in this release.
2. "Self-reported long-term illness or disability" is not an objective health measure but is based on the individual's own subjective assessment.
3. "Long-term illness or disability" includes people who reported not working and not seeking or unavailable for work because of self-reported long-term illness or disability. Economic classification follows the International Labour Organisation (ILO) classification.
4. "Student" includes those in full-time and part-time education.

### People with poorest personal well-being are most likely to be middle-aged

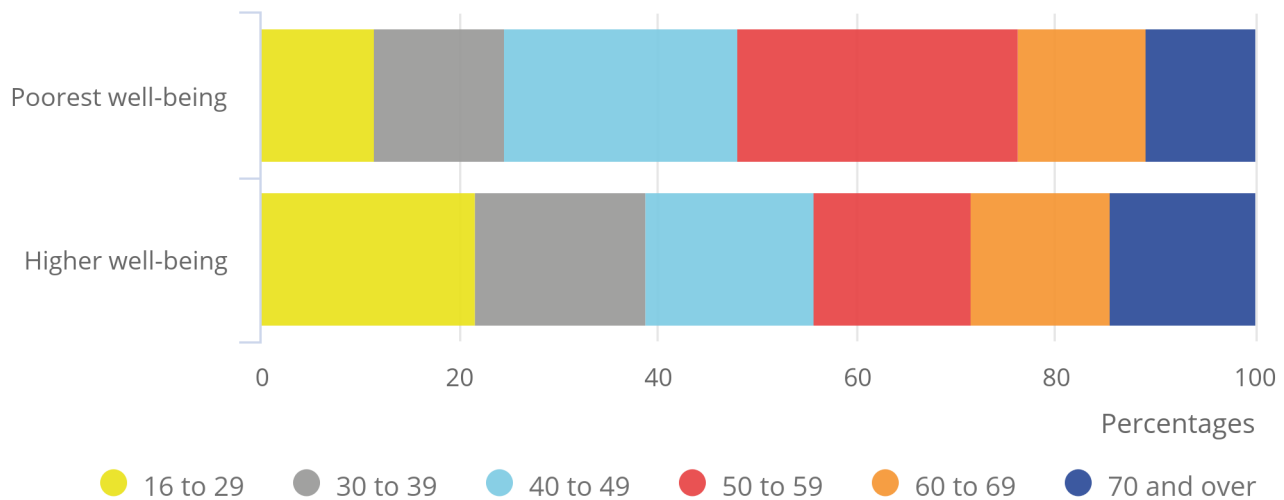
As [our previous research](#) has shown, personal well-being tends to be lowest among those in middle age. For example, about half of those reporting the poorest personal well-being (51.7%) were aged 40 to 59 years, compared with 32.9% of those reporting higher well-being.

**Figure 3: Personal well-being by age, 2014 to 2016**

UK

Figure 3: Personal well-being by age, 2014 to 2016

UK



Source: Annual Population Survey

### People with poorest personal well-being are least likely to be married or in a civil partnership

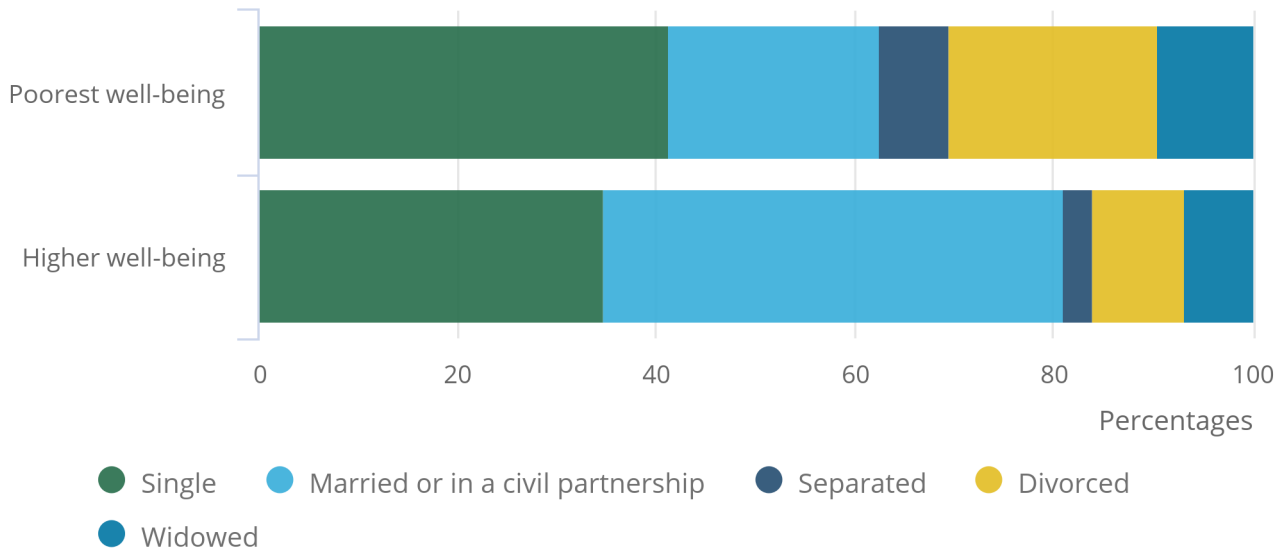
Marital status is another area that shows a clear relationship with personal well-being. Greater proportions of those reporting the poorest personal well-being were single (41.3%), separated (7.0%), divorced (21.1%) and widowed (9.4%) than those reporting higher well-being. A smaller proportion of those with the poorest personal well-being reported being married or in a civil partnership (21.3%) compared with those with higher well-being (46.2%).

**Figure 4: Personal well-being by marital status, 2014 to 2016**

UK

Figure 4: Personal well-being by marital status, 2014 to 2016

UK



Source: Annual Population Survey

### People with poorest personal well-being are most likely to rent their home

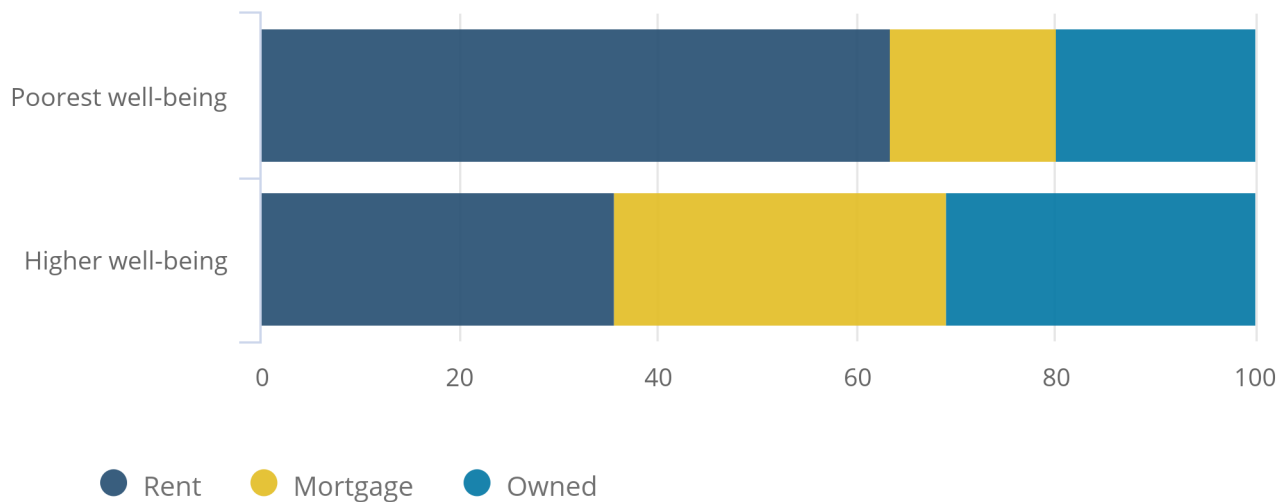
Of those with the poorest personal well-being, 63.4% reported that they rented their home, compared with 35.8% of those reporting higher well-being, and were less likely to own their home or have a mortgage.

**Figure 5: Personal well-being by housing tenure, 2014 to 2016**

UK

Figure 5: Personal well-being by housing tenure, 2014 to 2016

UK



Source: Annual Population Survey

Notes:

1. "Renting" includes both social and private renters.

### People with poorest personal well-being are most likely to have no or lower-level qualifications

Having lower or more basic educational qualifications appears to be associated with the poorest personal well-being. Of those with the poorest personal well-being, 24.5% reported either basic or no qualifications, which compares with 8.2% among those reporting higher well-being. Similarly, a relatively small proportion of those with the poorest personal well-being had a degree compared with those with higher well-being, 21.3% and 39.1% respectively.

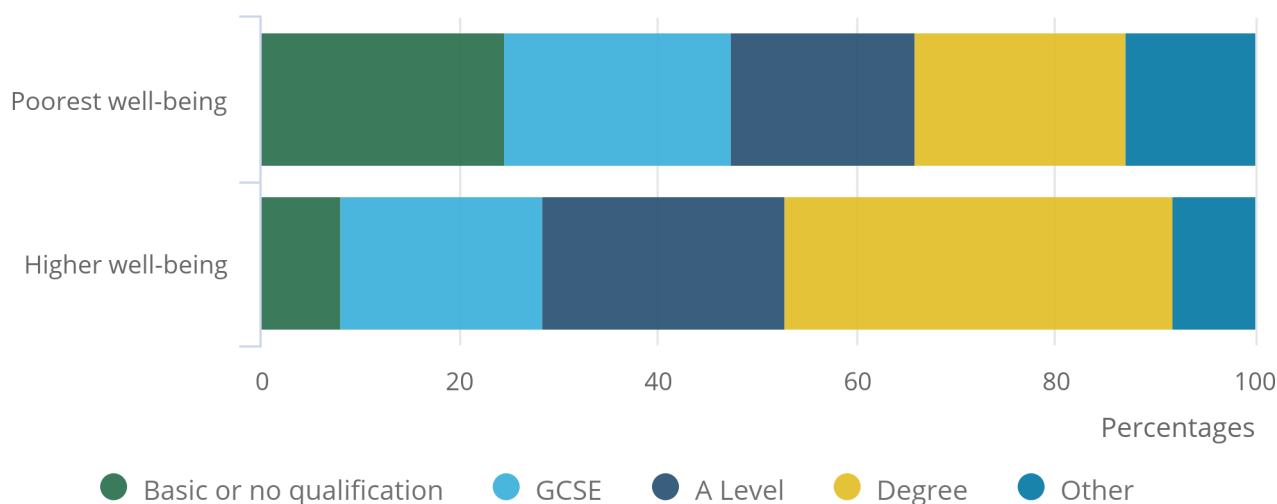


**Figure 6: Personal well-being by education, 2014 to 2016**

UK

Figure 6: Personal well-being by education, 2014 to 2016

UK



Source: Annual Population Survey

## 5 . What affects poorest personal well-being most?

To understand more about how each of these personal characteristics and circumstances contribute to the poorest personal well-being, logistic regression has been used. This is an analytical technique that focuses on one factor at a time, while holding others constant so the direct effect of specific characteristics and circumstances can be assessed.

Regression analysis can identify the strength of the relationships between the poorest personal well-being and other factors considered, but it cannot tell us about causality. Individuals will have many characteristics that could increase or decrease the chances of them reporting low personal well-being ratings and it can be difficult to identify the underlying causes of scoring their personal well-being this way, or alternatively, what keeps people from reporting low personal well-being scores.

All factors reported in this section have a statistically significant link with the poorest personal well-being (that is, we are confident these findings are robust and not just owing to random variability in the survey estimates). For each characteristic or circumstance, the likelihood of reporting the poorest personal well-being is compared to a reference category. The reference categories are those estimated to have the smallest odds of reporting the poorest personal well-being. They were chosen in such a way that all odds are displayed as positive in Figure 7 to facilitate the interpretation of the findings. For a full description of how the analysis was carried out, see the accompanying [technical report](#).

## Health

As shown in Figure 7, when other factors are held constant, self-reported health is the strongest factor associated with the poorest personal well-being. A person reporting fair health was 3.9 times more likely to have the poorest personal well-being than someone who reported good or very good health. This increased to 13.6 times higher for a person in very bad or bad health. Self-reported disability was also a significant factor associated with the poorest personal well-being, but the relationship was not as strong as for self-reported health. Those reporting a disability were 1.9 times more likely to report the poorest personal well-being than those who said they were not disabled.

The other main factors found to predict the poorest personal well-being are as follows.

## Economic activity

Compared with the other variable categories, students were found to have the lowest likelihood of the poorest personal well-being while unpaid family workers had the highest. This group is comprised of people who work in a family business and do not receive a formal wage or salary but benefit from the profits of that business. They were 4.1 times more likely than students to report the poorest personal well-being. Unemployed people were 3.7 times more likely than students to report the poorest personal well-being and those who were economically inactive due to self-reported long-term illness or disability were 2.9 times more likely than students to report the poorest personal well-being.

## Age

When compared with people aged 70 and over, those aged 30 to 39 years were 2.4 times more likely to report the poorest personal well-being. This increased further for those aged 40 to 49 years and 50 to 59 years, who were 3.0 and 2.8 times more likely respectively to report the poorest personal well-being.

## Marital status

People who were separated were 2.2 times more likely to report the poorest personal well-being than those who were married or in a civil partnership. Similarly, the likelihood of widows reporting the poorest personal well-being was 2.2 times greater than for married people or those in a civil partnership. Those single were twice as likely to report the poorest well-being compared with others married or in a civil partnership.

### Figure 7: Odds of reporting poorest personal well-being

[Download the data](#)

## 6 . How do personal characteristics and circumstances combine among people with poorest personal well-being?

Latent class analysis (LCA) is a statistical technique used to group together individuals with similar patterns of characteristics and circumstances. In this publication, this approach is used to understand how the characteristics and circumstances identified as the strongest factors associated with of the poorest personal well-being combine to produce a fuller picture of what the lives of people with the poorest personal well-being may be like. This allows us to better understand the characteristics of those people who fall into the 1% of the poorest personal well-being.

The final Indicator variables in the LCA model included:

- age
- self-reported health
- self-reported disability
- housing tenure
- economic activity

From the analysis, eight groups of people with similar characteristics and circumstances were identified. As shown in Table 1, the three groups with the greatest odds of reporting the poorest personal well-being were:

- unemployed or inactive renters with self-reported health problems or disability
- employed renters with self-reported health problems or disability
- retired homeowners with self-reported health problems or disability

**Table 1: Description of the groups identified and their odds of reporting the poorest personal well-being, 2014 to 2016**

<b>Main characteristics of the groups</b>	<b>Odds of reporting poorest personal well-being</b>
Unemployed or inactive renters with self-reported health problems or disability	1/32
Employed renters with self-reported health problems or disability	1/41
Retired homeowners with self-reported health problems or disability	1/71
Self-employed people without self-reported health problems or disability	1/187
Employees owning their homes with a mortgage without self-reported health problems or disability	1/348
Student or unemployed renters without self-reported health problems or disability	1/439
Elderly employees owning their home and without self-reported health problems or disability	1/508
Retirees owning their home and without self-reported health problems or disability	1/756

Source: Annual Population Survey

Through the LCA, three groups who have a much higher than 1% chance of reporting the poorest personal well-being were identified. As shown in Table 2, among the unemployed or inactive group, 2.9% reported the poorest personal well-being. This group included predominantly single renters aged under 60 years. A greater proportion of this group self-reported health or disability problems compared with those with higher well-being.

Among the employed group, 2.5% report the poorest personal well-being. Again, individuals in this group were mostly renters aged under 60 years self-reporting health or disability problems.

The third group mainly included homeowners who were retired, or widowed and self-reported health or disability problems – 1.5% reported the poorest personal well-being.

Common to all the three groups with the greatest odds of reporting the poorest personal well-being was the experience of self-reported health or disability problems.

People who rent rather than owning their homes were represented among two of the classes. Our earlier analysis also found that those who rent their home were more likely to report the poorest personal well-being than those who owned their homes.

Our analysis has also highlighted that people can experience the poorest personal well-being at any age, though there are different circumstances and characteristics associated with this at different ages, such as being in a different situation in relation to economic activities.

**Table 2: Characteristics of groups with the greatest odds of reporting the poorest personal well-being, UK, 2014 to 2016**

		LCA Group			Percentage
		Unemployed or inactive renters with self-reported health problems or disability	Employed renters with self-reported health problems or disability	Retired home owners with self-reported health problems or disability	Higher well-being population
Poorest well-being		2.9	2.5	1.5	NA
Age	16 to 59	96.0	86.5	0.6	71.6
	60 and over	4.0	13.5	99.4	28.4
General health	Fair, bad or very bad	34.4	98.4	93.6	22.9
	Good or very good	65.6	1.6	6.4	77.1
Disability	Disabled	32.9	77.4	82.4	22.9
	Not disabled	67.1	22.6	17.6	77.1
Tenure	Own home	12.7	19.4	61.4	31.0
	Buying with mortgage	10.0	31.5	4.9	33.2
	Renting	77.3	49.1	33.7	35.8
Economic activity	Employee	0.0	89.3	0.0	51.2
	Inactive	23.6	8.1	1.3	11.5
	Retired	0.0	0.4	98.6	21.0
	Self-employed	0.0	0.0	0.0	8.8
	Student	1.6	0.1	0.0	3.6
	Unemployed	74.8	2.0	0.0	3.7
Marital status	Married or civil partnership	21.6	39.9	47.1	46.2
	Separated	4.4	5.1	2.0	3.0
	Single	63.5	38.2	6.3	34.9
	Divorced or dissolved	8.9	14.0	12.5	9.1
	Widowed	1.6	2.8	32.2	6.9

Source: Annual Population Survey

Note:

1. "Marital status" was not included in the LCA model as it was not as important as the other variables to identify the groups but was considered to provide further examination of the groups.

## 7 . Next steps

This year, we will be establishing a Centre of Expertise for Inequalities. The aim of the centre will be to ensure that the right data are available to address the main social and policy questions about fairness and equity in our society, that the relevant analysis is taken forward and that the most appropriate methods are used. This will involve partnerships across government, academia and other organisations to identify where better evidence is needed and to make better use of new and existing data sources.

As part of this, we will be carrying out further work exploring:

- additional factors to further explain the circumstances and characteristics of those reporting the poorest personal well-being
- whether those in the current “fair” threshold (a rating of 4 to 5 for anxiety and 5 to 6 for happiness, life satisfaction and worthwhile) might be “at risk” of poor personal well-being, for example, by monitoring the size of this group and possible transitions in and out of poor well-being

## 8 . Acknowledgments

This publication represents the outcome of a collaborative effort.

The Office for National Statistics is grateful for the contribution and assistance provided by Alina Velias (City, University of London), Kate Laffan and Paul Dolan (London School of Economics and Political Science) to identify the characteristics and circumstances associated with the poorest personal well-being in the UK.