

# Analysis of Experimental Subjective Well-being Data from the Annual Population Survey, April to September 2011

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## Overview

This report presents initial estimates of subjective well-being from six months of the Annual Population Survey (APS) carried out between April and September 2011. This six monthly subjective well-being dataset, as well as the subjective well-being statistics derived from it, are considered experimental statistics, published at an early stage to involve users as they undergo further testing and development.

These estimates supplement those published previously by the Office for National Statistics (ONS) from the Opinions Survey in December 2011 and are based on a much larger sample (80,000 adults aged 16 and over from across the UK). The report provides overall estimates of people's own views of their well-being from four subjective well-being questions introduced on the APS in April 2011. Subjective well-being estimates are also presented by characteristics such as age, sex, ethnic group and region/country, as well as those relating to what people told ONS was important in the Measuring National Well-being 'National Debate' such as personal relationships, children and work situation.

## Introduction

It is increasingly understood that traditional economic measures are necessary, but not sufficient, to reflect a nation's overall progress or well-being. There has been increasing interest in the UK and around the world in using wider measures of well-being to monitor progress and evaluate policy in order to focus on quality of life and the environment, as well as economic growth in assessing progress.

The Office for National Statistics Measuring National Well-being (MNW) Programme was launched in November 2010 as a response to this growing demand from within the UK as well as

internationally. The long-term aim of the Programme is to develop a set of accepted and trusted statistics measuring well-being and progress in the UK.

An important component of national well-being is subjective well-being, which is measured by finding out how people think and feel about their life. Subjective well-being measures provide policy makers with unique information, aside from other socio-economic indicators. They can be used to assess the impact of policy interventions and to design policies to improve and promote individuals' subjective well-being.

While subjective well-being is important, it is just one component of national well-being. ONS believes that capturing both subjective and objective measures is essential when making any assessment of national well-being.

From April 2011 ONS introduced four subjective well-being questions on ONS household surveys, including the Annual Population Survey (APS) (the largest constituent survey of the Integrated Household Survey (IHS)) and the Opinions Survey (OPN).

The four questions are as follows:

- 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?

(All asked on a 0 to 10 scale, where 0 is 'not at all' and 10 is 'completely'.)

On 1 December 2011 ONS published the Initial investigation into Subjective Well-being from the Opinions Survey report based on a sample of 4,000 adults aged 16 and over. This was the first ONS report analysing ONS data on subjective well-being.

The data analysed in this second report was collected using the Annual Population Survey (APS) which is the largest constituent survey of the Integrated Household Survey. The sample size of the six month APS dataset is 80,000 adults aged 16 and over. The sample size analysed for this report is much larger than the dataset from the Opinions Survey report, and based on a UK rather than a Great Britain sample. This has allowed more detailed investigation of sub-groups of the population, such as analysis of subjective well-being by region and ethnic group. Other additional analyses in this report includes analysis of subjective well-being by people living in households with or without children, age of youngest child in the household, reasons for part-time work and economic inactivity, duration of unemployment, and socio-economic classification.

The analysis in this report is descriptive, in that it explores the data comparing subjective well-being ratings between different groups. At this stage ONS has not undertaken more complex analysis (regression analysis), where all the different characteristics are taken together and controlled for, to look at how they are associated with overall levels of subjective well-being. By making the micro data set available via the UK Data Archive and approved researcher route, we hope that the use of these data can be maximised to increase understanding in this area.

Although the four subjective well-being questions were drawn from established research and academic advice (Dolan et al., 2011), the data from these questions is classed as 'experimental' to allow for user feedback at an early stage, and potential refinement and development of the questions as required. After this iterative process the subjective well-being statistics will be submitted to the UK Statistics Authority for assessment as National Statistics.

## Executive Summary

To measure national well-being it is important to not only rely on traditional indicators of economic and social progress, but also to collect information from people themselves about how they assess their own well-being. Individual or subjective well-being estimates are an important addition to existing official statistics, this report presents experimental statistics from the ONS Annual Population Survey (APS) looking at the levels of subjective well-being in the UK.

### Overall estimates

Estimates are for the UK from April to September 2011 and are based on a 0 to 10 scale where 0 is 'not at all' and 10 is 'completely' and percentages refer to adults aged 16 and over living in private households:

- When asked, '**Overall, how satisfied are you with your life nowadays?**' the majority (75.5 per cent) of adults were estimated to have a rating of seven out of 10 or more. However, 7.0 per cent reported that their life satisfaction was less than five out of 10. The average rating for this question was 7.4 out of 10.
- When asked, '**Overall, to what extent do you feel the things you do in your life are worthwhile?**' a slightly larger proportion (79.5 per cent) of adults reported seven or more out of 10. Only 5.1 per cent of adults gave a rating of less than five out of 10. The average rating for the 'worthwhile' question was higher than the 'life satisfaction' question at 7.6 out of 10.
- When asked, '**Overall, how happy did you feel yesterday?**' again the majority (71.3 per cent) of adults responded with seven or more out of 10. However, the spread of ratings was wider than for the 'life satisfaction' and 'worthwhile' questions and a higher proportion of people gave ratings of less than five out of 10 (10.9 per cent). The average rating for the 'happiness yesterday' question was 7.3 out of 10.
- When asked, '**Overall, how anxious did you feel yesterday?**' the ratings were even more spread out. Although the majority of people, (59.6 per cent) reported a low level of anxiety for this question (between nought and three), 22.3 per cent reported a higher anxiety rating of between 6 and 10 out of 10. The average rating for this question was 3.2 out of 10.

### Subjective well-being and key characteristics

The overall estimates can be analysed by different key characteristics such as age, sex and region or country.

- The differences in average levels of subjective well-being between men and women are fairly small, however, women report slightly higher average ratings than men for each of the four questions. The largest difference is for the 'worthwhile' question where women have an average score of 7.8 out of 10, compare with 7.5 out of 10 for men.

- There is a 'U shape' relationship between the 'life satisfaction' 'worthwhile' and 'happiness yesterday' questions and age. This means that younger and older adults in the UK reported higher levels to these questions on average than people in their middle years. Highest levels were for those aged 16 to 19 and aged 65 to 79.
- An inverse U-shaped curve is observed for the 'anxious yesterday' question with higher levels of anxiety reported in the middle years. The youngest (16 to 19) and older (65 and over) age groups reported significantly lower levels of anxiety in the previous day.
- 'Mixed/Multiple ethnic groups' and 'Black/African/Caribbean/Black British' both reported significantly lower than average ratings (6.9 and 6.6 respectively) for 'life satisfaction' question compared with the UK average of 7.4 out of 10.
- Of the four UK countries, Northern Ireland has the highest score for life satisfaction (7.6 out of 10) compared with 7.5 for Scotland and 7.4 for both England and Wales. Northern Ireland also had the highest scores for the 'worthwhile' and 'happiness yesterday' questions.
- The overall life satisfaction rating for England was 7.4 out of 10. Most English regions did not differ very much from this, but, London and the West Midlands had the lowest average ratings (7.2 out of 10) and the South East and South West had the highest ratings (7.5 out of 10).
- Adults living in London reported the highest levels of anxiety in the previous day compared with other regions in England and constituent countries of the UK (3.5 out of 10).

### Subjective well-being and other characteristics

- It is possible to examine how the four subjective well-being monitoring questions are related with some of the areas that the national debate identified as important for well-being, for example, family, personal relationships and work situation.
- Having a partner is also positively associated with the 'life satisfaction', 'worthwhile' and 'happiness yesterday' questions. On average, adults who are married, in a civil partnership or cohabitating reported higher average ratings than those who are single, widowed, divorced, separated or formerly in a civil partnership.
- People living in households with children report significantly higher ratings for the 'worthwhile' question than those who live in households where no children are present. However, average ratings for the 'life satisfaction', 'happy yesterday' and 'anxious yesterday' questions do not vary between people who live in households with children and those who do not.
- Average ratings for the 'life satisfaction', 'worthwhile', and 'happy yesterday' questions were all significantly lower for the unemployed than for employed people. For example, the average overall life satisfaction for people who are employed was 7.5 out of 10, compared with 6.5 out of 10 for unemployed people.
- The longer the duration of a person's unemployment the lower their scores are for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions.
- Average ratings for the 'life satisfaction', 'happy yesterday' and 'anxious yesterday' questions did not differ between people who worked part-time or people who worked full-time. However, people who worked part-time had higher average ratings for the 'worthwhile' question than those who worked full-time.
- Average ratings for people who worked part-time differed depending on the reason for working part-time. People who were working part-time because they could not find a full-time job reported lower than average ratings for the 'life satisfaction' question (6.9 out of ten) than those who did not want a full-time job (7.7 out of ten).

## Section 1: Comparing the four overall Measures of Subjective Well-being

The four overall monitoring questions included in the APS dataset were designed to collect different types of information from people about their own well-being. It is therefore useful to look at the results from each of the four questions and compare them with one another to see how much the estimates differ. In this report the abbreviations 'life satisfaction', 'worthwhile' 'happy yesterday' and 'anxious yesterday' are used to refer to the four overall monitoring questions outlined in the introduction to this report.

**Table 1.1 Average (mean) rating and percentage of adults reporting low, medium and high ratings for each subjective well-being question(1–4), 2011(5)**

United Kingdom

	Low rating		Medium rating (7-8)	High rating (9-10)	Average (mean) rating
	(0-4)	(5-6)			
<b>Life satisfaction</b>	7.0	17.5	49.4	26.1	7.4
<b>Worthwhile</b>	5.1	15.4	48.2	31.3	7.6
<b>Happy yesterday</b>	10.9	17.8	38.7	32.6	7.3
	High rating		Medium rating (2-3)	Low rating (0-1)	Average (mean) rating
	(6-10)	(4-5)			
<b>Anxious yesterday</b>	22.3	18.2	23.6	36.0	3.2

**Table source:** Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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Comparing the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions, the highest proportion of people giving a high rating of nine or 10 out of 10 was for the 'happy yesterday' question. One third (32.6 per cent) of people gave a score of 9 or 10 out of 10 for this question and 71.3 per cent

of adults responded with seven or more out of 10. Of the three questions, the highest proportion of respondents gave a low rating in response to the 'happy yesterday' question, (28.7 per cent) and 10.9 per cent of respondents rated their happiness yesterday as less than five out of 10. This suggests that people are more likely to tend towards the extremes of the scale when providing answers to the 'happy yesterday' question than when answering the 'life satisfaction' or 'worthwhile' questions. This is perhaps not surprising given that the 'happy yesterday' question asks people to make an assessment of their emotions in the short term rather than an overall assessment of their life.

Just over a quarter of people (26.1 per cent) gave a high rating of 9 or 10 out of 10 for the 'life satisfaction' question and half (49.4 per cent) gave a medium rating of 7 or 8 out of 10 for this question. Almost a third of people (31.3 per cent) gave a high rating for the 'worthwhile' question and almost half (48.2 per cent) gave a medium rating or 7 or 8 out of 10 for this question.

For the 'anxious yesterday' question over a third of people (36.0 per cent) gave a low rating of nought or 1 out of 10 for this question indicating low anxiety levels. Two-fifths of respondents, (40.4 per cent) provided a high rating of 4 or above for this question. This suggests that like the 'happy yesterday' question, people are more likely to tend towards the extremes of the scale when answering this question compared with the 'life satisfaction' and 'worthwhile' questions.

## Section 2: Key Characteristics

### Gender

The differences in average levels of subjective well-being between men and women were fairly small although with the large sample from the APS these differences were statistically significant in most cases. Figure 2.1 shows that on average, women reported significantly higher average ratings than men for the 'life satisfaction' and 'worthwhile' questions and the same ratings for the 'happy yesterday' question. However, women reported significantly higher anxiety levels with an average rating of 3.3 out of 10 compared with 3.1 out of 10 for men.

**Figure 2.1 Average (mean) subjective well-being ratings(1–4): by gender, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Age**

As seen in previous research, (ONS, 2011 & Dolan et.al. 2008) Table 2.1 shows a U-shaped relationship for the 'life satisfaction' question ratings by age group. The average life satisfaction rating was significantly higher for the youngest age group of 16 to 19 (7.8 out of 10), and for the older age groups (those between 65 and 79) than for the people in the middle years. For the older age groups, the average life satisfaction was highest for the 65 to 69 and 65 to 79 years old (7.8 out of 10), with average ratings reducing significantly for the 80 years old and over age group.

The U-shape was less prominent for the 'worthwhile' question, which could suggest that people's views on the extent to which the things they do in life are worthwhile remain more stable throughout life compared their with life satisfaction. In groups over the age of 60 the average rating increased significantly, with the highest average rating occurring for the 65 to 69 age group (8.1).

For all age groups with the exception of 16 to 19 year olds, people had higher average 'worthwhile' than 'life satisfaction' ratings.

**Table 2.1 Average (mean) subjective well-being ratings(1-4): by age group, 2011(5)**

United Kingdom

	Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday
<b>16–19</b>	7.8	7.6	7.6	2.8
<b>20–24</b>	7.4	7.5	7.2	3.0
<b>25–29</b>	7.5	7.6	7.2	3.1
<b>30–34</b>	7.4	7.6	7.2	3.3
<b>35–39</b>	7.3	7.6	7.2	3.3
<b>40–44</b>	7.2	7.6	7.2	3.4
<b>45–49</b>	7.0	7.5	7.0	3.4
<b>50–54</b>	7.1	7.5	7.1	3.4
<b>55–59</b>	7.1	7.6	7.1	3.4
<b>60–64</b>	7.5	7.8	7.5	3.1
<b>65–69</b>	7.8	8.1	7.7	2.9
<b>70–74</b>	7.7	8.0	7.7	2.9
<b>75–79</b>	7.8	8.0	7.8	2.8
<b>80 and over</b>	7.5	7.5	7.5	3.0

**Table source:** Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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Table 2.1 shows the average ratings for the 'happy yesterday' and 'anxious yesterday' questions by age group. As with 'life satisfaction' and 'worthwhile' questions, a slight U-shape was observed for the 'happy yesterday' question. The youngest age group and groups over the age of 59 were significantly happier than groups in the middle years. As with the 'life satisfaction' question, a significant drop in average levels of happiness was observed in the 80 and over group.

An inverse U-shape was observed for the 'anxious yesterday' question with higher average levels of anxiety reported for the middle years. With the exception of the group aged 80 and over, the youngest (16 to 19) and older (65 and above) age groups reported significantly lower average levels of anxiety (2.9 or less out of 10). This pattern for the 'anxious yesterday' question by age was not evident from the smaller OPN sample that was analysed and published in December 2011.

## Gender and age group

Although on average men's and women's levels of subjective well-being were similar, when examined by age some important findings emerge, particularly in the 60 and over age groups which could be associated with retirement from work.

Table 2.2 shows average ratings for the 'life satisfaction' question were higher for women than men for all ages up to age 64, although this was only statistically significant for age groups 35 to 39, 40 to 44 and 60 to 64. In the 65 and over age groups, the small differences between men and women's ratings for the 'life satisfaction' question were no longer present (except for the age group 80 and over where men on average had slightly higher levels of life satisfaction than women, although this was not statistically significant).

For most age groups women reported on average slightly higher average ratings for the 'happy yesterday' question than men. However, the reverse was observed for ages 65 and over where men reported slightly higher average levels for the 'happy yesterday' question (apart from the 75 to 79 age group where the estimates were the same).

**Table 2.2 Average (mean) life satisfaction and happy yesterday ratings(1-4): by gender and age group, 2011(5)**

United Kingdom

Life satisfaction	Happy yesterday			
	Men	Women	Men	Women
<b>16–19</b>	7.7	7.9	7.6	7.6
<b>20–24</b>	7.4	7.5	7.2	7.3
<b>25–29</b>	7.4	7.5	7.1	7.3
<b>30–34</b>	7.3	7.4	7.1	7.2
<b>35–39</b>	7.3	7.4	7.2	7.3
<b>40–44</b>	7.1	7.2	7.1	7.2
<b>45–49</b>	7.0	7.1	6.9	7.0
<b>50–54</b>	7.1	7.1	7.1	7.1
<b>55–59</b>	7.1	7.2	7.1	7.1
<b>60–64</b>	7.4	7.7	7.4	7.6
<b>65–69</b>	7.8	7.8	7.8	7.7
<b>70–74</b>	7.7	7.7	7.8	7.7
<b>75–79</b>	7.8	7.8	7.8	7.8
<b>80 and over</b>	7.6	7.5	7.5	7.4

Table source: Office for National Statistics

**Table notes:**

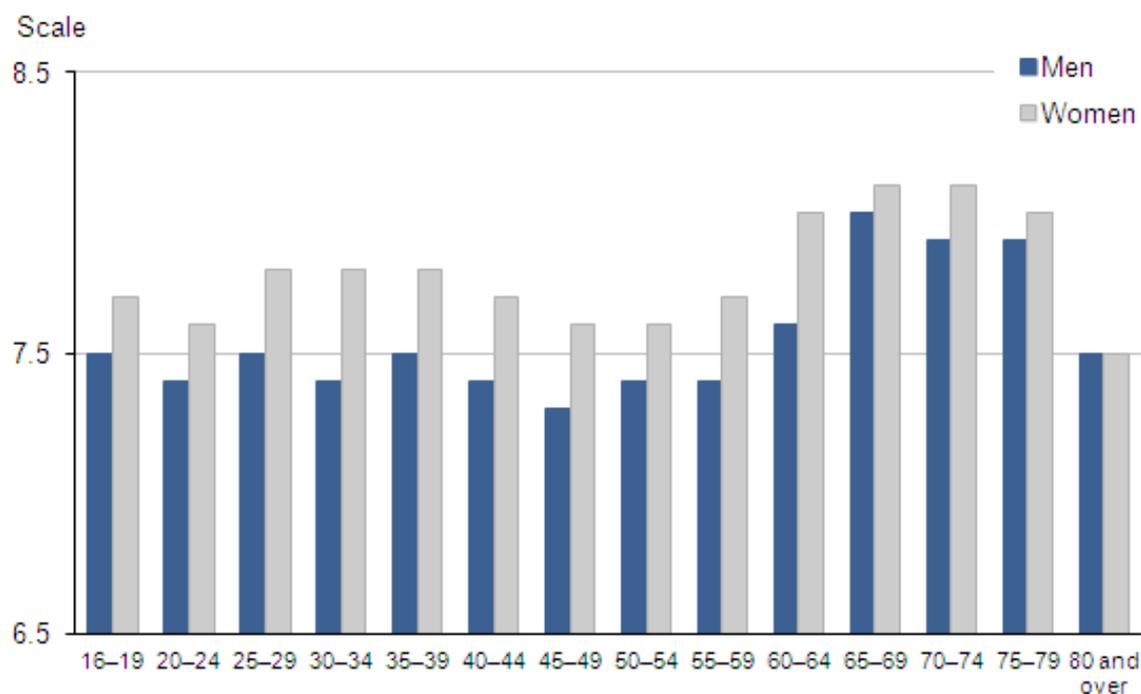
1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Figure 2.2 Average (mean) worthwhile ratings(1–4): by gender and age group, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

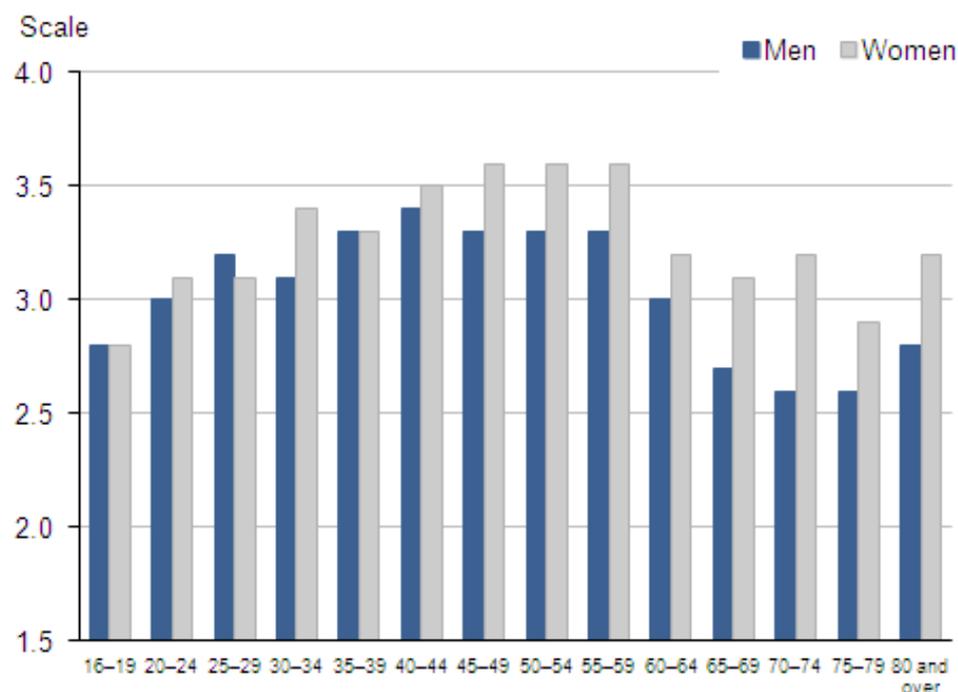
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Women had significantly higher average ratings for the 'worthwhile' question than men for all age groups except the youngest, and groups aged 65 and over. Average ratings for the 'worthwhile' question were fairly stable for both men and women until the age of 60 where a sharp rise was observed (Figure 2.2). The average ratings for the 'worthwhile' question for the 60 to 79 age groups were the highest of all ages, but lower for those aged 80 and over where they were 7.5 out of 10.

**Figure 2.3 Average (mean) anxious yesterday ratings(1–4): by gender and age group, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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Figure 2.3 shows that on the whole, women reported higher levels of anxiety than men for all age groups with the exception of the 16 to 19 and 35 to 39 age groups where average ratings were the same (2.8 and 3.3 out of 10 respectively) and the 25 to 29 age group where men reported higher levels of anxiety than women. After age 65 the average anxiety levels appear to drop off more for men than women.

**Ethnic group**

Table 2.3 highlights the variations in average subjective well-being ratings by ethnic group. 'White' respondents reported the same or similar average ratings as the UK as a whole which is to be expected as the majority of the UK population report being 'White' and, as such make up the largest proportion of survey respondents.

'Indian', 'Chinese' and 'Other Asian' groups had broadly similar average ratings for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions compared with the UK average. However, 'Indian' respondents reported significantly higher levels of anxiety (3.5 out of 10) than the UK average (3.2 out of 10).

Both 'Pakistani' and 'Bangladeshi' groups reported significantly lower average ratings for the 'worthwhile' question and higher ratings for the 'anxious yesterday' question than the UK average. However, 'Pakistani' respondents also reported significantly lower ratings for the 'life satisfaction' and 'happy yesterday' questions.

'Mixed/Multiple ethnic groups' and 'Black/African/Caribbean/Black British' both reported significantly lower than average ratings for the 'life satisfaction' and 'happy yesterday' questions.

**Table 2.3 Average (mean) subjective well-being ratings(1–4): by ethnic group, 2011(5)**

United Kingdom

<b>Ethnic group (UK level)</b>	<b>Life satisfaction</b>	<b>Worthwhile</b>	<b>Happy yesterday</b>	<b>Anxious yesterday</b>
<b>All ethnic groups</b>	7.4	7.6	7.3	3.2
<b>White</b>	7.4	7.7	7.3	3.2
<b>Gypsy, Traveller/ Irish Traveller</b>	..(6)	..(6)	..(6)	..(6)
<b>Mixed / Multiple ethnic groups</b>	6.9	7.5	7.0	3.4
<b>Indian</b>	7.4	7.6	7.3	3.5
<b>Pakistani</b>	7.0	7.1	7.0	3.7
<b>Bangladeshi</b>	7.1	7.1	7.2	3.9
<b>Chinese</b>	7.3	7.4	7.2	3.2
<b>Any other Asian background</b>	7.4	7.5	7.3	3.5
<b>Black/ African/ Caribbean/Black British</b>	6.6	7.4	6.9	3.6
<b>Arab</b>	6.8	7.3	7.0	4.0
<b>Other ethnic group</b>	7.3	7.4	7.3	3.4

**Table source:** Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.

2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.
6. Sample size too small for reliable estimates.

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## Section 3: Countries of the UK and English Regions

Traditionally when making assessments of how constituent countries of the UK and English regions are performing, a range of objective variables are used. However, it is important not only to look at objective data but also to consider subjective well-being estimates to get a full picture of well-being in various geographic areas. If only objective data are taken into account then a different picture may emerge compared with when subjective well-being data are also used alongside this information.

Looking at objective data may also help us understand why different levels of subjective well-being estimates exist. The differences between subjective well-being estimates and other objective data are also of interest and the reasons for these differences warrant further research.

Table 3.1 includes a selection of objective data for the countries of the UK and regions of England that are commonly used to make assessments about different areas within the UK. Table 3.3 provides subjective well-being estimates for the same geographic areas.

### Objective data

When Gross Value Added (GVA) (the value of goods and services produced in an area) per person by country and region of residence is examined, England has the highest levels of GVA per person compared with the other countries of the UK. Within England, London has the highest level of GVA far exceeding other regions (Table 3.2). Of all regions and constituent UK countries Wales has the lowest GVA followed by Northern Ireland and North East England.

However, one indicator is not enough to explain the multifaceted nature of well-being, and other indicators should be considered to provide a broader awareness of the different context in the countries of the UK and the English regions. For example, if unemployment rates are examined then England does not perform as well as Northern Ireland (Table 3.2) as it has higher rates of unemployment (Table 3.1). London also has high levels of unemployment (Table 3.1), ranking eighth out of the nine English regions (Table 3.2) with only the North East currently experiencing higher levels of unemployment. When looking at unemployment rates it should also be borne in mind that employment and economic inactivity rates also vary between the different constituent countries of the UK and English regions.

Life expectancy is also a common indicator of the health of the people in an area. Men and women living in England have higher life expectancy than those living in the other countries of the UK. Within England, it is lower for both men and women in middle and northern English regions with the

North West having the lowest life expectancy of all regions (Tables 3.1 and 3.2). In contrast, London is among the English regions with the highest levels of life expectancy.

**Table 3.1 GVA(1–3), unemployment rate(4), life expectancy(5) and percentage of people aged 65 and over(6): by English region and countries of the UK(7)**

United Kingdom

	GVA £ per head	Unemployment rate (%)	Life expectancy		Percentage aged 65 and over
			Men	Women	
<b>United Kingdom</b>	20,849	8.4	78.2	82.3	16.6
<b>North East</b>	15,744	11.2	77.2	81.2	17.2
<b>North West</b>	17,381	9.3	77.0	81.1	16.7
<b>Yorkshire and The Humber</b>	16,917	9.9	77.7	81.8	16.4
<b>East Midlands</b>	18,090	8.2	78.4	82.4	17.1
<b>West Midlands</b>	17,060	9.3	77.9	82.2	17.2
<b>East of England</b>	21,035	7.0	79.6	83.2	17.5
<b>London</b>	31,969	10.0	79.0	83.3	11.5
<b>South East</b>	23,336	6.3	79.7	83.5	17.2
<b>South West</b>	18,669	6.1	79.5	83.5	19.6
<b>England</b>	20,974	8.4	78.6	82.6	16.5
<b>Wales</b>	15,145	9.0	77.6	81.8	18.6
<b>Scotland</b>	20,220	8.6	75.9	80.4	16.8
<b>Northern Ireland</b>	15,651	7.2	77.1	81.5	14.5

**Table source:** Office for National Statistics

**Table notes:**

1. Gross Value Added.
2. 2010.
3. Residence based GVA.
4. October–December 2011.

5. 2008–2010.
6. 2010.
7. More data are available in Regional Profiles on the Neighbourhood Statistics Website.

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**Table 3.2 Rankings(1) of constituent countries of the UK and English regions by GVA(2), unemployment rate(3) and life expectancy**

United Kingdom

Ranking	GVA (£ per head)	Unemployment rate	Life expectancy	
			Men	Women
1	London	SW	SE	SE/SW
2	South East	SE	E	SE/SW
3	East of England	E	SW	L
4	South West	EM	L	E
5	East Midlands	NW	EM	EM
6	North West	WM	WM	WM
7	West Midlands	Y&H	Y&H	Y&H
8	Y&H(4)	L	NE	NE
9	North East	NE	NW	NW
1	England	Northern Ireland	England	England
2	Scotland	England	Wales	Wales
3	Northern Ireland	Scotland	Northern Ireland	Northern Ireland
4	Wales	Wales	Scotland	Scotland

**Table source:** Office for National Statistics

**Table notes:**

1. Ranking where 1 = highest rank.
2. Gross Value Added.
3. Lowest rate of unemployment is given highest ranking.
4. Y&H = Yorkshire and the Humber.

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## Subjective well-being

Subjective well-being provides further information that is not available from objective indicators alone and provides an additional way of making an assessment of the well-being of an area.

Northern Ireland had higher average ratings than England, Scotland and Wales for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions (7.6, 7.8 and 7.5 out of 10 respectively) (Tables 3.3 and 3.4).

This is supported by findings from the [Gallup-Healthways Well-Being Index for 2011](#) which reports that Northern Ireland's higher Well-being Index rating is due to better life ratings, work environment perceptions and access to basic necessities.

However, the average 'anxious yesterday' rating in Northern Ireland (3.2 out of 10) was the same as England and similar to Wales and Scotland (3.1).

Within England, 'life satisfaction' ratings did not vary much across the regions with an average rating for the majority of regions of 7.4 out of 10. However, London and the West Midlands had significantly lower average ratings (7.2) than other regions and the South East and the South West had the highest average 'life satisfaction' ratings (7.5 out of 10) (Table 3.3 and 3.4).

Similar patterns were also seen for the 'worthwhile' and 'happy yesterday' questions with the West Midlands and London having the lowest average 'worthwhile' ratings (7.4 and 7.5 respectively) and along with the North East, the lowest average 'happy yesterday' ratings (7.2) (although the differences were not statistically significant for the 'happy yesterday' question). People living in London reported the highest levels of anxiety on the previous day to the interview with average ratings of 3.5 compared with 3.1 or 3.2 out of 10 for all other regions and constituent countries of the UK.

**Table 3.3 Average (mean) subjective well-being ratings(1–4): by countries of the UK and English regions, 2011(5)**

United Kingdom

	Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday
<b>United Kingdom</b>	7.4	7.6	7.3	3.2
<b>North East</b>	7.4	7.6	7.2	3.2
<b>North West (including Merseyside)</b>	7.4	7.7	7.3	3.2
<b>Yorkshire and The Humber</b>	7.4	7.6	7.3	3.2
<b>East Midlands</b>	7.4	7.6	7.3	3.2
<b>West Midlands</b>	7.2	7.4	7.2	3.1
<b>East of England</b>	7.4	7.7	7.4	3.1
<b>London</b>	7.2	7.5	7.2	3.5
<b>South East</b>	7.5	7.7	7.4	3.1
<b>South West</b>	7.5	7.7	7.4	3.1
<b>England</b>	7.4	7.6	7.3	3.2
<b>Wales</b>	7.4	7.7	7.3	3.1
<b>Scotland</b>	7.5	7.6	7.3	3.1
<b>Northern Ireland</b>	7.6	7.8	7.5	3.2

Table source: Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Table 3.4 Rankings(1) of constituent countries of the UK and English regions by average ratings from subjective well-being questions**

United Kingdom

Ranking	Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday(2)
1	SE/SW	NW/E/SE/ SW	SE/SW/E	WM/E/SE/ SW
2	SE/SW	NW/E/SE/ SW	SE/SW/E	WM/E/SE/ SW
3	E/NE/NW/ Y&H	NW/E/SE/ SW	SE/SW/E	WM/E/SE/ SW
4	E/NE/NW/ Y&H	NW/E/SE/ SW	NW/Y&H/ EM	WM/E/SE/ SW
5	E/NE/NW/ Y&H	NE/Y&H/ EM	NW/Y&H/ EM	NE/NW/ Y&H/EM
6	E/NE/NW/ Y&H	NE/Y&H/ EM	NW/Y&H/ EM	NE/NW/ Y&H/EM
7	E/NE/NW/ Y&H	NE/Y&H/ EM	L/WM/NE	NE/NW/ Y&H/EM
8	WM/L	L	L/WM/NE	NE/NW/ Y&H/EM
9	WM/L	WM	L/WM/NE	L
1	Northern Ireland	Northern Ireland	Northern Ireland	Wales/ Scotland
2	Scotland	Wales	England/ Wales/ Scotland	Wales/ Scotland
3	England/ Wales	England/ Scotland	England/ Wales/ Scotland	England/ Northern Ireland
4	England/ Wales	England/ Scotland	England/ Wales/ Scotland	England/ Northern Ireland

**Table source:** Office for National Statistics**Table notes:**

1. Ranking where 1 = highest rank.
2. Lowest anxiety rating is given higher ranking.

3. NE = North East, NW = North West (including Merseyside), Y&H = Yorkshire and the Humber, EM = East Midlands, WM = West Midlands, E = East of England, L = London, SE = South East, SW = South West.

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There are likely to be many reasons for the differences observed in the subjective well-being levels between regions and countries within the UK. One reason for the ratings observed for London could be because it has a much younger age profile compared with the rest of England with considerably fewer people aged 65 and over (Table 3.1). It is possible that this younger population is affecting the average well-being ratings. In section 2 we saw that people aged of 65 and over report on average higher levels of 'life satisfaction', feelings that what they do in life is 'worthwhile' and 'happiness yesterday' than people in their middle years. However, the age profile of the West Midlands does not differ much from the other regions and it is more likely that there are other contributing factors besides age profile that are having an effect on subjective well-being ratings.

Comparing these subjective well-being estimates with the objective data described earlier shows some interesting differences as well as similarities. When looking at the value of the goods and services produced in the area where people live it could be concluded that London would have the highest levels of well-being. However, the subjective well-being estimates tell a different story, with people reporting on average some of the lowest levels of 'life satisfaction', feeling that what they do in life is 'worthwhile' and 'happiness yesterday' and the highest levels of 'anxious yesterday' compared with all the English regions and countries within the UK. The unemployment estimates on the other hand seem to be more in line with people's perceptions about their own well-being, while the life expectancy figures show a different story again.

It is outside the scope of this report to examine all factors that may affect differences in subjective well-being between constituent countries of the UK and English regions. However, it is possible that the subjective well-being questions are picking up some regional differences that may not be picked up by objective measures alone. This highlights the importance of using subjective well-being data alongside other objective measures when making an assessment of overall well-being of an area or country.

## Section 4: Household and Personal Relationships

Previous research into subjective well-being has found that being in a partnership improves people's subjective well-being. (Dolan et al., 2008).

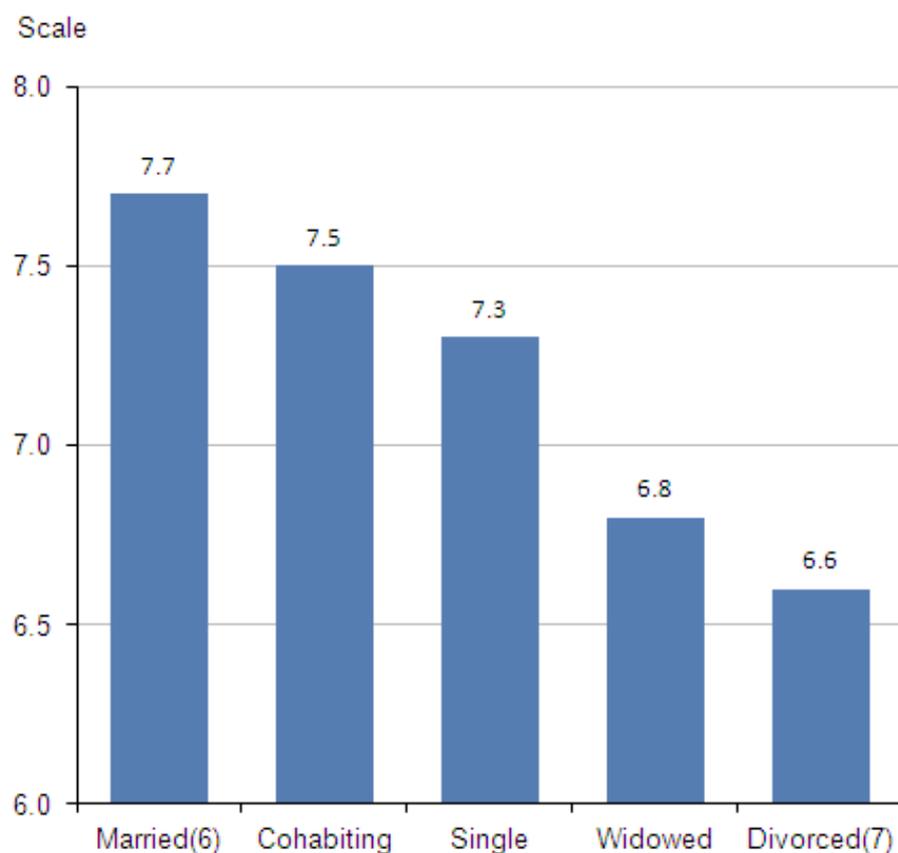
The ONS Initial investigation into [Subjective Well-being data from the Opinions Survey report](#) showed that people who are not in a partnership report lower average ratings for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions and higher average ratings for the 'anxious yesterday' question.

Figure 4.1 shows analysis from the APS data. People who are married or in civil partnerships reported the highest average levels of life satisfaction (7.7 out of 10), significantly higher than cohabiting couples (7.5 out of 10). Cohabiting couples reported significantly higher average ratings

for the 'life satisfaction' question than single people (7.3 out of 10). People who are widowed had an average rating of 6.8 out of 10. The lowest average rating for the 'life satisfaction' question were reported by people who are divorced or separated, including those who have dissolved civil partnerships (6.6 out of 10).

**Figure 4.1 Average (mean) life satisfaction ratings(1–4): by relationship status, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September,
6. 'Married' includes people in civil partnerships.
7. 'Divorced' includes people who are separated, and people in dissolved civil partnerships.

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Individuals who are married or in a civil partnership also reported the highest average ratings for the 'worthwhile' and 'happy yesterday' questions (7.9 and 7.6 out of 10). People who are single reported an average score of 7.5 out of 10 for the 'worthwhile' question and 7.2 out of 10 for the 'happy yesterday' question. Divorced and separated people reported the lowest average scores for these two questions (7.3 out of 10 for the 'worthwhile' question, and 6.7 for the 'happy yesterday' question). However, the average ratings for the 'worthwhile' question did not vary as much between the groups compared with the 'life satisfaction' and 'happy yesterday' questions.

Divorced and separated people also reported the highest average rating for the 'anxious yesterday' question (3.8 out of 10) compared with 3.1 out of 10 for people who are married or cohabiting.

**Table 4.1 Average (mean) subjective well-being ratings(1–4): by relationship status, 2011(5)**

United Kingdom

	Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday
<b>Married / Civil partnership</b>	7.7	7.9	7.6	3.1
<b>Cohabiting</b>	7.5	7.7	7.3	3.1
<b>Single</b>	7.3	7.5	7.2	3.2
<b>Widowed</b>	6.8	7.4	6.8	3.4
<b>Divorced, separated or dissolved civil partner</b>	6.6	7.3	6.7	3.8

**Table source:** Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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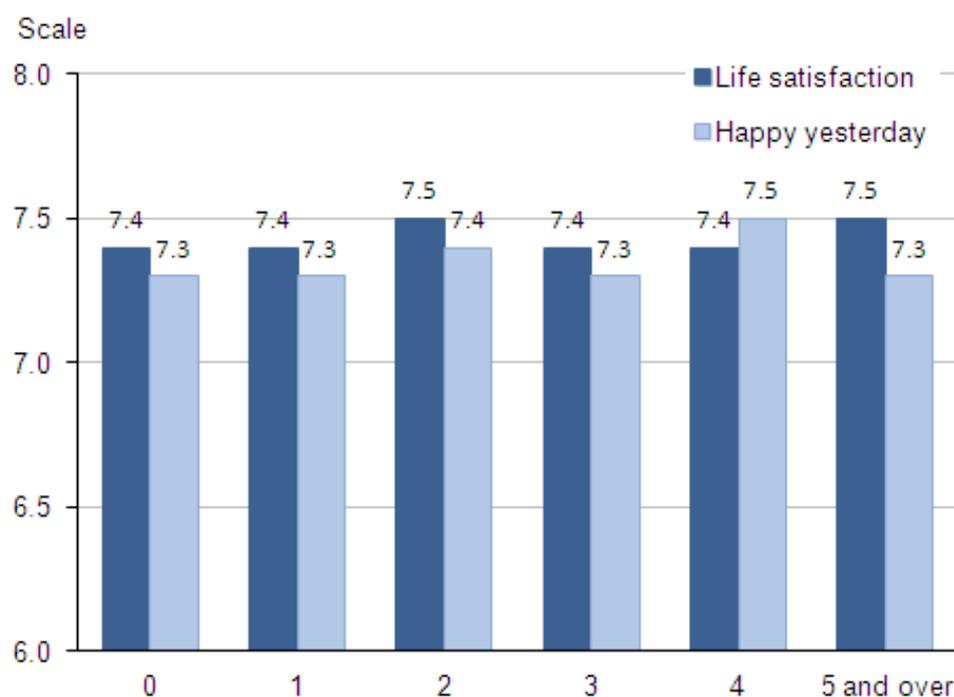
**Presence of children in household and subjective well-being**

Previous research has found that having children does not have a significant effect on people's happiness; but that it does have a positive effect on overall life satisfaction (Haller and Hadler, 2006). This could suggest that people regard having children as an important part of their overall

well-being, even if the presence of children does not improve people's day-to-day emotions (Dolan et al., 2008).

**Figure 4.2 Average (mean) life satisfaction and happy yesterday ratings(1–4): by number of children living in the household, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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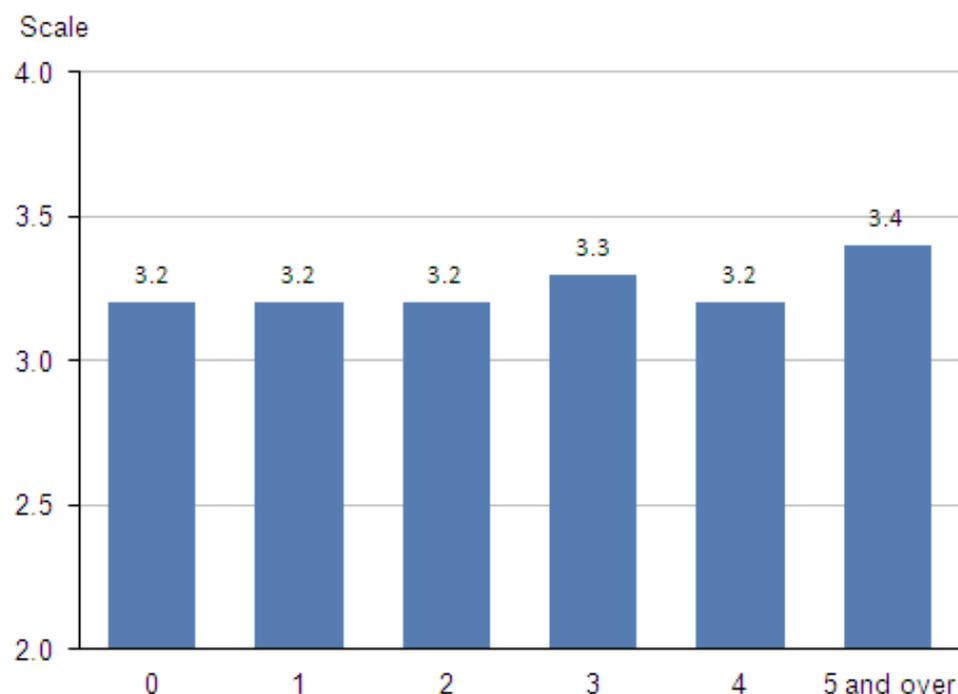
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Interestingly, there was no significant difference between the average ratings for the 'life satisfaction' and 'happy yesterday' questions for people who live in households without children and people who live in households with between one and five or more children (Figure 4.2).

Further to this, there was no significant difference between the average ratings to the 'anxious yesterday' question for people who live in households without children and people who live in households with between one and five or more children (Figure 4.3).

**Figure 4.3 Average (mean) anxious yesterday ratings(1–4): by number of children living in the household, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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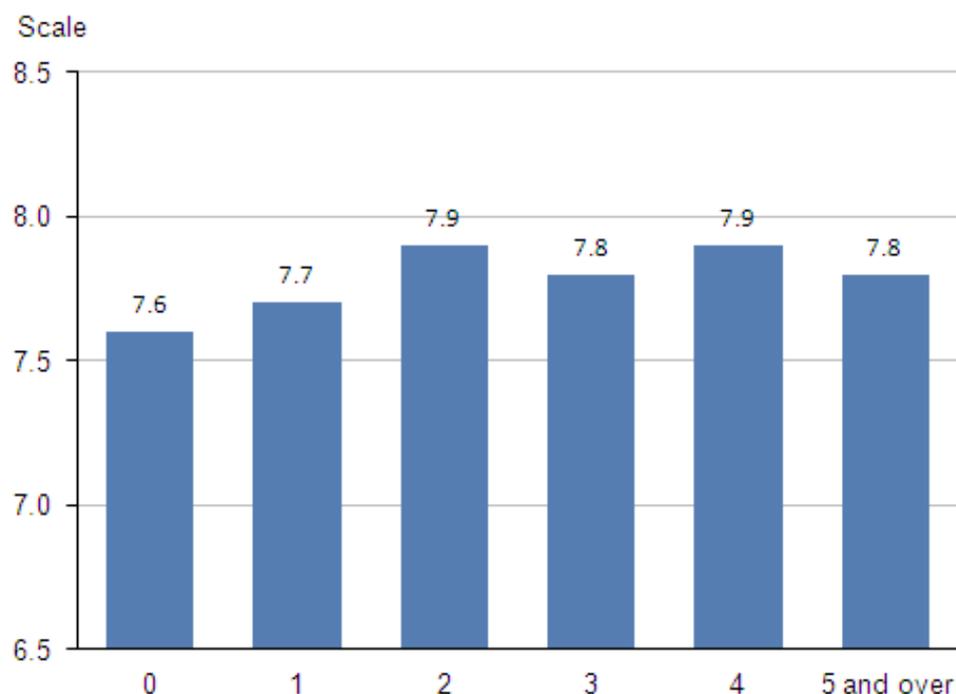
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However, the average ratings for the 'worthwhile' question improved significantly for people living in households with children. The lowest rating for the 'worthwhile' question was given by people living in households where no children are present (7.6 out of 10). This increases to 7.8 and 7.9 out of 10 for people living with two or more children in their household (Figure 4.4).

This finding suggests that although the presence of children does not alter overall life satisfaction or improve day-to-day emotions, it may bring an increased sense of meaning and purpose to people's lives, therefore increasing average scores for the 'worthwhile' question.

**Figure 4.4 Average (mean) worthwhile ratings(1–4): by number of children living in the household, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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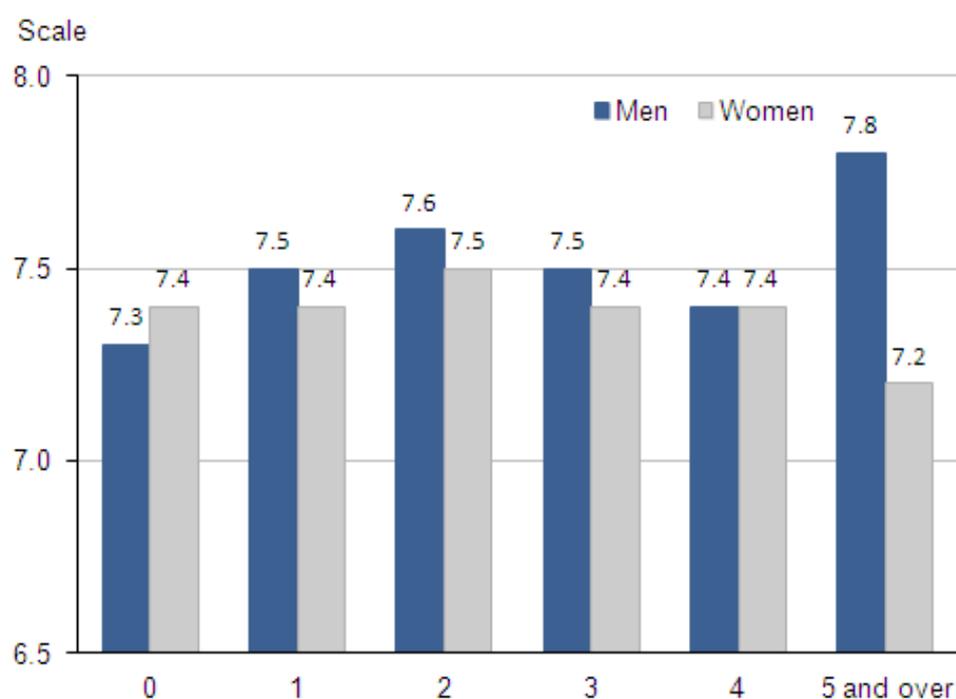
Comparing average ratings for the 'life satisfaction' question and number of children in the household shows a different pattern for men and women. Average ratings for the 'life satisfaction' question were significantly lower for men living in households with no children (7.3 out of 10) than for men living in households with children. For example, the average rating for men living in a household with two children was 7.6 out of 10. The highest average rating for the 'life satisfaction' question was reported by men who live with five or more children (7.8 out of 10). However, it should be noted that this figure was not statistically significant due to the small proportion of men living in these types of households.

Women's average ratings for the 'life satisfaction' question did not appear to vary much depending on the presence or number of children in the household. Women living in households with two

children had the highest average life satisfaction rating (7.5 out of 10), and women living in households with five or more children had the lowest average rating (7.2 out of 10), but, these differences were not statistically significant (Figure 4.5).

**Figure 4.5 Average (mean) life satisfaction ratings(1–4): by gender of respondent and number of children living in the household, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Age of youngest child in family**

People living in families where the youngest child was under one year of age reported the highest average ratings for the 'life satisfaction' question (7.9 out of 10), the 'worthwhile' question (8.0 out of 10), and the 'happy yesterday' question (7.6 out of 10). This group of respondents also reported the lowest average score for the 'anxious yesterday' question (3.0 out of 10).

Average ratings for 'life satisfaction', 'worthwhile' and 'happy yesterday' questions decreased as the age of the youngest child in the family increased. Related to this, average scores for the 'anxious yesterday' question were slightly higher for respondents living with older children in their family. For example, the average score was 3.0 out of 10 for respondents living in families with a youngest child of under one year of age, compared to 3.3 out of 10 for respondents where the youngest child in the family was aged between 11 and 16.

**Table 4.2 Average (mean) subjective well-being ratings(1–4): by age of youngest child in the family, 2011(5)**

United Kingdom

	Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday
<b>Under 1</b>	7.9	8.0	7.6	3.0
<b>1 to 4</b>	7.5	7.9	7.3	3.1
<b>5 to 10</b>	7.3	7.8	7.3	3.3
<b>11 to 16</b>	7.3	7.6	7.2	3.3

**Table source:** Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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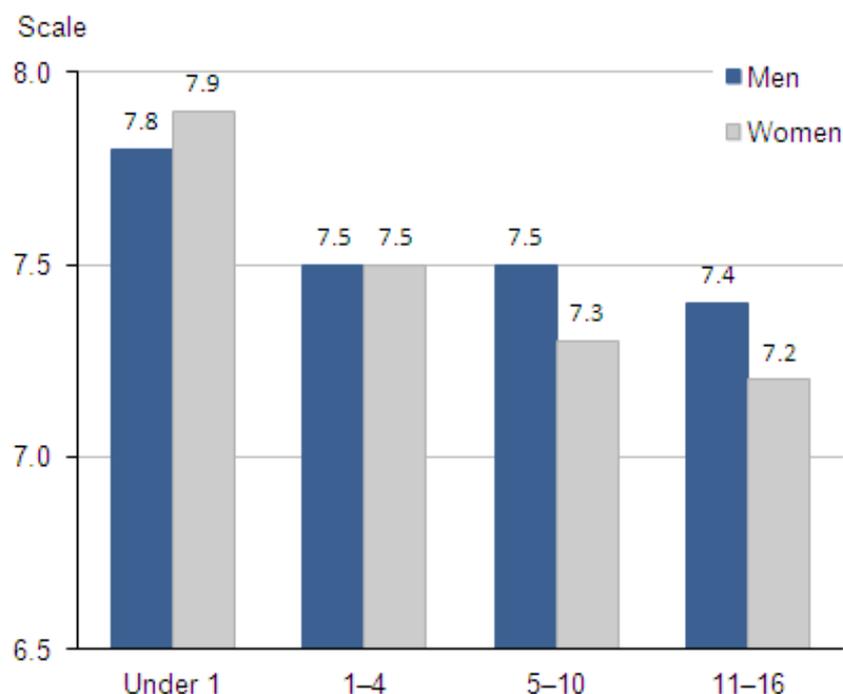
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**Gender of respondent and age of youngest child**

A different pattern emerged when men's and women's average ratings for the 'life satisfaction' question are compared with the age of youngest child in the family. Women's average ratings decreased depending on the age of the child more sharply than men's. For example, women living in families where the youngest child was under the age of one had an average score of 8.0 out of 10 for the 'life satisfaction' question, whereas those living in families where the youngest child was aged between 11 and 16 reported an average rating of 7.2 out of 10. Men living in families with children under the age of one reporting average ratings of 7.8 out of 10 for the 'life satisfaction' question, whereas men living in families where the youngest child was between 11 and 16 reported an average rating of 7.4 out of 10.

**Figure 4.6 Average (mean) life satisfaction ratings(1–4): by gender of respondent and age of youngest child in the family, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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## Section 5: Work situation

### Labour Market status

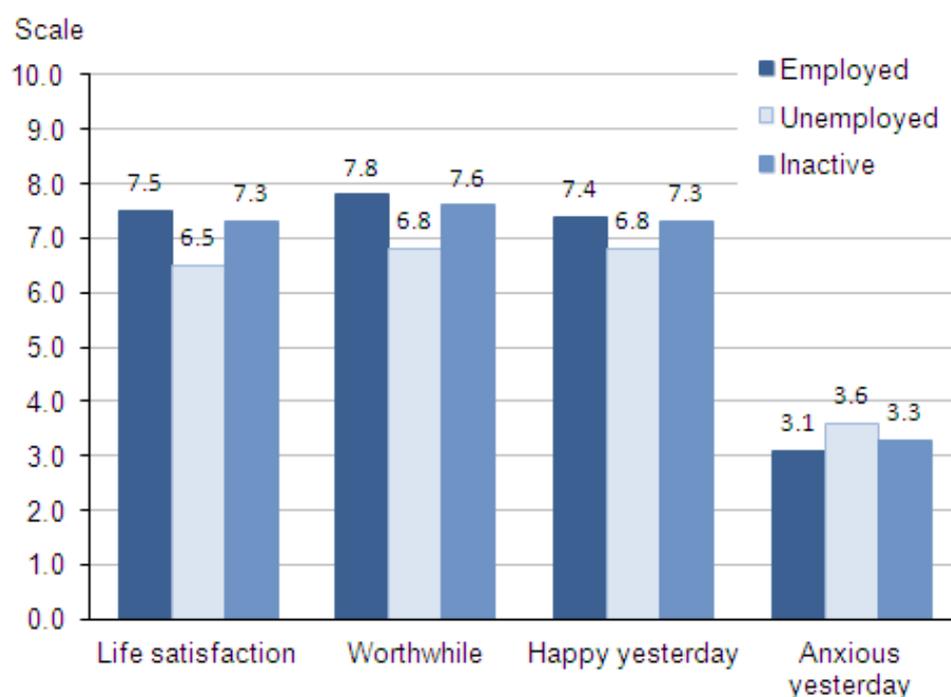
Previous research has consistently shown that unemployment has a negative effect on subjective well-being (Dolan et al., 2008) and this is supported by analysis of the APS data. Average ratings for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions were significantly lower for unemployed people (6.5, 6.8 and 6.8 out of 10 respectively) than for employed people (7.5, 7.8 and 7.4 out of 10 respectively), as shown in Figure 5.1.

Unemployed people also gave significantly higher average ratings for the 'anxious yesterday' question compared with people in employment (3.6 compared to 3.1 out of 10).

Economically inactive people are those who are not in paid work but are not unemployed because they have not been actively seeking work or are unavailable to start work. Some of the groups that fall under this category include students, retired people, those looking after family/home, as well as people who are sick. On average, the economically inactive population was more likely than those who are unemployed to report higher ratings for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions, and lower average ratings for the 'anxious yesterday' question.

**Figure 5.1 Average (mean) subjective well-being ratings(1–4): by labour market status, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Unemployment**

It has been suggested that unemployment has a more negative effect on men's subjective well-being than on women's (Dolan et al., 2008). The April to September APS data shows that unemployed women gave on average a significantly higher average rating to the 'worthwhile' question, (7.1 out of 10) compared with unemployed men who gave an average rating of 6.6 out of 10. However, both unemployed men and women had similar average ratings for the 'life satisfaction', 'happy yesterday' and 'anxious yesterday' questions (Table 5.1).

Longer times of unemployment led to lower average ratings for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions (Figure 5.2). For example, the average rating for 'life satisfaction' was 6.9 out of 10 for people unemployed for up to 6 months, decreasing to 6.2 out of 10 for those unemployed for 6 to 12 months, and to 6.0 out of 10 for people whose length of unemployment exceeded 12 months.

**Table 5.1 Average (mean) subjective well-being ratings(1–4): by labour market status and gender, 2011(5)**

United Kingdom

		Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday
<b>In employment</b>	<b>Men</b>	7.5	7.7	7.4	3.0
	<b>Women</b>	7.5	7.9	7.4	3.2
<b>ILO unemployed</b>	<b>Men</b>	6.4	6.6	6.7	3.5
	<b>Women</b>	6.6	7.1	6.8	3.6

**Table source:** Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Figure 5.2 Average (mean) subjective well-being ratings(1–4): by duration of unemployment, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Employment**

The effect of the number of hours worked on subjective well-being remains unclear (Dolan et al., 2008). Some studies have suggested a positive impact of the number of hours worked on life satisfaction up to a certain point (Meier and Stutzer, 2006; Weinzierl, 2005). Other studies have shown a negative impact of the number of hours worked on happiness (Luttmer, 2005).

Table 5.2 shows that the average ratings for the 'life satisfaction', 'worthwhile' and 'happy yesterday' questions were higher for people working less than 16 hours per week than for people working 16 hours or more per week, but did not vary greatly between the groups of people working between 16 to 30 hours, 31 to 45 hours, or more than 45 hours. For example, the average rating for the 'happy yesterday' question was 7.8 out of 10 for people working less than 6 hours, and 7.6 out of 10 for people working 6 to 15 hours per week, but 7.4 out of 10 for those working 16 to 30 hours per week and 7.3 out of 10 for both groups of people working 31 to 45 hours or more than 45 hours per week. The average levels of anxiety did not vary significantly with the number of total hours worked in the week.

**Table 5.2 Average (mean) subjective well-being ratings(1–4): by hours of work, 2011(5)**

United Kingdom

	Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday
<b>Less than 6 hours</b>	7.7	8.0	7.8	3.2
<b>6–15 hours</b>	7.7	7.9	7.6	2.9
<b>16–30 hours</b>	7.5	7.8	7.4	3.1
<b>31–45 hours</b>	7.5	7.7	7.3	3.1
<b>46 hours and over</b>	7.5	7.8	7.3	3.2

**Table source:** Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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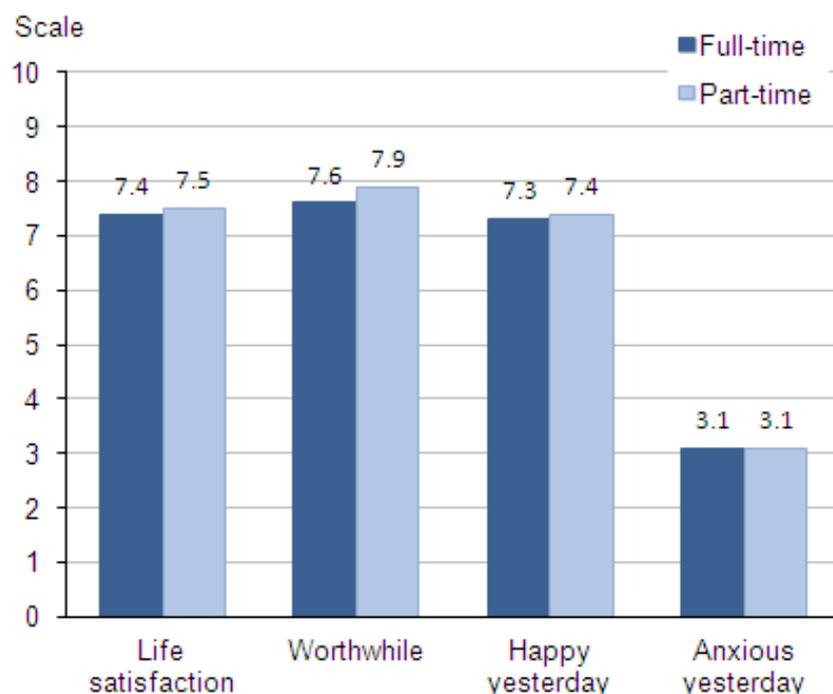
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Research from the British Household Panel Survey (BHPS) showed no difference in life satisfaction between full-time and part-time workers (Bardasi and Francesconi, 2004). Figure 5.3 shows that average ratings for the 'life satisfaction' question were similar for full-time and part-time workers (7.4 and 7.5 out of 10 respectively) from the APS data. Average ratings for the 'worthwhile' question were higher for people working part-time (7.9 out of 10) than for people working full-time (7.6 out of 10). The average levels of happiness and anxiety were similar for people working part-time and full-time.

**Figure 5.3 Average (mean) subjective well-being ratings(1–4): by full time and part time workers, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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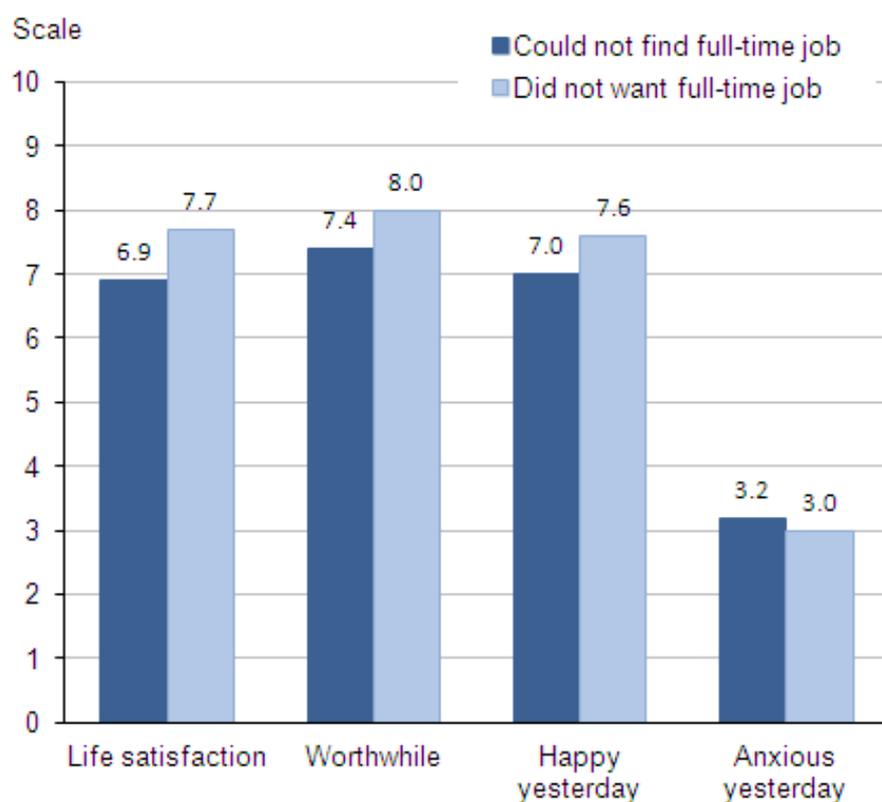
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The reasons for working part-time impacted on subjective well-being ratings (Figure 5.4). People who were working part time because they could not find a full-time job reported lower average ratings for the 'life satisfaction' question (6.9 out of 10) and the 'worthwhile' question (7.4 out of 10) than those working part-time because they did not want a full-time job (7.7 out of 10 for the 'life satisfaction' question and 8.0 out of 10 for the 'worthwhile' question). They also reported lower average ratings for the 'happy yesterday' question than people choosing to work part-time (7.0 versus 7.6 out of 10) and a higher average rating for the 'anxious yesterday' question (3.2 versus 3.0 out of 10).

**Figure 5.4 Average (mean) subjective well-being ratings(1–4): by reason for part time work, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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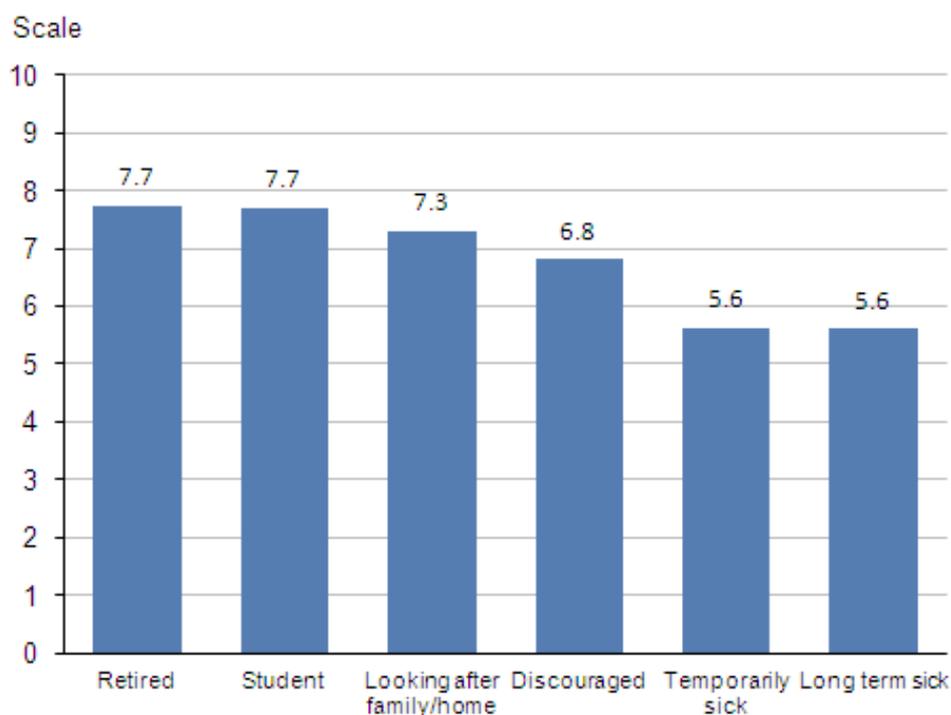
**Reasons for economic inactivity**

For economically inactive people, the average ratings for the four subjective well-being questions varied greatly depending on the reasons of inactivity (Figure 5.5 and Table 5.3). Temporarily sick and long-term sick people reported low average ratings not only for the 'life satisfaction' question (5.6 out of 10 for both) and 'happy yesterday' question (5.7 out of 10 for both) but also lower average ratings for the 'worthwhile' question (6.2 out of 10 for both) than other inactive groups of people. Both temporarily and long-term sick people also experienced high average ratings for the

'anxious yesterday' question (4.6 and 4.8 out of 10 respectively). The average ratings for both the 'worthwhile' and 'happy yesterday' questions were higher for retired people (7.9 and 7.7 out of 10) than any of the other groups of inactive people, including students. Retired people and students had the same average level for the 'life satisfaction' question (7.7 out of 10).

**Figure 5.5 Average (mean) life satisfaction ratings(1–4): by reasons for economic inactivity, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**Table 5.3 Average (mean) subjective well-being ratings(1–4): by reason for economic activity, 2011(5)**

United Kingdom

	Life satisfaction	Worthwhile	Happy yesterday	Anxious yesterday
Retired	7.7	7.9	7.7	2.9
Student	7.7	7.7	7.4	3.2
Looking after family/home	7.3	7.8	7.3	3.3
Discouraged	6.8	7.0	6.5	4.1
Temporarily sick	5.6	6.2	5.7	4.6
Long-term sick	5.6	6.2	5.7	4.8
Other	7.4	7.6	7.4	3.2

Table source: Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

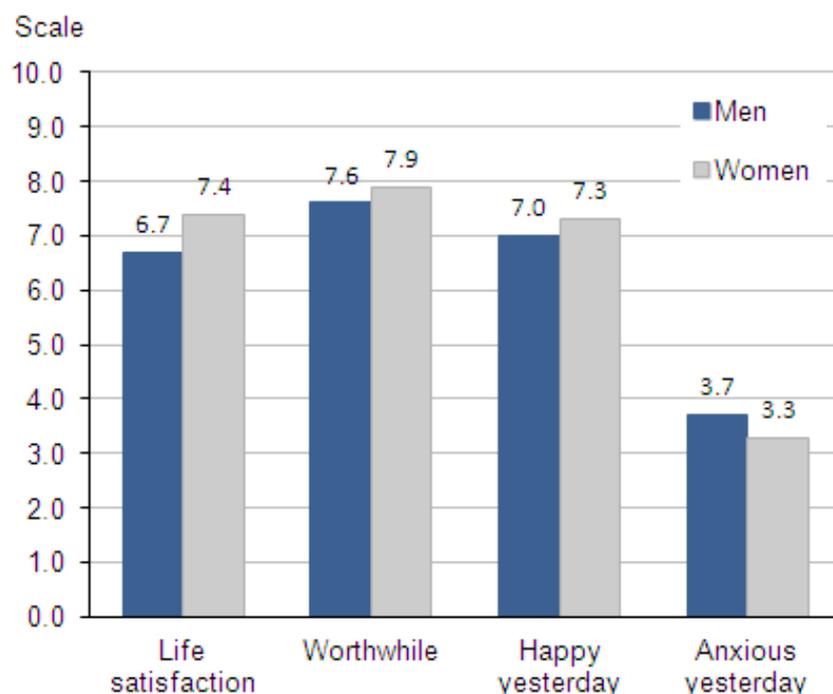
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Figure 5.6 shows that men classified as inactive because they were looking after family or home experienced significantly higher average ratings for the 'anxious yesterday' question (3.7 out of 10) than women looking after the family or home (3.3 out of 10). Their average rating for the 'life satisfaction' (6.7) and 'happy yesterday' (7.0) questions were lower than that of women in the same situation (7.4 and 7.3 out of 10 respectively). Also men looking after the family or home had lower average rating for the 'worthwhile' question (7.6 out of 10) than women looking after the family or home (7.9 out of 10).

**Figure 5.6 Average (mean) subjective well-being ratings(1–4): by men and women that look after their family/home, 2011(5)**

United Kingdom



Source: Annual Population Survey (APS) - Office for National Statistics

**Notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. Data from April to September.

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**National Statistics Socio-economic Classification (NS-SEC)**

Very little research exists on the relationship of socio-economic position with subjective well-being. The APS April to September dataset was analysed by National Statistics Socio-economic Classification (NS-SEC), which is a classification with a defined conceptual basis developed to replace social class (Rose and Pevalin, 2003). The most advantaged NS-SEC classes (Higher managerial and professional) typically have relatively high levels of autonomy within the job, relatively secure jobs and personalised reward structures. This tends to be reversed for the most disadvantaged classes (semi-routine and routine).

People in semi-routine and routine occupations (such as hairdressing employees, bus drivers and labourers) had significantly lower average ratings for the 'life satisfaction' question (7.3 out of 10) and for the 'worthwhile' question (7.5 out of 10) than people in most other NS-SEC classes (NS-SEC classes 1, 2, 3 and 4).

Small employers and own account workers (NS-SEC class 4) such as shopkeepers, farmers, self-employed taxi drivers, or hairdressing and beauty salon proprietors had a higher average rating to the 'worthwhile' question (7.9 out of 10) than people in other NS-SEC classes. The difference in average rating to the 'worthwhile' question was only statistically significant between people in NS-SEC class 4 and people in NS-SEC classes 5, 6 and 7, but not with those in NS-SEC classes 1, 2 and 3.

Small employers and own account workers (NS-SEC class 4) also exhibited the highest average rating to the 'life satisfaction' question along with those in the higher managerial and professional category (7.6 out of 10), and the highest average rating to the 'happy yesterday' question (7.6 out of 10), although the differences in ratings between NS-SEC class 4 and other classes were not always statistically significant.

**Table 5.4 Average (mean) subjective well-being ratings(1–4): by NS-SEC(5),2011(6)**

United Kingdom

	<b>Life satisfaction</b>	<b>Worthwhile</b>	<b>Happy yesterday</b>	<b>Anxious yesterday</b>
<b>Higher managerial and professional (NS-SEC class 1)</b>	7.6	7.8	7.4	3.0
<b>Lower managerial and professional (NS-SEC class 2)</b>	7.5	7.8	7.3	3.1
<b>Intermediate (NS-SEC class 3)</b>	7.5	7.7	7.4	2.9
<b>Small employers and own account workers (NS-SEC class 4)</b>	7.6	7.9	7.6	2.8
<b>Lower supervisory and technical (NS-SEC class 5)</b>	7.4	7.6	7.2	3.0
<b>Semi-routine (NS-SEC class 6)</b>	7.3	7.5	7.3	3.2
<b>Routine (NS-SEC class 7)</b>	7.3	7.5	7.2	3.0
<b>Never worked, unemployed and not elsewhere classified</b>	7.3	7.5	7.2	3.3

Table source: Office for National Statistics

**Table notes:**

1. Scale 0 = 'not at all' and 10 = 'completely'.
2. Adults 16 and over.
3. All data weighted.
4. Non-respondents not included.
5. National Statistics Socio-economic Classification.
6. Data from April to September.

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## Section 6: Background

The ONS four subjective well-being questions were developed with expert academic advice (Dolan et al., 2011) as well as benefiting from discussions with members of the National Statistician's Measuring National Well-being Advisory Forum. They represent a balanced approach to the measurement of subjective well-being drawing on the three main theoretical approaches identified to measure subjective well-being (Dolan et al., 2011 & ONS 2011).

### Approaches to measuring subjective well-being

- the **evaluative approach** asks individuals to step back and reflect on their life and make a cognitive assessment of how their life is going overall, or on certain aspects of their life,
- the **'eudemonic' approach**, sometimes referred to as the psychological or functioning/flourishing approach draws on self-determination theory tends to measure such things as people's sense of meaning and purpose in life, connections with family and friends, a sense of control and whether they feel part of something bigger than themselves,
- the **experience approach**, seeks to measure people's positive and negative experiences over a short time frame to capture people's well-being on a day-to-day basis.

The four overall monitoring questions that were included in the IHS and OPN are:

- Overall, how satisfied are you with your life nowadays? (**Evaluative approach**),
- Overall, to what extent do you feel the things you do in your life are worthwhile? (**Eudemonic approach**),
- Overall, how happy did you feel yesterday? (**Experience approach**),
- Overall, how anxious did you feel yesterday? (**Experience approach**).

Respondents are asked to provide an answer from 0 ('not at all') to 10 ('completely').

ONS is not alone in beginning to measure the subjective well-being of the UK. The Commission on the Measurement of Economic Performance and Social Progress (2009) has recommended that '**National statistical agencies should incorporate questions on subjective well-being in their standard surveys to capture people's life evaluations, hedonic experiences and life priorities**'. Eurostat has developed a module on well-being for the 2013 wave of the European Union Statistics on Income and Living Conditions (EU-SILC). The Organisation for Economic Co-operation and Development (OECD) is currently developing guidelines on the measurements of subjective well-being for National Statistical agencies to use. In addition to this numerous other national initiatives are being developed in countries such as France and the United States.

Methodological testing and development continues and ONS wants to involve users at an early stage to allow feedback; not only on what these data show but also on how the results have been presented. Anonymised micro datasets will also be made available for users to analyse.

## The Annual Population Survey

The Annual Population Survey (APS) is a combined survey of households in the UK. Its purpose is to provide information on key social and socio-economic variables between the ten-yearly censuses, with particular emphasis on providing information relating to small geographical areas.

The APS comprises of key variables from the Labour Force Survey (LFS) and all the LFS boosts. Key topics in the survey include education, employment, health and ethnicity.

The data analysed in this report are derived from a customised weighted six month APS micro-dataset. This dataset is not part of the regularly produced APS datasets and was produced specifically for the analysis of subjective well-being data.

ONS is making the experimental APS microdata available to approved researchers to allow them to undertake further analysis of these experimental questions at an early stage and to provide further feedback to ONS.

## ONS Measuring National Well-being Programme

This article is published as part of the ONS Measuring National Well-being Programme.

The programme aims to produce accepted and trusted measures of the well-being of the nation - how the UK as a whole is doing. It is about looking at 'GDP and beyond' and includes:

- greater analysis of the national economic accounts, especially to understand household income, expenditure and wealth,
- further accounts linked to the national accounts, including the UK Environmental Accounts and valuing household production and 'human capital',
- quality of life measures, looking at different areas of national well-being such as health, relationships, job satisfaction, economic security, education environmental conditions,
- working with others to include the measurement of the well-being of children and young people as part of national well-being,
- measures of 'subjective well-being' - individuals' assessment of their own well-being,
- headline indicators to summarise national well-being and the progress we are making as a society.

The programme is underpinned by a communication and engagement workstream, providing links with Cabinet Office and policy departments, international developments, the public and other stakeholders. The programme is working closely with Defra on the measurement of 'sustainable development' to provide a complete picture of national well-being, progress and sustainable development.

## Background notes

1. Details of the policy governing the release of new data are available by visiting [www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html](http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html) or from the Media Relations Office email: [media.relations@ons.gsi.gov.uk](mailto:media.relations@ons.gsi.gov.uk)

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This document is also available on our website at [www.ons.gov.uk](http://www.ons.gov.uk).

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## **Appendices**

### **Data Tables**

[RFT - data tables \(433 Kb Excel sheet\)](#)