



## National Survey for Wales, 2016-17: Mental Wellbeing

10 October 2017  
SB 52/2017

The National Survey for Wales 2016-17 includes the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), a scale of 14 self assessed questions that measures mental wellbeing. Scores range from 14 to 70, a higher score suggests stronger mental wellbeing. All results are for adults aged 16 and over, and most are age-standardised (see notes). In line with other studies, health and several other factors were associated with mental well-being.

### About this bulletin

This bulletin provides an overview of mental wellbeing among adults living in Wales from the National Survey for Wales. Mental wellbeing is measured using the Warwick-Edinburgh Mental Wellbeing Scale. This is the first time this has been used in the National Survey. Some initial results were published in June 2017.

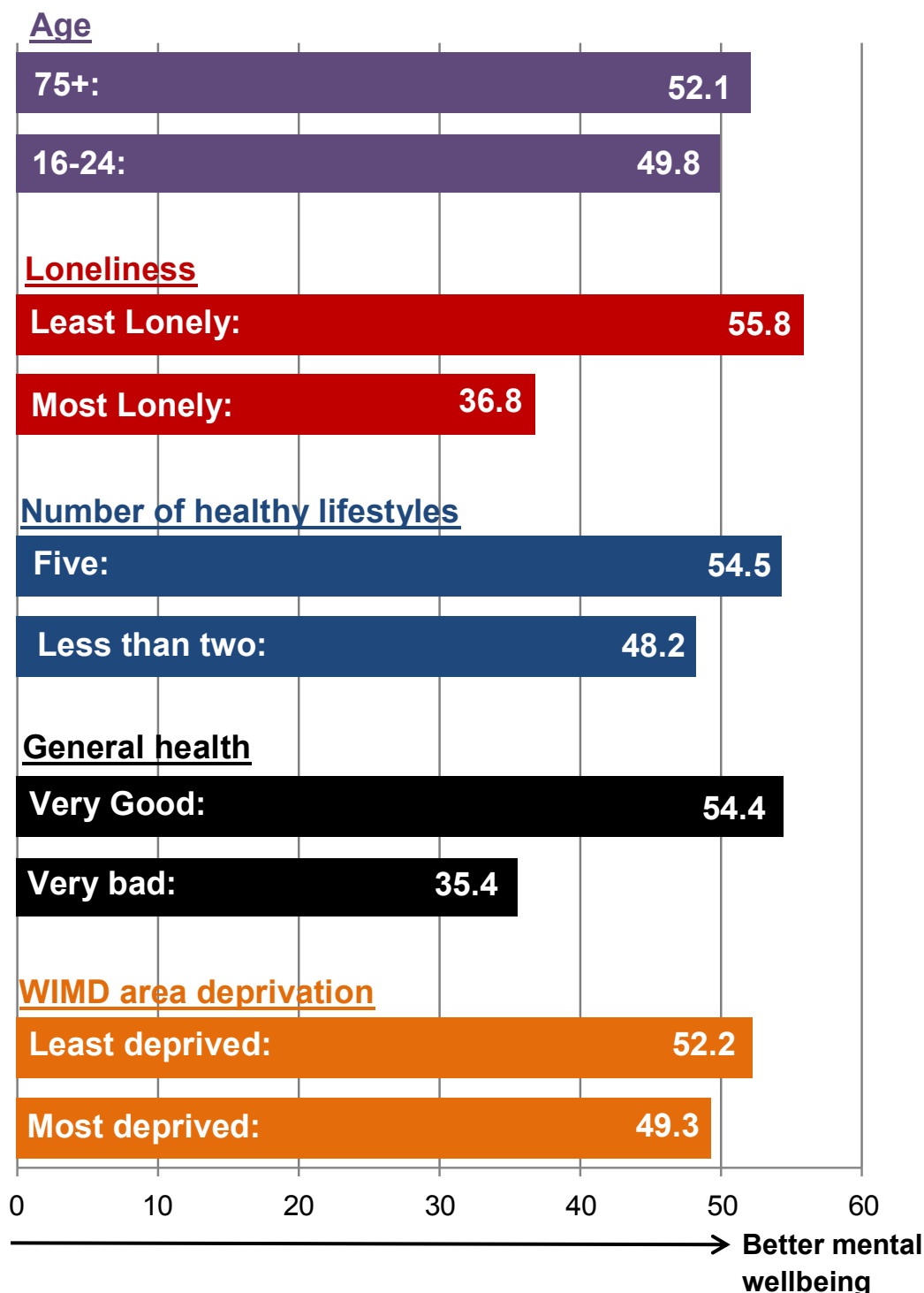
The bulletin explores associations between mental wellbeing and other variables, but the results do not imply causality. Any association may result from other factors.

The full questionnaire is available on the [National Survey web pages](#).

Additional tables can be accessed via [StatsWales](#).

### In this bulletin

Mental wellbeing and demographic factors	2
Loneliness and mental wellbeing	4
Lifestyles and mental wellbeing	5
General health, illnesses	6
Selected other factors	8
Summary table	10



## Section 1:

### Mental wellbeing and socio-demographic factors



The mean WEMWBS score for adults in Wales was 50.9. Scores were higher for men than women. Scores were highest among adults aged 65 and over. WEMWBS scores increased as the level of deprivation decreased.

Figure 1: Mean adult WEMWBS scores, by age and gender

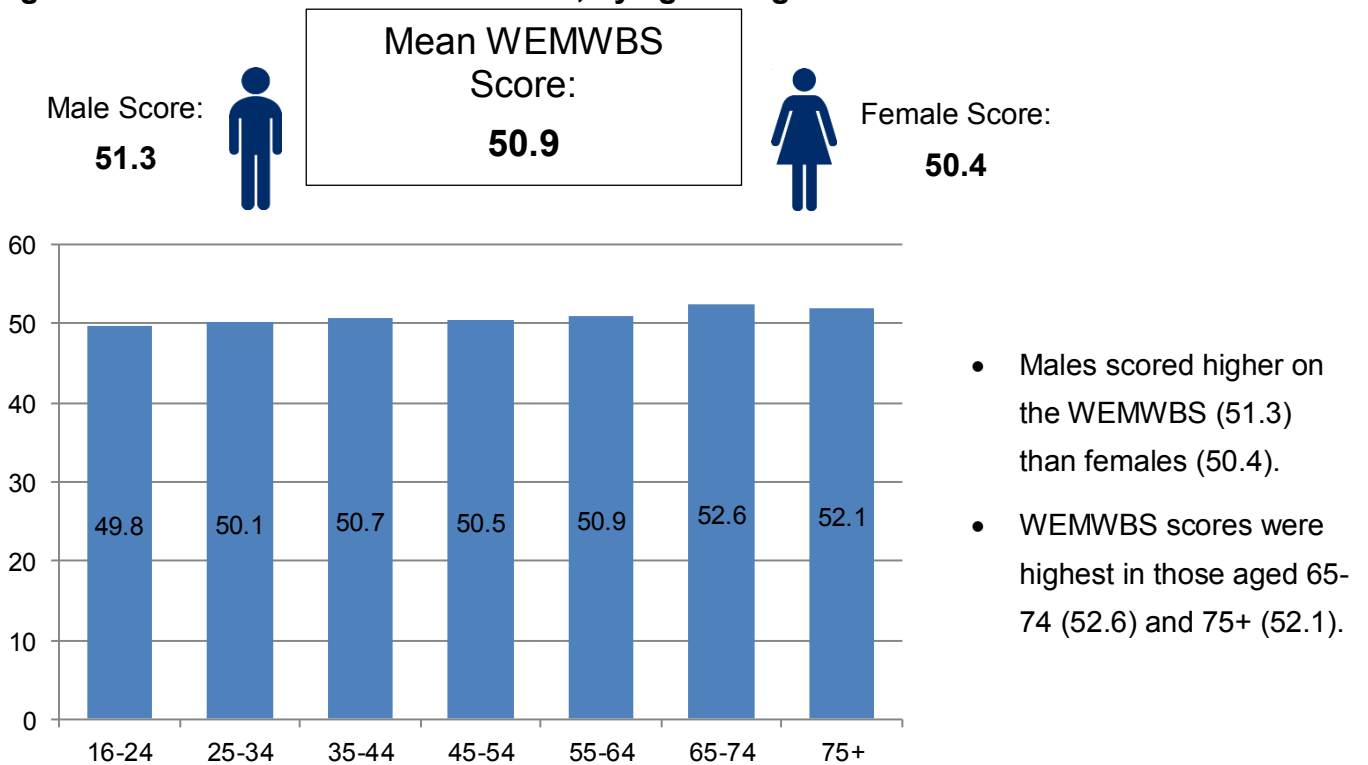
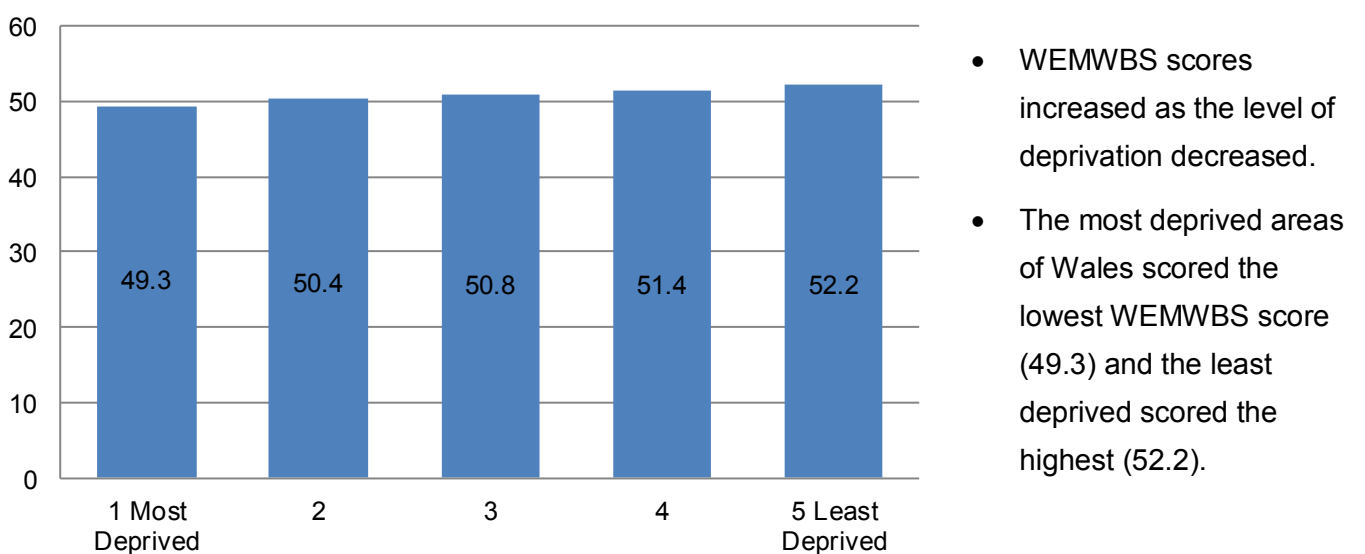
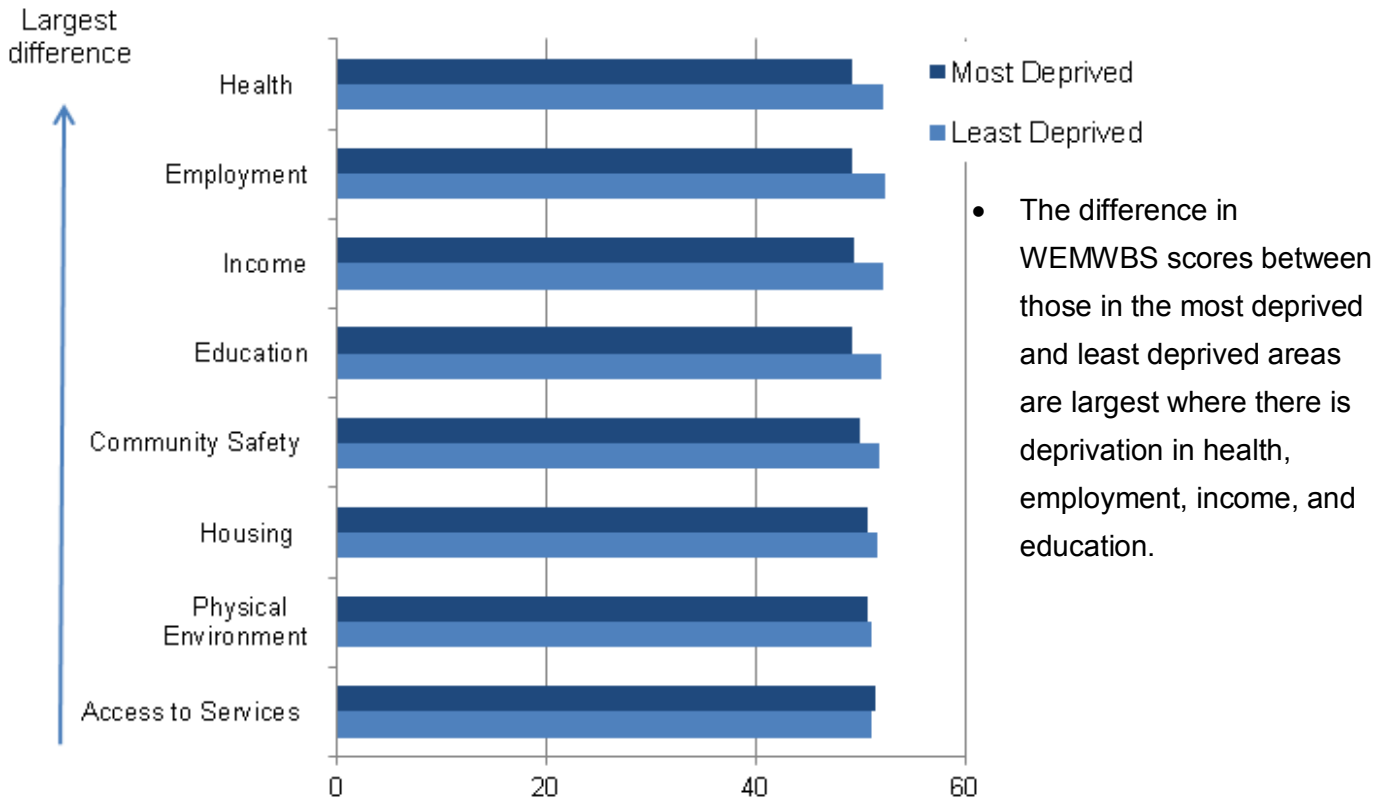


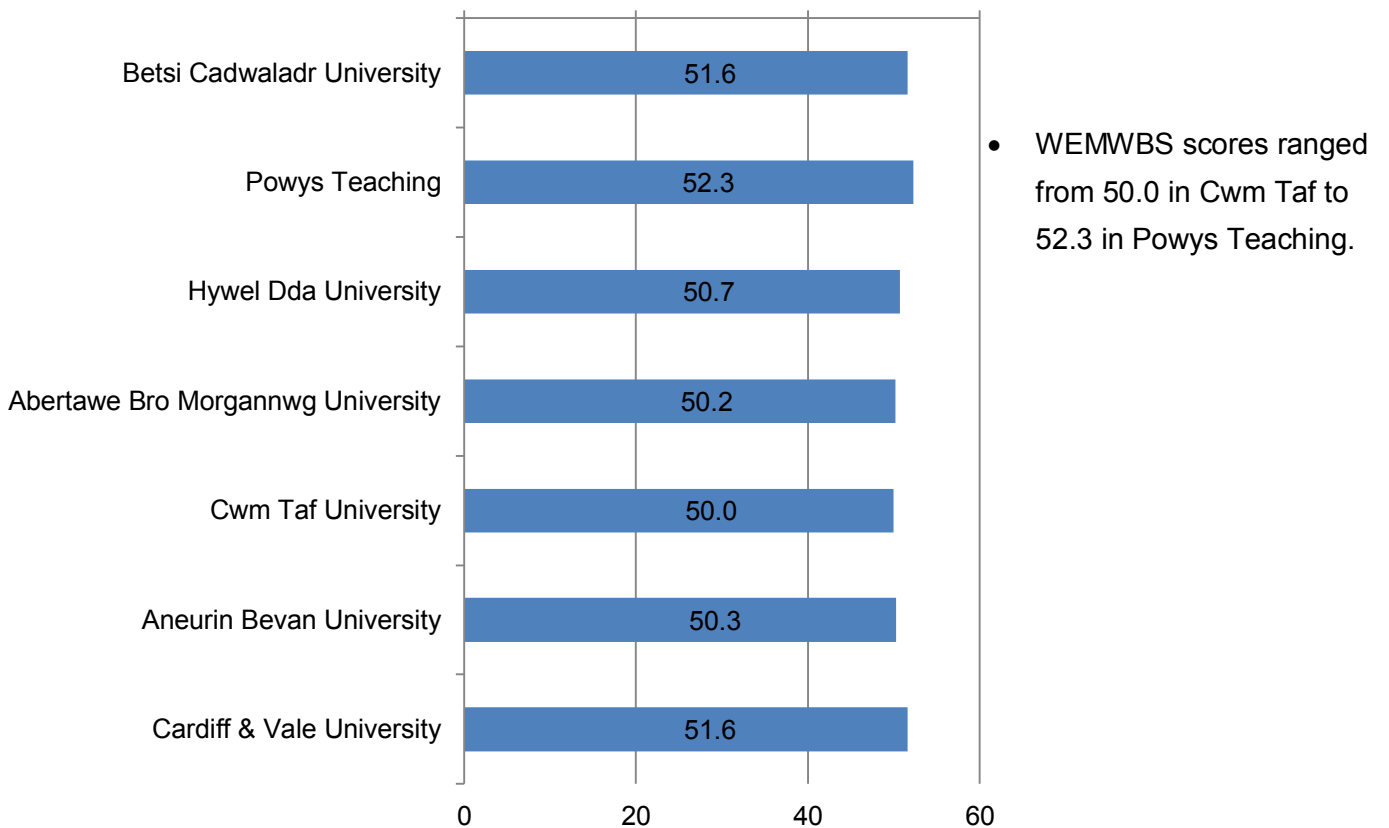
Figure 2: Mean adult WEMWBS scores by area deprivation



**Figure 3: Mean WEMWBS scores by 8 WIMD domains**



**Figure 4: Mean adult WEMWBS scores by LHB**



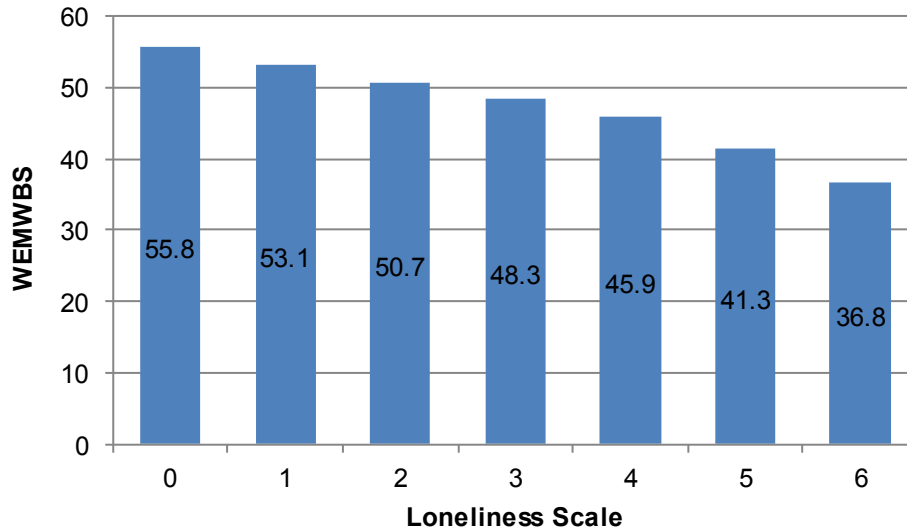
## Section 2:

### Loneliness and mental wellbeing



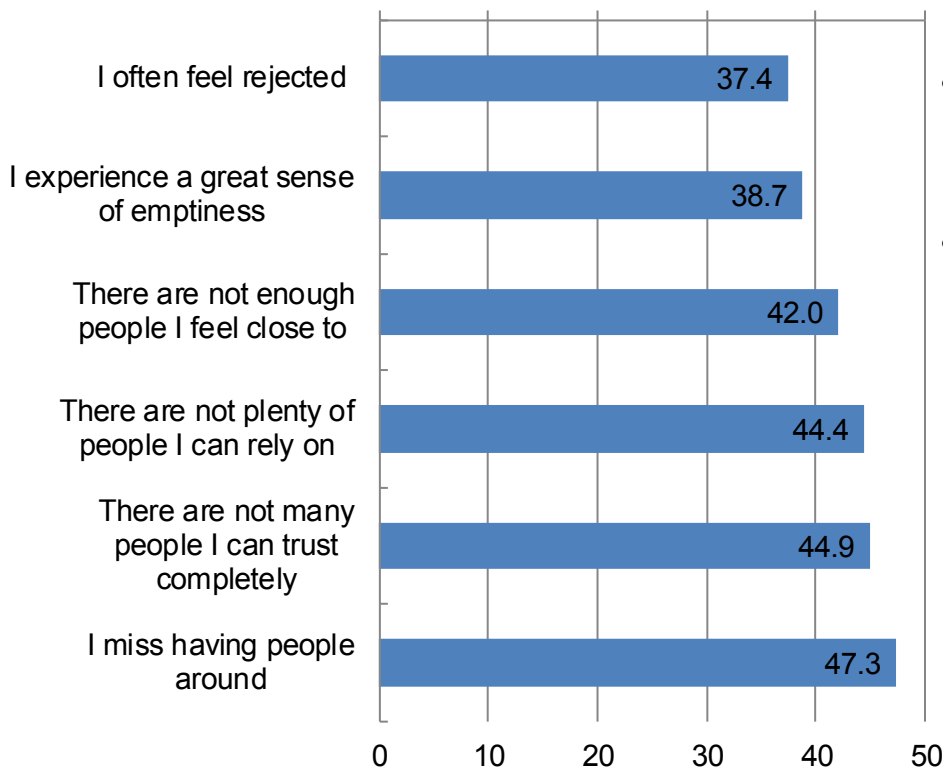
As loneliness scores increased, WEMWBS scores decreased.

**Figure 5: Mean adult WEMWBS scores by loneliness score**



- Adults who scored themselves 0 on the loneliness scale, indicating no loneliness were more likely to have a higher WEMWBS score (55.8) than adults who scored themselves 6 on the loneliness scale, indicating severe loneliness (36.8).

**Figure 6: Mean adult WEMWBS scores by loneliness indicators**



- The loneliness score was calculated based on response to six questions.
- Those who indicated often feeling rejected and those with a great sense of emptiness had the lowest WEMWBS scores, scoring 37.4 and 38.7 respectively.

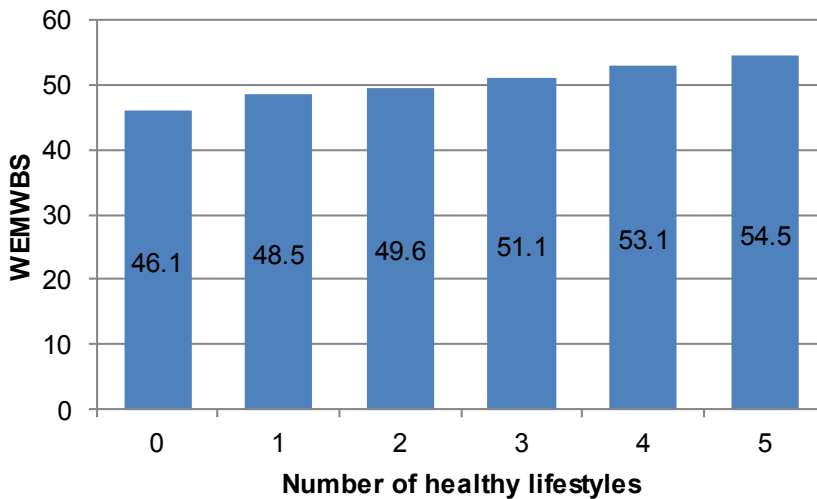
## Section 3:

### Lifestyles and mental wellbeing



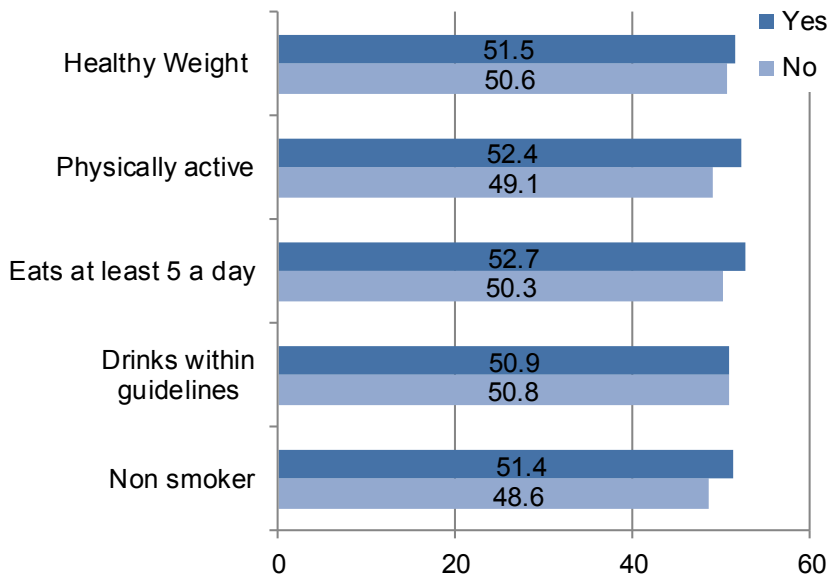
**WEMWBS scores increased with the number of healthy behaviours. Higher WEMWBS scores were seen in non-smokers, adults who consumed at least five portions of fruit or vegetables the previous day, adults who were active for at least 150 minutes a week and those of a healthy weight, but there was little difference for those drinking within/above guidelines.**

**Figure 7: Mean WEMWBS scores by the number of healthy lifestyle indicators**



- The five healthy lifestyle behaviours refer to; not smoking, not drinking above guidelines, eating five or more portion of fruit and veg the previous day, being physically active for 150 minutes a week and maintaining a healthy BMI.
- Adults with fewer than 2 healthy lifestyles had lower WEMWB scores (48.2) than adults who followed five healthy lifestyle behaviours (54.5).

**Figure 8: Mean WEMWBS scores with the five healthy lifestyle indicators**



- Higher WEMWBS were seen among non-smokers (51.4) those that ate at least 5 portions of fruit or veg a day (52.7), Adults who physically active (52.4) and adults with a healthy weight (51.5)
- However, there was little difference for those drinking within/above guidelines.

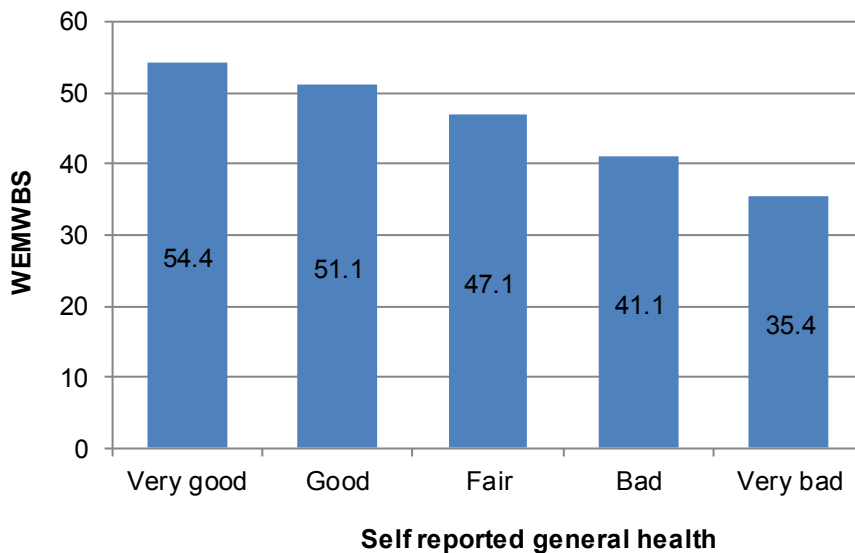
## Section 4:

### General health, illnesses and mental wellbeing



WEMWBS scores increased as self-reported health improved. Scores were lower in those with a longstanding illness or limiting illness, in particular those with multiple conditions.

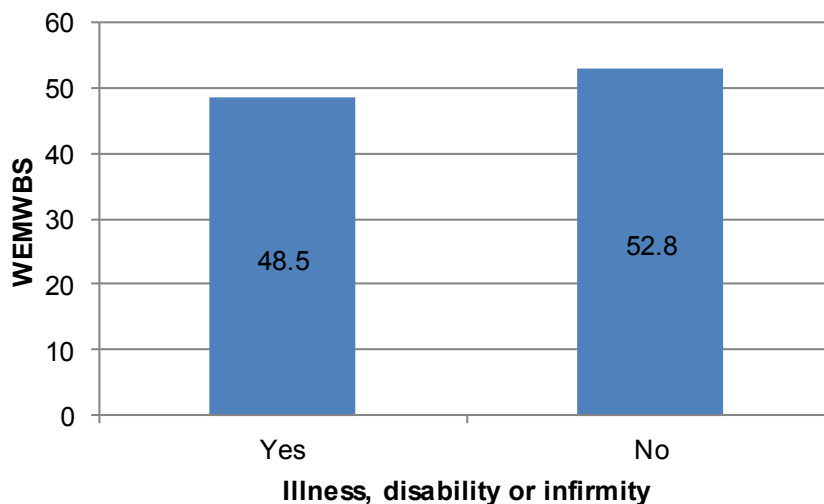
**Figure 9: Mean WEMWBS scores of adults self reported health status**



Average mental well-being scores increased with general health status.

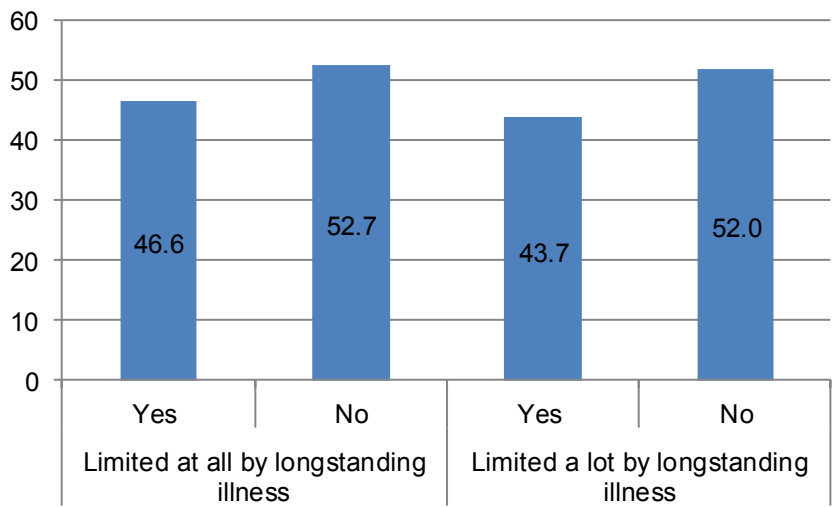
WEMWBS scores ranged from 35.4 among adults who reported being in very bad health to 54.4 among adults who reported being in very good health.

**Figure 10: Mean WEMWBS scores of adults reporting an illness, disability, infirmity**



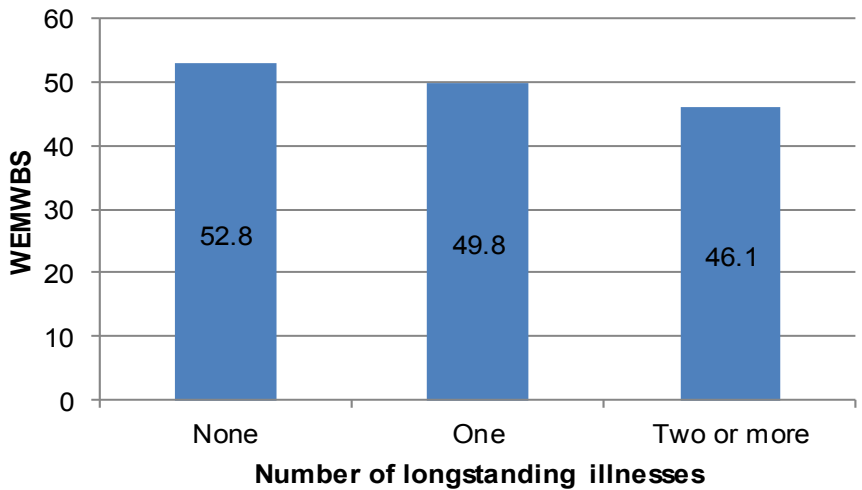
- Individuals who reported a long-standing illness, disability or infirmity had a lower WEMWBS score (48.5) than those that did not (52.8).
- The largest difference in WEMWBS score was found among individuals who reported a mental illness (40.6) compared with who did not report a mental illness (51.8).

**Figure 11: Mean WEMWBS scores of adults who reported a limiting illness**



- Scores were lower among adults who felt limited by an illness (average WEMWBS score of 46.6). Those who reported being limited a lot had still lower average scores (43.7).
- Again there was a notable difference for mental illness. Individuals who felt limited by a mental illness had an average WEMWBS score of 38.6 and those that did not had a score of 51.7.

**Figure 12: Mean WEMWBS scores by number of long-standing illnesses**



- WEMWBS scores were lower among adults reporting multiple long-standing conditions (46.1).

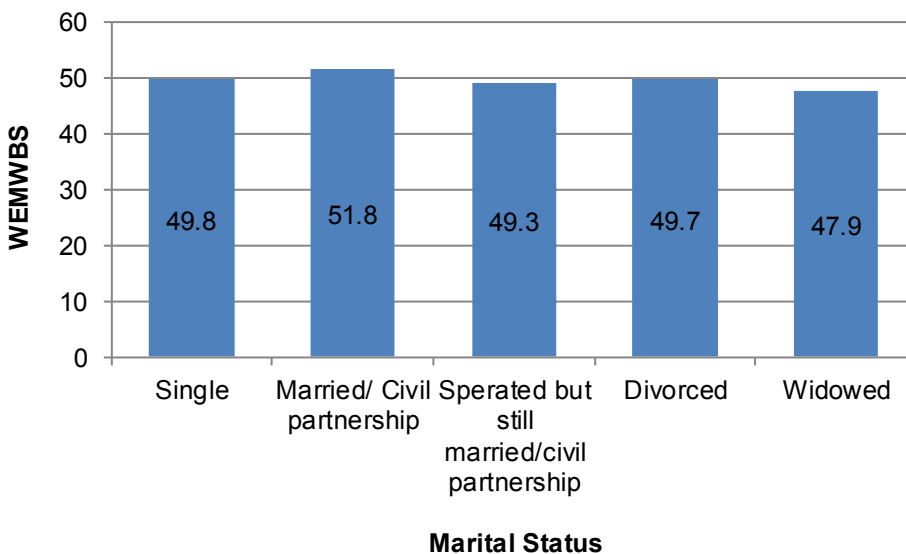
## Section 5:

### Selected other factors



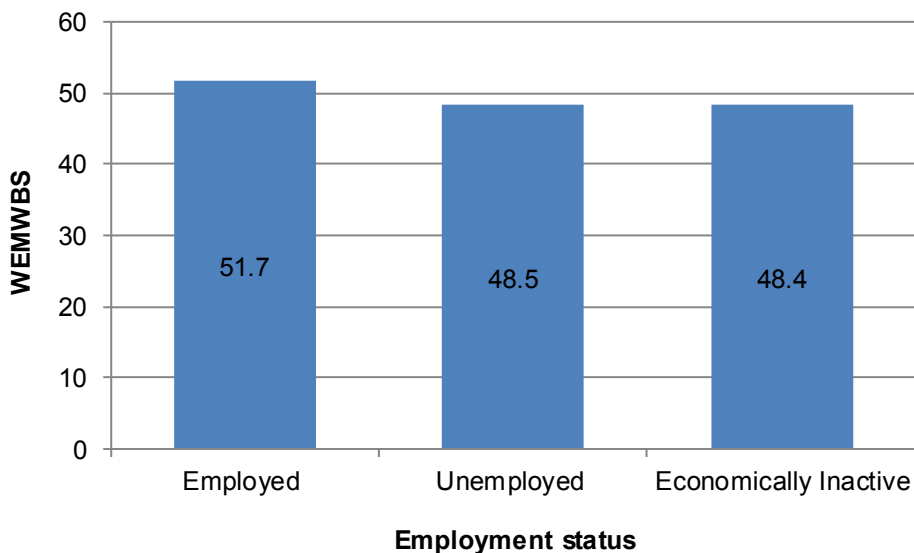
Looking at selected other factors, there were some differences in WEMWBS scores for marital status (highest in married / civil partnership), economic activity (highest in employed), qualifications (highest in those with degree / diploma), housing tenure (highest in owner occupiers), and rural / urban areas (higher in rural areas).

**Figure 13: Mean WEMWBS scores by marital status**



- WEMWBS scores ranged from 47.9 for those who were widowed to 51.8 for those who were married or in a civil partnership.

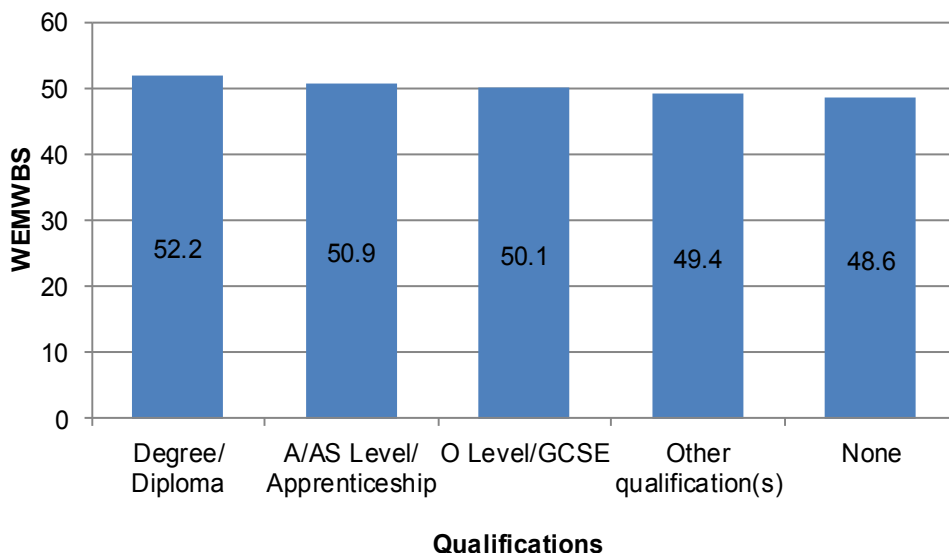
**Figure 14: Mean WEMWBS scores by economic activity**



Adults in employment had higher average WEMWBS scores (51.7) than adults who were unemployed (48.5) or economically inactive (48.4).

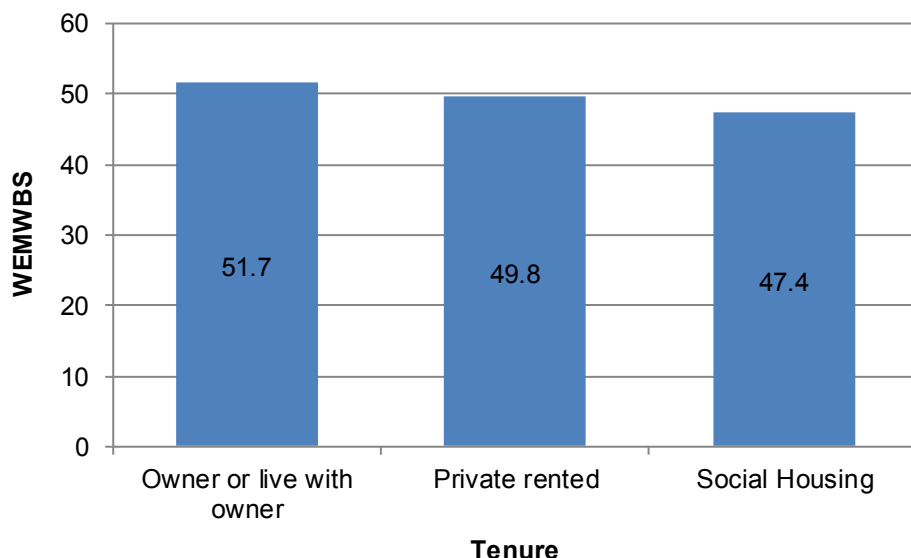


**Figure 15: Mean WEMWBS scores by highest qualification**



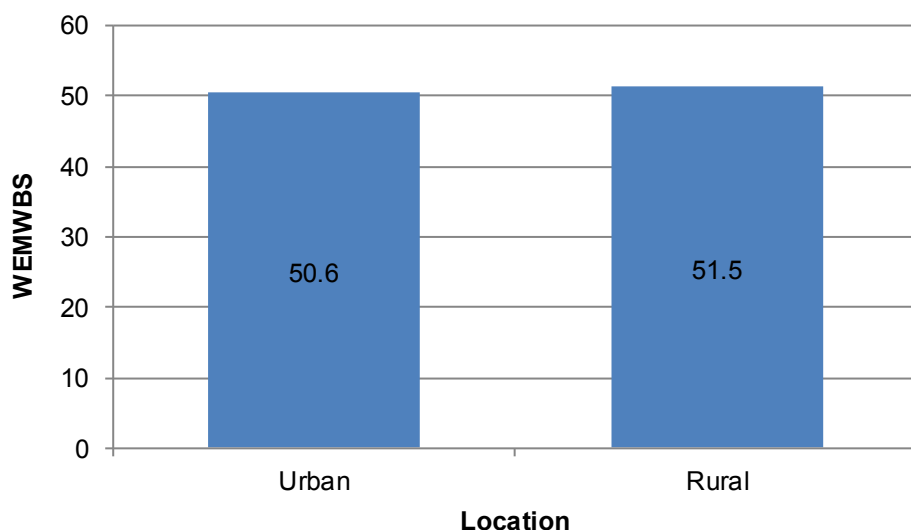
- Average mental well-being scores increased with the level of qualification.
- WEMWBS scores ranged from 48.6 among adults with no qualifications to 52.2 among adults with degrees or postgraduate diplomas.

**Figure 16: Mean WEMWBS scores by housing tenure**



- Adults who owned their own property or were living with someone who owned the property scored highest (51.7) and adults living in social housing scored lowest (47.4).

**Figure 17: Mean WEMWBS scores by rural/urban location**



- Adults who lived in rural areas scored slightly higher (51.5) than adults living in urban areas (50.6).

## Summary table: Mental wellbeing - summary of key variables adults aged 16 & over, 2016-17

Mean WEMWBS over key variables

	Mean WEMWBS score
<b>All aged 16+</b>	50.9
<b>By sex:</b>	
Male	51.3
Female	50.4
<b>By age:</b>	
16-24	49.8
25-34	50.1
35-44	50.7
45-54	50.5
55-64	50.9
65-74	52.6
75+	52.1
<b>By WIMD deprivation quintile (age-standardised):</b>	
Quintile 1 (most deprived)	49.3
Quintile 2	50.4
Quintile 3	50.8
Quintile 4	51.4
Quintile 5 (least deprived)	52.2
<b>By area (age-standardised):</b>	
Betsi Cadwaladr	51.6
Powys Teaching	52.3
Hywel Dda	50.7
Abertawe Bro Morgannwg	50.2
Cwm Taf	50.0
Aneurin Bevan	50.3
Cardiff & Vale	51.6
<b>Healthy behaviours (age-standardised):</b>	
0 or 1 healthy behaviours:	48.2
5 healthy behaviours	54.5
<i>Non-smoker</i>	51.4
<i>Weekly alcohol consumption within guidelines</i>	50.9
<i>Ate 5 portions of fruit and veg</i>	52.7
<i>Active 150 minutes in the previous week</i>	52.4
<i>Healthy weight</i>	51.5
<b>General health (age-standardised):</b>	
Very good	54.4
Good	51.1
Fair	47.1
Bad	41.1
Very bad	35.4
<b>Longstanding/ limiting illnesses (age-standardised):</b>	
No longstanding illness	52.8
Any longstanding illness	48.5
One longstanding illness	49.8
Two or more longstanding illnesses	46.1
No limiting illness	52.7
Limiting illness	46.6

**Summary table: Mental wellbeing - summary of key variables adults aged 16 & over, 2016-17**  
**Continued**

*Mean WEMWBS over key variables*

	<b>Mean WEMWBS score</b>
<b>Loneliness (age-standardised):</b>	
No loneliness	55.8
Severe loneliness	36.8
<b>Marital status (age-standardised):</b>	
Single	49.8
Married/ Civil partnership	51.8
Separated but still married/civil partnership	49.3
Divorced	49.7
Widowed	47.9
<b>Employment status (age-standardised):</b>	
Employed	51.7
Unemployed	48.5
Economically inactive	48.4
<b>Qualifications (age-standardised):</b>	
Degree	52.2
A/AS Level/ Apprenticeship	50.9
O Level/ GCSE	50.1
Other qualifications	49.4
None of the above/ no qualifications	48.6
<b>Tenure (age-standardised):</b>	
Owner or live with owner	51.7
Private rented	49.8
Social Housing	47.4
<b>Urban/Rural living (age-standardised):</b>	
Urban	50.6
Rural	51.5

## Definitions

### WEMWBS

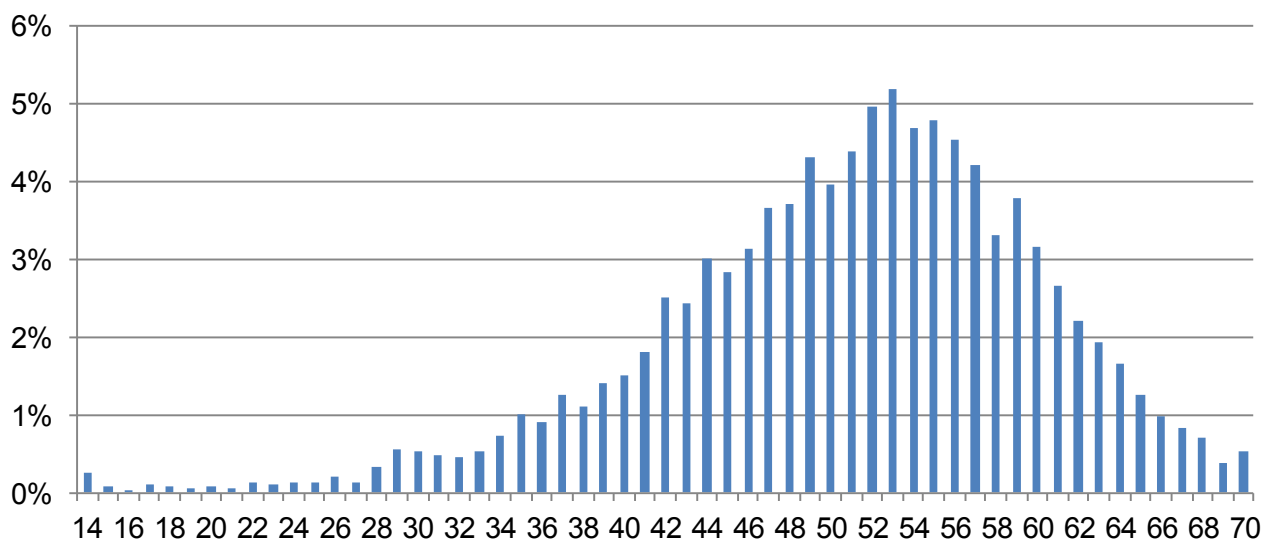
The [Warwick-Edinburgh Mental Wellbeing Scale](#) (WEMWBS) uses 14 questions to measure mental wellbeing in the last 2 weeks. The items are all worded positively and cover both feeling and functioning aspects of wellbeing. These questions have 5 responses from 1 (none of the time) to 5 (all of the time). Scores from the 14 questions are combined to give an overall score ranging from 14 to 70. Lower scores indicate lower mental wellbeing and higher scores suggest higher mental well being. This is the first time that WEMWBS has been used in the National Survey for Wales; WEMWBS is used in both the English and Scottish health surveys, however due to differences in survey methodology the results are not directly comparable.

Mean scores are shown throughout this bulletin.

All participants were asked to rate the following 14 questions themselves:

1. "I've been feeling optimistic about the future"
2. "I've been feeling useful"
3. "I've been feeling relaxed"
4. "I've been feeling interested in other people"
5. "I've had energy to spare"
6. "I've been dealing with problems well"
7. "I've been thinking clearly"
8. "I've been feeling good about myself"
9. "I've been feeling close to other people"
10. "I've been feeling confident"
11. "I've been able to make up my own mind about things"
12. "I've been feeling loved"
13. "I've been interested in new things"
14. "I've been feeling cheerful"

**Figure 15: The frequency of WEMWBS scores at a Wales level**



### Other measure of wellbeing

Four other questions were asked that provided an indication of personal wellbeing though it's important to note that these were single questions that do not make a combined measurement like WEMWBS. These questions were answered using a ten point scale. They are also used in [ONS surveys](#).

1. Overall satisfaction with life
2. Extent of feeling that things done in life are worthwhile
3. Overall happiness yesterday
4. Overall anxiety yesterday

[Results from the National Survey for Wales published in June 2017](#) showed a clear relationship between these measures and WEMWBS scores. Those who were satisfied with their lives, felt the things they did were worthwhile, were happy and less anxious had higher mental wellbeing WEMWBS scores.

### Welsh deprivation

The [Welsh Index of Multiple Deprivation](#) (WIMD) is used as the official measure of deprivation in Wales. Deprivation is a wider concept than poverty. Deprivation refers to wider problems caused by a lack of resources and opportunities. The WIMD is constructed from eight different types of deprivation. These are: income, housing, employment, access to services, education, health, community safety and physical environment. Wales is divided into, 1,909 Lower-Layer Super Output Areas (LSOA) each having about 1,600 people. Deprivation ranks have been worked out for each of these areas: the most deprived LSOA is ranked 1, and the least deprived 1,909. Respondents to the survey have been split into five groups based on the LSOA they live in (with 20% of LSOAs allocated to each group), and results are compared for the most and least deprived.

## Rural / urban

The [ONS 2011 rural / urban classification](#) assigning small areas to rural / urban areas was used. Essentially (and oversimplifying slightly), this is based on the size of the physical settlement, those having a population above 10,000 being classed as urban and the remainder as rural.

## Age standardisation

Age standardisation has been used throughout this bulletin (apart from results by age and by sex) in order to enable groups to be compared after adjusting for the effects of any differences in their age distributions. When different sub-groups are compared in respect of a variable on which age has an important influence, any differences in age distributions between these sub-groups are likely to affect the observed differences in the proportions of interest.

Age standardisation was carried out using the direct standardisation method. The standard population to which the age distribution of sub-groups was adjusted was adapted from the 2013 European Standard Population. Calculations were conducted using Stata. The age-standardised Proportion  $p'$  was calculated as follows, where  $p_i$  is the age specific proportion in age group  $i$  and  $N_i$  is the standard population size in age group  $i$ :

$$p' = \frac{\sum_i N_i p_i}{N_i}$$

Therefore  $p'$  can be viewed as a weighted mean of  $p'$  using the weights  $N_i$ . Age standardisation was carried out using the age groups: 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75 and over.

## Key quality information

### Background

The National Survey for Wales 2016-17 was carried out by the Office for National Statistics on behalf of the Welsh Government. The results reported in this bulletin are based on interviews completed in 2016-17 (1 April 2016 – 31st March 2017).

21,666 addresses were chosen randomly from the Royal Mail's Small User Postcode Address File. Interviewers visited each address, randomly selected one adult (aged 16+) in the household, and carried out a 45-minute face-to-face interview with them, which asked for their opinions on a wide range of issues affecting them and their local area. A total of 10,493 interviews were achieved. For WEMWBS questions respondents were asked to complete the question using CASI (Computer Assisted Self-Interviewing). This meant answers to the questions were inputted by the respondent themselves directly onto the computer. Where respondents declined to use CASI, the questions were asked directly to the interviewee instead.

### Interpreting the results

The bulletin explores associations between mental wellbeing and other variables, but the results do not imply causality. Any association may result from other factors.

Mean WEMWBS scores quoted in this release are based on only those who provided an answer to the relevant question. Missing answers occur for several reasons, including refusal or an inability to answer a particular question and cases where the question is not applicable to the respondent.

The results of the National Survey are weighted to compensate for unequal selection probabilities and differential non-response (i.e. to ensure that the age and sex distribution of the final dataset matches that of the Welsh population).

### Quality report

A summary [quality report](#) is available, containing more detailed information on the quality of the survey as well as a summary of the methods used to compile the results.

### Technical report

More detailed information on the survey methodology is set out in the [technical report](#) for the survey.

### Sampling variability

Estimates from the National Survey are subject to a margin of uncertainty. Part of the uncertainty comes from the fact that any randomly-selected sample of the population will give slightly different results from the results that would be obtained if the whole population was surveyed. This is known as sampling error<sup>1</sup>. Confidence intervals can be used as a guide to the size of the sampling error. These intervals are calculated around a survey estimate and give a range within which the true value is likely to fall. In 95% of survey samples, the 95% confidence interval will contain the 'true' figure for the whole population (that is, the figure we would get if the survey covered the entire

---

<sup>1</sup> Sampling error is discussed in more detail in the [Quality Report](#) for the National Survey.

population). In general, the smaller the sample size the wider the confidence interval. Confidence intervals are included in the tables of survey results published on [StatsWales](#).

As with any survey, the National Survey is also subject to a range of other sources of error: for example, due to non-response; because respondents may not interpret the questions as intended or may not answer accurately; and because errors may be introduced as the survey data is processed. These kinds of error are known as non-sampling error, and are discussed further in the [quality report](#) for the survey.

Information on our [revisions policy](#).

### **Release policy**

Information about the process for releasing new results is available from the [Welsh Government's statistics web pages](#).

### **Availability of datasets**

The data behind the charts and tables in this release are published in spreadsheets on [StatsWales](#). An anonymised version of the annual datasets (from which some information is removed to ensure confidentiality is preserved), together with supporting documentation, will be deposited with the UK Data Archive. For more information, please [contact us](#)



## **National Statistics status**

The [United Kingdom Statistics Authority](#) has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Official Statistics](#).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

## **Well-being of Future Generations Act (WFG)**

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators ("national indicators") that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016 and this release includes the adult element of 1 of the national indicators namely "Mean mental well-being score for people".

Information on indicators and associated technical information - [How do you measure a nation's progress? - National Indicators](#)

As a national indicator under the Act they must be referred to in the analyses of local well-being produced by public services boards when they are analysing the state of economic, social, environmental and cultural well-being in their areas.

[Further information on the Well-being of Future Generations \(Wales\) Act 2015.](#)

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

## **Further details**

The document is available at:

<http://gov.wales/statistics-and-research/national-survey/?tab=current&lang=en>

## **Next update**

September 2019 (provisional)

## **We want your feedback**

We welcome any feedback on any aspect of these statistics which can be provided by email to

[stats.healthinfo@gov.wales](mailto:stats.healthinfo@gov.wales)

## **Open Government Licence**

All content is available under the [Open Government Licence v3.0](#), except where otherwise stated.

