Statistical Bulletin

ystadegau ar gyfer cymru statistics for wales

Llywodraeth Cymru
Welsh Government

National Survey for Wales, 2016-17
Loneliness

In the National Survey 2016-17, people were asked how a series of six statements covering different aspects of loneliness applied to their situation. People were classed as lonely if they reported negatively on four or more of the statements. The results are used to help monitor progress against the Well-being of Future Generations Act, as set out in the Well-being of Wales report.

Key findings

- 17% of people were lonely, and 54% of people experienced some feelings of loneliness.

- Younger people were more likely to be lonely than older people: 20% of 16-24 year olds were lonely, compared with 10% of those aged 75 or over.

- Poor general health, limiting long-term illness, low mental well-being and low subjective well-being were associated with being lonely. The impact of having a limiting long-term illness on loneliness was stronger for younger people.

- 37% of people who were in material deprivation were lonely.

- People who felt safe after dark, who felt a strong sense of community and/or were satisfied with their area, were less lonely.

- 20% of people experienced loneliness related to the absence of close personal relationships, and 34% of people were lonely due to a lack of wider social contacts.

About this bulletin

This bulletin provides more detailed analysis of the 2016-17 National Survey results on **loneliness**.

The full questionnaire is available on the National Survey web pages.

Additional tables can be accessed via the Results viewer.

In this bulletin

Introduction

This bulletin provides more detailed analysis of the loneliness results gathered as part of the National Survey during 2016-17. Loneliness is an important topic for various policy strategies in Wales, notably the Well-being of Future Generations (Wales) Act 2015, the Public Health Outcomes Framework for Wales, and the Social Services National Outcomes Framework. These three frameworks are discussed in turn below.

The percentage of people who are lonely is one of the 46 national indicators used to measure progress against the Well-being of Future Generations (Wales) Act 2015. The Act is designed to improve the social, economic, environmental, and cultural well-being of Wales. The Well-being of Wales report provided an update on the progress being made in Wales towards the achievement of the well-being goals and the associated national indicators.[1] In the Act, loneliness is viewed as important to a range of well-being outcomes. .

The Public Health Outcomes Framework for Wales considers the wider economic, environmental and social factors that can impact on the health and well-being of individuals, communities and society. The framework groups outcomes under three domains: living conditions that support and contribute to health now and for the future, ways of living that improve health, and health throughout the life-course. Loneliness is an indicator under the 'living conditions' domain and is related to the development of cohesive and supportive communities.

Other specific outcome frameworks also highlight the importance of loneliness as an indicator of well-being. The Social Services National Outcomes Framework is designed to help improve the well-being of carers and people who need care and support. The ability of people to enjoy safe and healthy relationships, in personal, family and community spheres, is an important element of well-being. Overall, social and emotional loneliness are indicators of this dimension of well-being for carers and people who need care.

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[1] See the chapter entitled 'A Wales of cohesive communities' in Well-being of Wales for discussion of the loneliness indicator.

Loneliness

Loneliness[2] was measured for the first time in the National Survey in 2016-17. The De Jong Gierveld loneliness scale was used to assess levels of loneliness. For a series of six statements, people were asked the extent to which they applied to their situation. These statements were:

1. 'I experience a general sense of emptiness'

2. 'I miss having people around'

3. 'I often feel rejected'

4. 'There are plenty of people I can rely on when I have problems'

5. 'There are many people I can trust completely'

6. 'There are enough people I feel close to'

Responses were combined to produce a scale from 0 to 6, where 0 is least lonely and 6 is most lonely. For reporting purposes in this bulletin, we have considered people who have a score of 4 to 6 as being lonely. On this basis 17% of people were classed as lonely[3].

Loneliness is a complex issue and we looked at the links between loneliness and a range of demographic, social and health factors. We carried out in-depth analysis to evaluate the independent effect of each factor on loneliness, taking account of the influence of the other factors. For instance, we found that age had an effect on loneliness over and above other factors such as marital status, general health and whether people volunteered. When controlling for a range of factors[4], the following characteristics were associated with being lonely.

- **Age** - Older age groups were the least likely to be lonely. The proportion of people who were lonely decreased with age. 20% of those aged 16 to 24 were lonely, compared with 10% of those aged 75 or over, see Chart 1. It is recognised that loneliness is an issue across the life-course; however, older people are usually identified as a vulnerable and disproportionately affected group. The smaller proportion of lonely older people could be a positive finding in relation to the well-being of an increasingly ageing population.

Chart 1: People who are lonely, by age group

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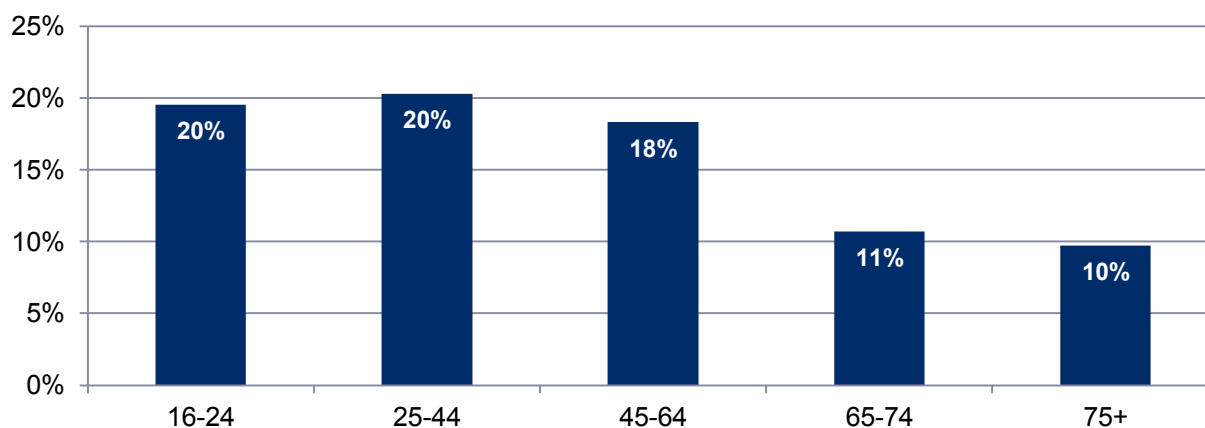
[2] Loneliness – see Terms and definitions.
[3] Descriptive analysis using stricter cut-points (scores of 5 to 6, and those scoring the maximum 6 points) showed similar patterns of relationships to key characteristics as the 4 or more threshold used in this bulletin.
[4] Using regression analysis - more details can be found in the Key quality information.

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- **Ethnicity** – People of non-white ethnic groups were more lonely than white people: 25% of the non-white group[5] were lonely, compared with 17% of the white group.

- **Marital status** – Being married or in a civil partnership was linked to lower levels of loneliness than being single, separated, widowed or divorced. 13% of married people were lonely, compared with 22% of single people.

- **Material deprivation**[6] – The material circumstances of individuals were an important factor in relation to loneliness. 37% of people in material deprivation were lonely, compared with 14% of those who were not in material deprivation.

- **Internet use** – 18% of people who used the internet were lonely, compared with 13% of those who did not use the internet. This relationship remained even when controlling for other factors such as age (so it is not simply the case that people who used the internet were younger and therefore more lonely).

  No significant differences were found in the proportion of people who were lonely by the frequency of using the internet. However, there is growing concern over links between internet use and well-being and more research is needed into these complex relationships.

- **Sense of community**[7] - People with a sense of community were less likely to be lonely. 11% of those who felt a strong sense of community were lonely, compared with 23% of those who did not feel a sense of community. This finding could support the aim of the [Well-being of Future Generations Act](#) to develop cohesive communities to tackle loneliness and improve well-being. However, the relationship between sense of community and loneliness could also operate in the opposite direction: being lonely may negatively impact the development of a sense of community.

- **Satisfaction with local area** – People who were satisfied with their local area as a place to live were less likely to be lonely: 15% of those who were satisfied with their local area were lonely, compared with 30% of people who were dissatisfied. However, as with having a sense of community, the relationship between loneliness and satisfaction with the local area may operate in either direction. Loneliness could mean people are dissatisfied with their area, or dissatisfaction with the local area may contribute to feeling lonely.

- **Feeling safe**[8] - 26% of people who did not feel safe after dark were lonely compared with 14% of those who did feel safe. Those who felt safe in their local area remained less likely to be lonely when other factors were controlled for. Issues of community safety may prevent people from engaging fully with their communities and offer a barrier to tackling loneliness. It may also be that people who feel lonely are more likely to feel less safe.

- **Volunteering** – Volunteering was related to a decreased likelihood of being lonely. 13% of volunteers were lonely, compared with 19% of people who were not volunteers.

[5] Due to small numbers, the "non-white" group could not be disaggregated further for analysis.
[6] Material deprivation – see [Terms and definitions](#).
[7] Sense of community – see [Terms and definitions](#).
[8] Feeling safe - see [Terms and definitions](#).

- **General health** - The connections between loneliness and health are well-documented and an association of loneliness with general health status was confirmed when controlling for other factors. There was a steep gradient in the proportion of people who were lonely, see Chart 2. 13% of those who reported being in good or very good health felt lonely, compared with 25% of those who considered themselves in fair health, and 39% of those in bad health or worse. The relationship between loneliness and health is complex and the direction of the association is unclear.

**Chart 2: People who are lonely, by general health**
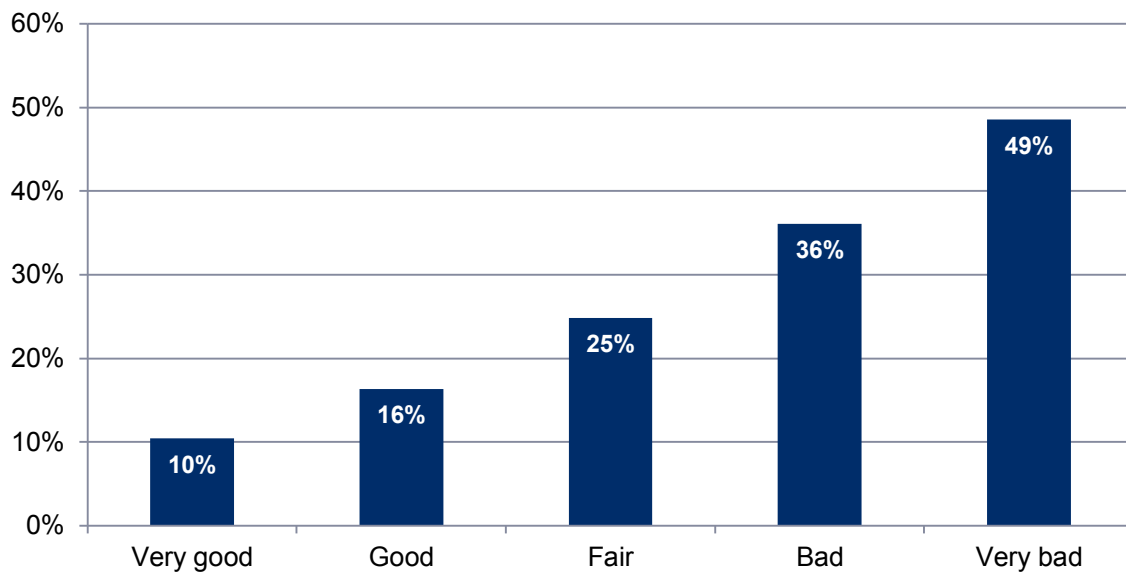
- **Limiting long-term illness** (LLTI) – People were asked whether they had conditions or illnesses lasting or expected to last for 12 months or more, and also whether any of their conditions or illnesses reduced their ability to carry-out day-to-day activities. People were defined as having a limiting long-term illness if they had such a condition. LLTI was related to loneliness, 26% of those with a LLTI were lonely, compared with 13% of those who did not have a LLTI.

- **Age and LLTI interaction** – The impact of having a LLTI on loneliness was greater for younger age groups, see Chart 3. This interaction was significant when controlling for other factors, including the main effects of both age and having a LLTI.

  This finding echoes results from a study by the disability charity Scope which highlighted the extra burden of loneliness for younger disabled adults. They found 85% of 18-34 year olds with a disability felt lonely.[9]

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[9] By their measure of loneliness, this was those who always, often or occasionally felt lonely over the previous 12 months.

Chart 3: People who are lonely, by age and limiting long-term illness (LLTI)
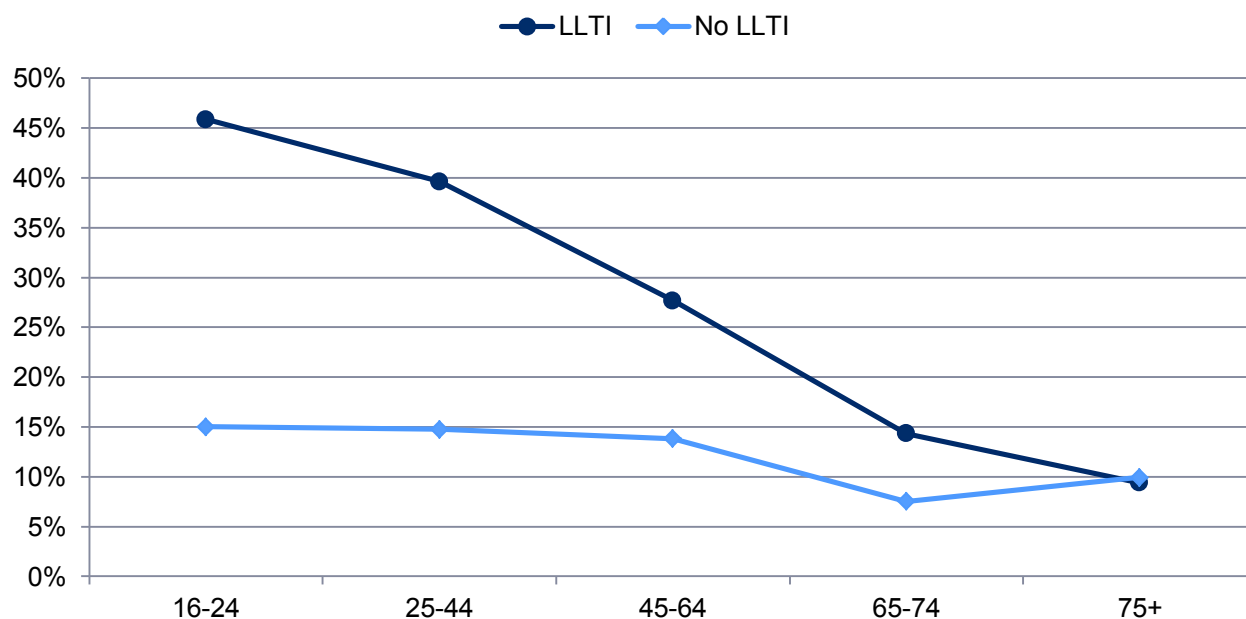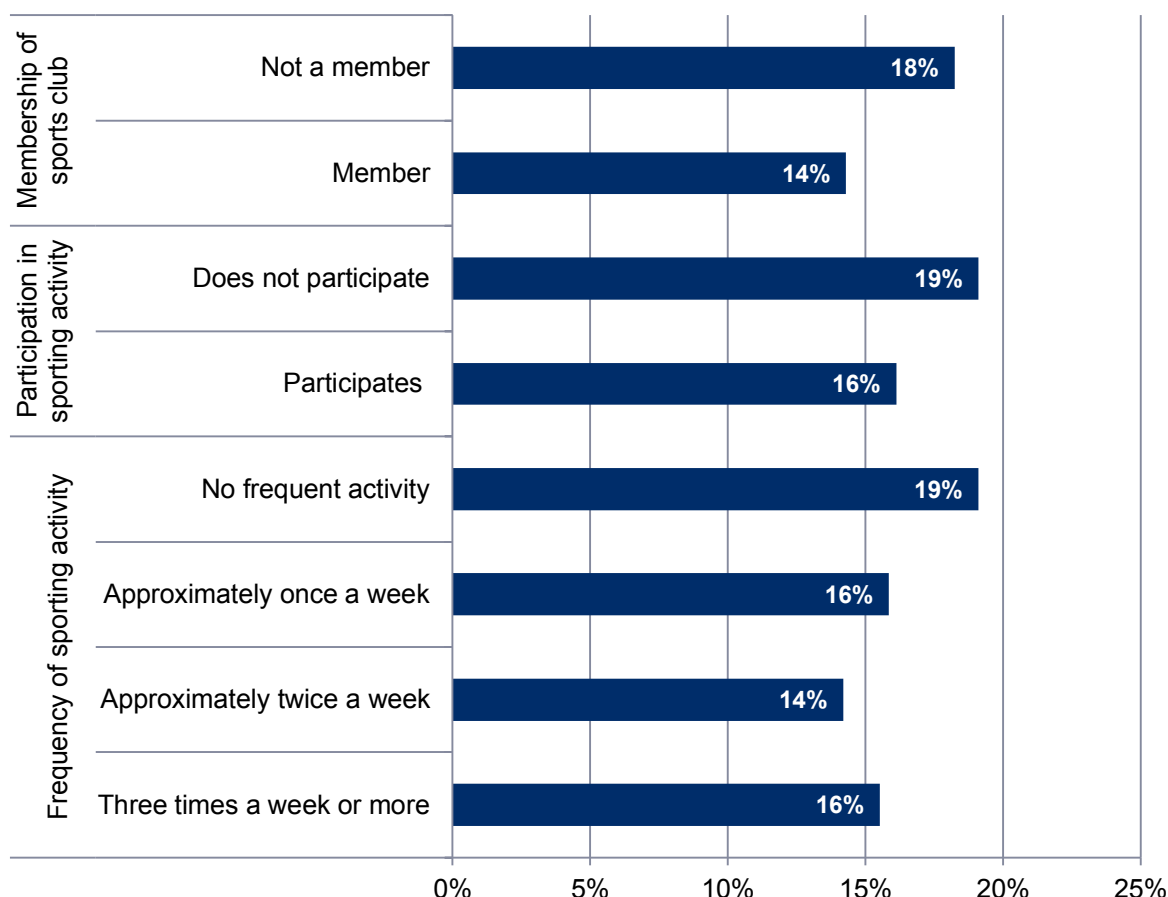

When controlling for other factors, characteristics **not** identified as related to loneliness were: gender, household type, economic status, tenure, car availability, using Welsh daily, religion, having fewer than two healthy behaviours, whether the area they lived in was urban or rural, the level of local area deprivation, and the local authority area.

All of these factors displayed relationships with loneliness in descriptive analysis. However, in our in-depth analysis other characteristics were found to better explain their relationships to loneliness. For example, the association of area deprivation with loneliness may have been explained by accounting for the deprived circumstances of individuals. Likewise, the apparent relationships of factors such as household type or tenure with loneliness could have been an effect of the age of people likely to be in those categories related to a higher likelihood of loneliness.

Loneliness and sport

Participating in sporting activities could provide opportunities to develop social networks and contact and may be beneficial to tackling loneliness. Small differences in the proportion of people feeling lonely were identified based on: membership of sports clubs; participation in any sporting activity; and the frequency with which people participated in sporting activities (summarised in Chart 4). For example, those who participated in sporting activities three times a week or more were less lonely than people who took part in no frequent sporting activities. However, when controlling for other factors, differences by sporting activity and participation were no longer significant: that is, they were better explained by other factors, for instance health status or material deprivation.

Chart 4: People who are lonely, by sporting activity

Membership of sports club	
Not a member	18%
Member	14%
Participation in sporting activity	
Does not participate	19%
Participates	16%
Frequency of sporting activity	
No frequent activity	19%
Approximately once a week	16%
Approximately twice a week	14%
Three times a week or more	16%

Loneliness and caring

Previous [research](#) has highlighted that those who care for others because of illness, disability or old age are a group vulnerable to social isolation and loneliness. The [Social Services and Well-being (Wales) Act 2014](#) places a duty on the Welsh Government, local authorities and health boards to promote the well-being of carers, as well as of people who need care and support. The National Survey 2016-17 measured people's carer status by whether they looked after, or gave any help or support to family members, friends, neighbours or others because of long-term physical or mental ill-health or disability, or problems related to old age. Using this definition, the proportion of carers and non-carers who were lonely was the same, at 17%. The proportion of people who were lonely increased slightly for those who were spending more of their time caring for others, as shown in Chart 5. 17% of people who were not carers were lonely, compared with 22% of those caring for between 20-49 hours a week, and 20% of those who provided more than 50 hours of care a week. However, these differences were not significant, showing that there is not sufficient evidence to report that those caring for others are lonelier than those who do not provide care.

Chart 5: People who are lonely, by caring for others
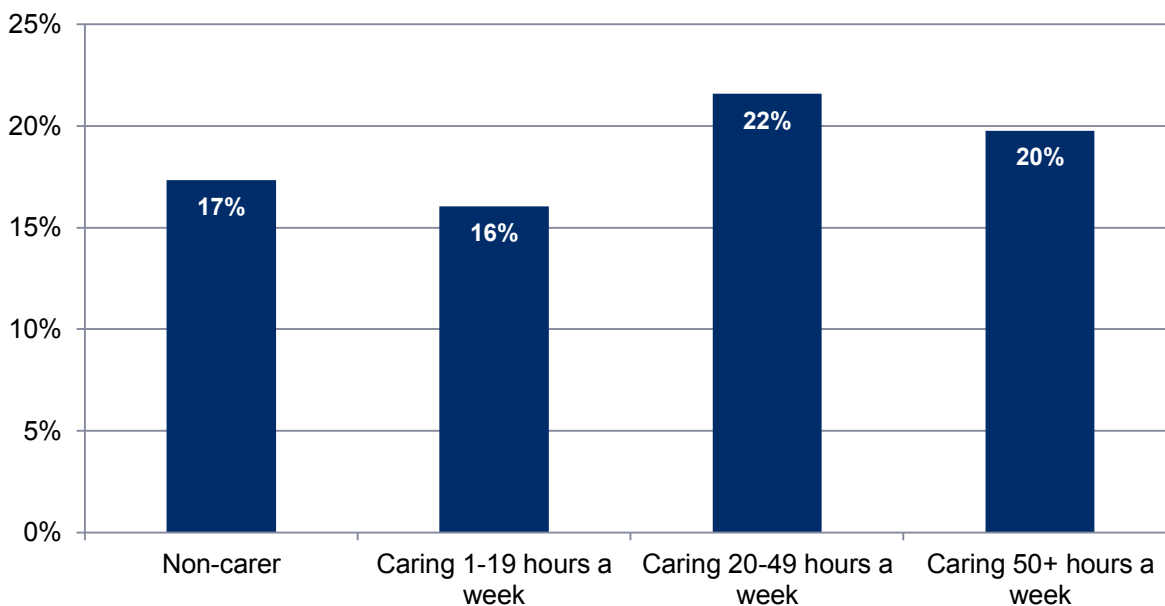
Well-being and loneliness

Loneliness is closely related to well-being, and reciprocal relationships are likely to operate whereby lower well-being may contribute to feelings of loneliness, which in turn contribute to lower well-being. There was a strong association found between loneliness and mental well-being, as measured using the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)[10]. Lower WEMWBS scores indicate worse mental well-being. The average mental well-being score for those who were not lonely was 55.8, compared with 51.2 for those who experienced some feelings of loneliness and 42.3 for those who felt lonely. .

The National Survey also asked a series of questions about subjective well-being[11]. In general, people with low well-being on these measures were also more likely to experience loneliness: Chart 6 shows the proportion of people who were lonely for the well-being outcomes. Those with low well-being are disproportionately lonelier than those with higher well-being for the four well-being measures: overall satisfaction with life; extent of feeling that things done in life are worthwhile; overall happiness yesterday; and overall anxiety yesterday.

Controlling for the set of factors identified as related to loneliness in the previous section[12], lower mental well-being, being less satisfied with life, thinking that things you do in life are less worthwhile and having lower levels of happiness were all related to an increased likelihood of being lonely. Anxiety was not found to significantly relate to loneliness when controlling for other factors.

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[10] Mental well-being (WEMWBS) – see Terms and definitions.
[11] See Terms and definitions for details of the well-being measures.
[12] When mental well-being, satisfaction with life, worthwhileness of life and happiness are controlled for volunteering, general health and satisfaction with the local area were no longer significantly related to loneliness.

Chart 6: People who are lonely, by subjective well-being
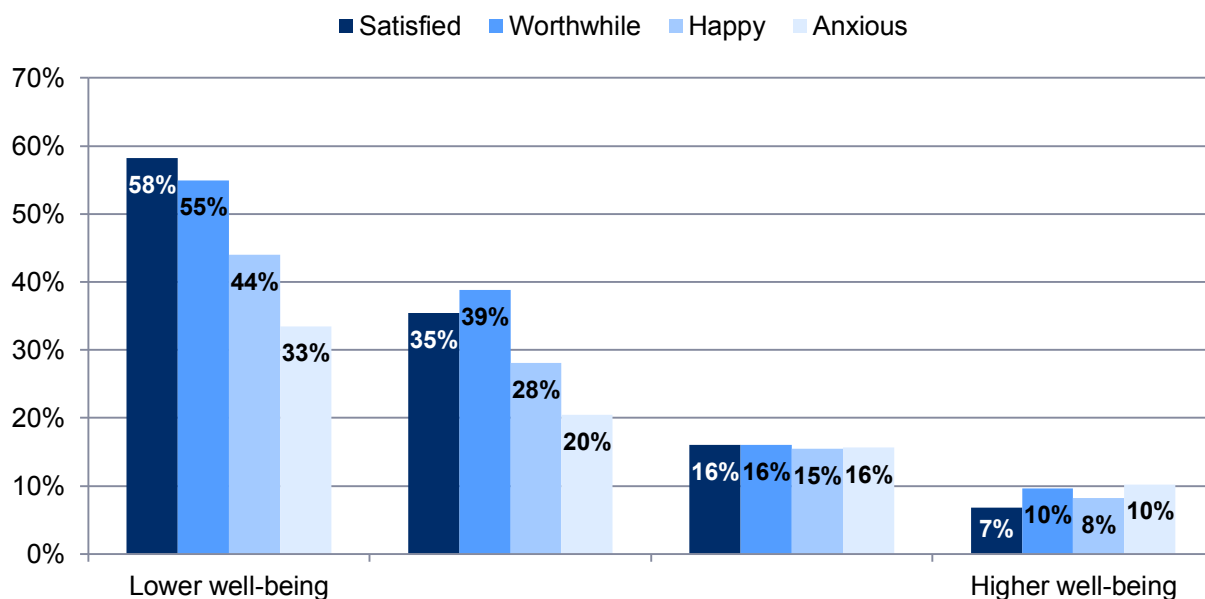
Emotional loneliness

It is recognised that there are two dimensions to loneliness[13]: emotional loneliness and social loneliness. Emotional loneliness refers to loneliness which relates to the absence of close relationships or emotional attachments, for instance through not having a partner. The emotional loneliness subscale is made up of the statements regarding: feeling a general sense of emptiness, missing having people around, and often feeling rejected. The subscale is measured on a scale of 0 to 3, and in this bulletin we have used scores of 2 or more to represent emotional loneliness. On this basis, 20% of people felt emotionally lonely.

When controlling for other factors, the following characteristics were related to a higher likelihood of being emotionally lonely:

- being younger

- being non-white

- living in a single adult household

- being in material deprivation

- being less satisfied with the local area as a place to live

- not feeling safe in the local area

- having poor general health

- having a limiting long-term illness

In contrast with the overall loneliness measure, household type is a significant factor in relation to emotional loneliness. A higher proportion of people were emotionally lonely when they lived in single adult households, see Chart 7. For example, 43% of people in single parent households

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[13] Loneliness – De Jong Gierveld scale - see Terms and definitions.

were lonely, compared with 10% of those living in a household as a married pensioner couple with no children.

Chart 7: People who are emotionally lonely, by household type
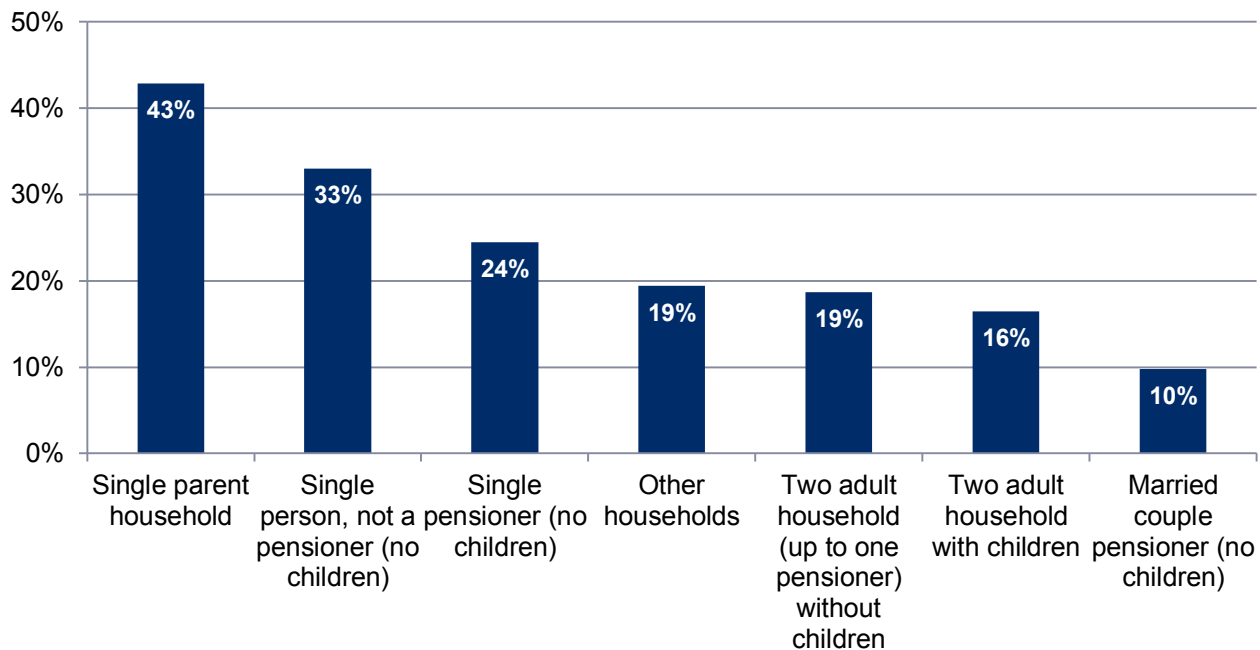
In comparison with the overall measure of loneliness, when controlling for other factors, sense of community and volunteering were not significantly associated with emotional loneliness.

Other factors **not** found to have significant associations with emotional loneliness when controlling for other factors were: gender, qualification level, economic status, tenure, car availability, using Welsh daily, participating in sporting activity three or more times a week, religion, having fewer than two healthy behaviours, whether the area they lived in was urban or rural, the level of deprivation of the local area, and the local authority area. Differences in emotional loneliness were present by these factors in descriptive analysis: however, our further analysis showed these links were better explained by other factors.

Examining the individual component questions can reveal further insights into the characteristics of people who have experienced different dimensions of loneliness. The statements for emotional loneliness were as follows (figures in brackets indicate the percentage of people who responded 'yes' or 'more or less'[14]):

- I experience a general sense of emptiness (22%)
- I miss having people around (41%)
- I often feel rejected (15%)

The three statements showed varying age profiles, see Chart 8. The age trend demonstrated for the overall loneliness scale - where older age groups appeared less lonely - is repeated for the statements on experiencing a sense of emptiness and feeling rejected. However, there was a slight u-shaped relationship for the statement on missing having people around. Those in the youngest and oldest groups were worst off: 47% of people aged 16-24, and 44% of those aged 75 or over

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[14] Responses of 'yes' and 'more or less' are counted according to the guidance on using the De Jong Gierveld 6-item loneliness scale.

reported that they missed having people around. More women than men often felt rejected: 17% of women felt rejected compared with 13% of men.

Chart 8: People agreeing with the emotional loneliness statements, by age group
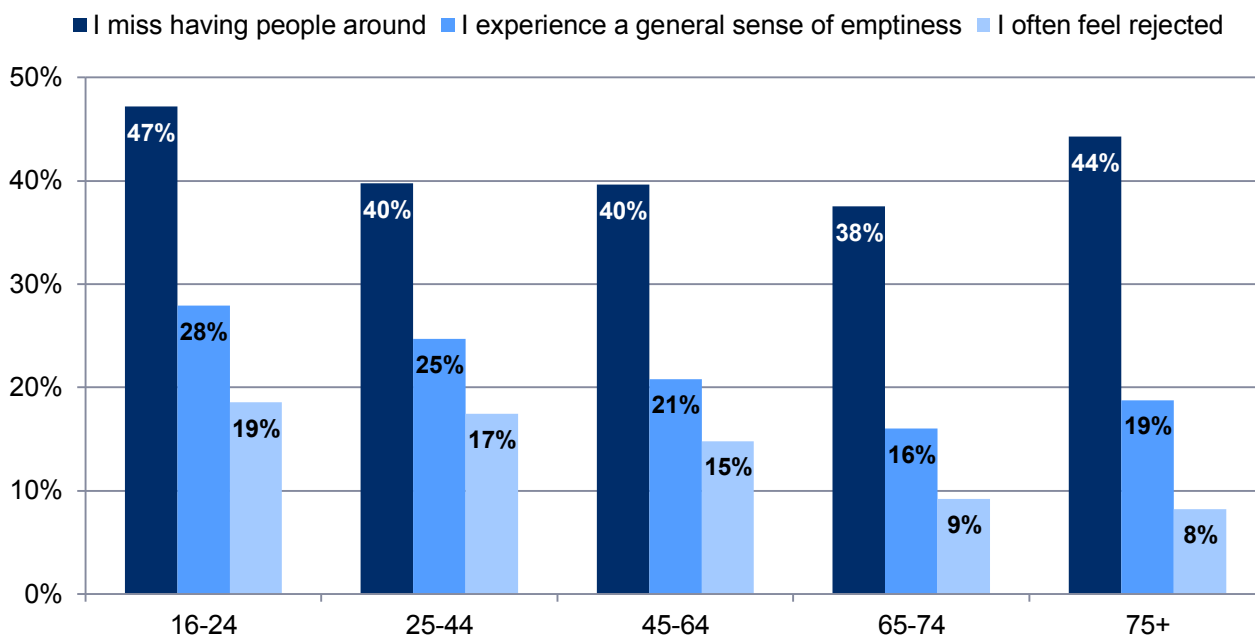
Social loneliness

Social loneliness represents feelings of loneliness related to a lack of wider social contacts or networks. The social loneliness subscale is based on the statements that: there are plenty of people they can reply on when they have problems, there are many people they can trust completely, and that there are enough people they feel close to. The subscale is measured on a scale of 0 to 3, and for this bulletin we have taken scores of 2 or more as representing social loneliness. By this definition 34% of people felt socially lonely. Social loneliness appears to be more prevalent than emotional loneliness (which was experienced by 20% of people).

When controlling for other factors, the following characteristics were related to an increased likelihood of being socially lonely:

- being middle-aged
- being a man
- being single, separated, divorced or widowed
- having higher level qualifications
- being in material deprivation
- not using Welsh daily and not being able to speak more than just a few words of Welsh
- not having a sense of community
- not feeling safe in your local area

- not volunteering

- not having a religion

- being an internet user

- being in poorer general health

In comparison with overall loneliness where significant associations were not identified, use of Welsh, religion, healthy lifestyle behaviours and local authority area (see Chart 9 and Chart 10) demonstrated relationships with social loneliness. Gender was also associated with social loneliness. The finding that men (36% of whom were socially lonely) were more likely than women (32%) to be socially lonely is in line with a previous study which also found gender differences in social loneliness.
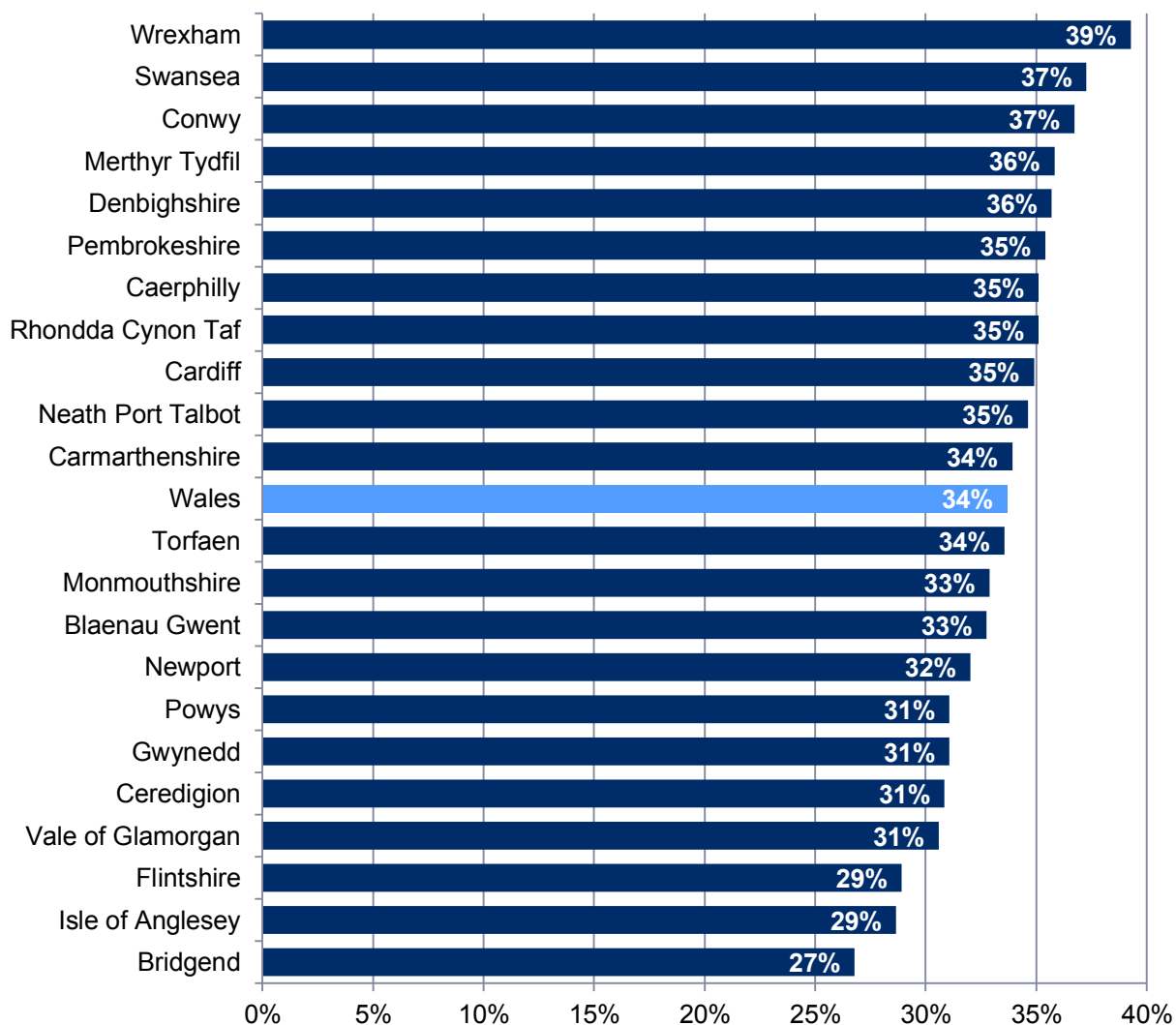
Chart 9: People who are socially lonely, by religion and Welsh language use
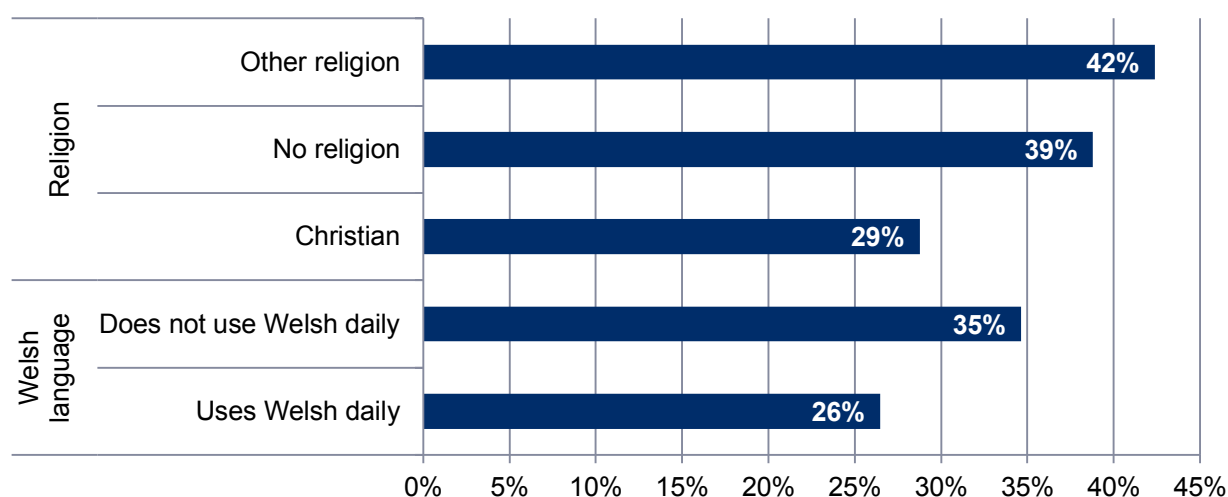
When controlling for other factors, having a limiting long-term illness (LLTI) was not related to social loneliness, whereas it was linked to both emotional loneliness and overall loneliness. However, an interaction between age and LLTI was present. For social loneliness, having a LLTI made the greatest difference for those who were aged 25-44. Of people aged 25-44, 55% of those with an LLTI were lonely compared with 31% of those without an LLTI: a 24 percentage point difference.

In addition, ethnicity (classified as white and non-white) was not found to have a relationship with social loneliness when controlling for other factors, in contrast to the results for overall loneliness and emotional loneliness. Other factors **not** found to have significant associations with social loneliness when other factors were controlled for were: household type, economic status, tenure, car availability, satisfaction with the local area, having fewer healthy behaviours and the level of deprivation of the local area.

Chart 10: People who are socially lonely, by local authority

Local authority	Percentage
Wrexham	39%
Swansea	37%
Conwy	37%
Merthyr Tydfil	36%
Denbighshire	36%
Pembrokeshire	35%
Caerphilly	35%
Rhondda Cynon Taf	35%
Cardiff	35%
Neath Port Talbot	35%
Carmarthenshire	34%
Wales	34%
Torfaen	34%
Monmouthshire	33%
Blaenau Gwent	33%
Newport	32%
Powys	31%
Gwynedd	31%
Ceredigion	31%
Vale of Glamorgan	31%
Flintshire	29%
Isle of Anglesey	29%
Bridgend	27%

The component questions for the social dimension of loneliness were as follows (figures in brackets indicate the percentage of people who responded 'no' or 'more or less'[15]):

- There are plenty of people I can rely on when I have problems (34%)

- There are many people I can trust completely (46%)

- There are enough people I feel close to (28%)

The results for these statements followed the age trend for overall loneliness, with older people faring better. For instance, 49% of those aged 16-24 felt that there were not many people they could trust completely, compared with 29% for those aged 75 or over. Gender differences were apparent and more men than women felt that there were few people they could trust (48% of men compared with 44% of women) or rely on (36% of men compared with 32% of women).

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[15] Responses of 'no' and 'more or less' are counted according to the guidance on using the De Jong Gierveld 6-item loneliness scale.

Summary of regression results

Overall loneliness

When controlling for other factors, the following factors were associated with an increased likelihood of being lonely:

- being younger

- being of a non-white ethnic group

- not being married or in a civil partnership

- being materially deprived

- using the internet

- not having a sense of community

- not being satisfied with the local area as a place to live

- not feeling safe after dark

- not being a volunteer

- having worse general health

- having a limiting long-term illness

- being a younger person with a limiting long-term illness

Emotional loneliness

When controlling for other factors, the following factors were related to an increased likelihood of being emotionally lonely:

- being younger

- being non-white

- living in a single adult household

- being materially deprived

- being less satisfied with the local area as a place to live

- not feeling safe in the local area

- having poor general health

- having a limiting long-term illness

- being younger with a limiting long-term illness

Social loneliness

When controlling for other factors, the following factors were linked with an increased likelihood of being socially lonely:

- being middle-aged

- being a man

- being single, separated, divorced or widowed

- having higher level qualifications

- being materially deprived

- not using Welsh daily and not being able to speak more than just a few words of Welsh

- not having a sense of community

- not feeling safe in your local area

- not volunteering

- not having a religion

- being an internet user

- being in poorer general health

- being younger with a limiting long-term illness

Terms and definitions

Loneliness

Various measures of loneliness can be used for data analysis purposes and in this bulletin we use the De Jong Gierveld six-point loneliness scale. This scale has three statements about emotional loneliness (EL) and three about social loneliness (SL).

1. 'I experience a general sense of emptiness' (EL)

2. 'I miss having people around' (EL)

3. 'I often feel rejected' (EL)

4. 'There are plenty of people I can rely on when I have problems' (SL)

5. 'There are many people I can trust completely' (SL)

6. 'There are enough people I feel close to' (SL)

The scale uses three response categories: **'Yes' / 'More or less' / 'No'** - where the neutral and positive answers are scored as '1' on the negatively worded questions (in this instance, questions 1-3). On the positively worded items (questions 4-6), the neutral and negative answers are scored as '1'. This means that an answer of 'more or less' is given the same score as either 'yes' or 'no', depending on the question.

The scores for each individual question are added together to provide an overall loneliness measure. This gives a possible range of scores from 0 to 6, **where 0 is least lonely and 6 is most lonely**. For reporting purposes in this bulletin we have considered people who have a score of 4 to 6 as being lonely.

Material deprivation

Material deprivation is a measure which is designed to capture the consequences of long-term poverty on households, rather than short-term financial strain.

Non-pensioner adults were asked whether they had things like 'a holiday away from home for at least a week a year', 'enough money to keep their home in a decent state of decoration', or could 'make regular savings of £10 a month or more'. The questions for adults focussed on whether they could afford these items. These items are really for their 'household' as opposed to them personally which is why they were previously called 'household material deprivation'.

Pensioners were asked slightly different questions such as whether their 'home was kept adequately warm', whether they had 'access to a car or taxi, when needed' or whether they had their hair done or cut regularly'. These also asked whether they could afford them, but also focussed on not being able to have these items for other reasons, such as poor health, or no one to help them etc. these questions were less based on the household and more about the individual.

Those who did not have these items were given a score, such that if they didn't have any item on the list, they would have a score of 100, and if they had all items, they had a score of 0. Non-

pensioners with a score of 25 or more were classed as deprived and pensioners with a score of 20 or more were classed as deprived.

Parents of children were also asked a set of questions about what they could afford for their children.

In this bulletin the non-pensioner and pensioner measures of deprivation are combined to provide an 'adult' deprivation variable. The terms 'adult' and 'household' deprivation may be used interchangeably depending on context.

Sense of community

Respondents were asked to respond to what extent they agreed or disagreed with the following statements:

- 'I belong to my local area.'

- 'This local area is a place where people from different backgrounds get on well together.'

- 'People in my local area treat each other with respect and consideration.'

Responses were combined, with those agreeing to all three statements deemed as having a sense of community.

Feeling safe

Respondents were asked to respond to the question 'How safe or unsafe do you feel walking alone in your area after dark?'. Respondents were also asked to consider how safe or unsafe they *would* feel if they had to be in the following situations:

- 'At home after dark'

- 'Travelling by public transport after dark'

- 'Travelling by car after dark'

For all four questions, answers were scored on a four point scale from 'very safe' to 'very unsafe'. Those that responded that they felt 'very safe' or 'fairly safe' to all four questions were considered as feeling safe.

Mental well-being (WEMWBS)

The Warwick-Edinburgh Mental Well-being Scale uses 14 questions to measure mental well-being in the last 2 weeks. The items are all worded positively and cover both feeling and functioning aspects of well-being. 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, where higher scores suggest higher mental well-being.

Respondents were asked to rate the following 14 statements:

- 'I've been feeling optimistic about the future'

- 'I've been feeling useful'

- 'I've been feeling relaxed'

- 'I've been feeling interested in other people'

- 'I've had energy to spare'

- 'I've been dealing with problems well'

- 'I've been thinking clearly'

- 'I've been feeling good about myself'

- 'I've been feeling close to other people'

- 'I've been feeling confident'

- 'I've been able to make up my own mind about things'

- 'I've been feeling loved'

- 'I've been interested in new things'

- 'I've been feeling cheerful'

Subjective well-being

Respondents were asked to reply to a series of questions concerning their feelings on aspects of their lives, scoring their responses on scales of 0 to 10, where 0 indicates 'not at all' and 10 represents 'completely'. The following four questions were asked:

- 'Overall, how satisfied are you with your life nowadays?'

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

- 'Overall, how happy did you feel yesterday?'

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

For life satisfaction, worthwhileness of life and happiness scales, scores 0-4 were classed as low, 5-6 as medium, 7-8 as high, and scores 9-10 as very high. For anxiety the scale was grouped so that scores 0-1 were classed as very low, scores 2-3 as low, 4-5 as medium and scores 6-10 as high levels of anxiety.

Key quality information

Background

The National Survey for Wales is 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 (30 March 2016 – 31 March 2017).

The sample was drawn from the Royal Mail Small Users Postcode Address File (PAF), whereby all residential addresses and types of dwellings were included in the sample selection process as long as they were listed as individual addresses. If included as individual addresses on the PAF, residential park homes and other dwellings were included in the sampling frame but community establishments such as care homes and army barracks are not on the PAF and therefore were not included.

The National Survey sample in 2016-17 comprised 21,666 addresses chosen randomly from the PAF. 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.

Interpreting the results

Percentages quoted in this bulletin are based on only those respondents who provided an answer to the relevant question. Some topics in the survey were only asked of a sub-sample of respondents and other questions were not asked where the question is not applicable to the respondent. Missing answers can also occur for several reasons, including refusal or an inability to answer a particular question.

Where a relationship has been found between two factors, this does not mean it is a causal relationship. More detailed analysis is required to identify whether one factor causes change in another.

The results are weighted to ensure that the results reflect the age and sex distribution of the Welsh population.

Quality report

A Quality Report is available, containing more detailed information on the quality of the survey, which includes relevance, accuracy, timeliness and punctuality, accessibility and clarity, and comparability and coherence of the data. It also includes a summary of the methods used to compile the results.

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. 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 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.

Significant differences

Where the text of this release notes a difference between two National Survey results (in the same year), we have checked to ensure that the confidence intervals for the two results do not overlap. This suggests that the difference is statistically significant (but as noted above, is not as rigorous as carrying out a formal statistical test), i.e. that there is less than a 5% (1 in 20) chance of obtaining these results if there is no difference between the same two groups in the wider population.

Checking to see whether two confidence intervals overlap is less likely than a formal statistical test to lead to conclusions that there are real differences between groups. That is, it is more likely to lead to "false negatives": incorrect conclusions that there is no real difference when in fact there is a difference. It is also less likely to lead to "false positives": incorrect conclusions that there is a difference when there is in fact none. Carrying out many comparisons increases the chance of finding false positives. Therefore, when many comparisons are made the conservative nature of the test is an advantage because it reduces (but does not eliminate) this chance.

Where National Survey results are compared with results from other sources, we have not checked that confidence intervals do not overlap.

Regression

After considering the survey results, factors we considered likely to have an influence on volunteering, being a carer and other responses were incorporated into binary logistic regression models. The final models consisted of those factors that remained significant even after holding the other factors constant. These significant factors are those that have been discussed in this bulletin and the use of regression analysis is indicated by the statement that we have 'controlled for other factors'.

More details on the methodology used in the regression analysis are available in the Technical Report: Approach to regression analysis and models produced.

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 national indicator: 'Percentage of people who are lonely'. This indicator is discussed in the chapter entitled 'A Wales of cohesive communities' within the [Well-being of Wales](#) report.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales](#) report.

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

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.

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/

Next update

Not a regular output

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to surveys@gov.wales.

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