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What factors are linked to people living in households that are in **material deprivation**?

Future Generations Indicator 19

Material deprivation is a measure of poverty and its effects (that is, the extent to which people are able to afford basic things like food and heating). [The National Survey for Wales](#) includes a standard set of questions about material deprivation every year.

This report is based on National Survey interviews carried out in **2018-19**. It provides an update of [previous analysis based on the 2014-15 survey](#).

Key findings

Holding other factors constant¹, the factors below were found to be linked to being in household **material deprivation**.

- **Females**, compared with males
- **People aged 45-54**, compared with being younger or older
- Having **no qualifications**
- Having a **long-term limiting condition**
- Having **low life satisfaction**
- Having **low mental well-being**
- Living in **social housing**, compared with private rented or owner occupied
- Having **children living in the household**
- Not having **access to internet** in the household
- Household having no **access to a car**.

Factors included in our analysis and found **not** to be linked to people living in households in material deprivation were: sexual orientation; religion; ethnicity; participation in sporting activities; marital status; and whether the person lives in an urban or rural area. As with all analysis of this type, we are unable to attribute cause and effect or to allow for factors not measured in the survey.

¹ For this analysis, we have controlled for a range of factors so that even if they are related (e.g. general health and age), the link between each factor and being in material deprivation can be explored independently.

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1. Background

[The Well-being of Future Generations \(Wales\) Act 2015](#) focuses on improving the social, economic, environmental, and cultural well-being of Wales. To achieve this, the Act requires public bodies in Wales to think about long-term issues and targets, work better with communities and stakeholders, and to take a more joined-up and cohesive approach to decision-making. To ensure that this vision is achieved, the Act puts in place seven well-being goals² (**Figure 1**).

The Act requires the Welsh Government to set [national indicators](#) measuring achievement against the well-being goals. The [National Survey for Wales](#) measures progress against 15 of the 46 national indicators. The survey involves face-to-face interviews with a random sample of 12,000 people across Wales each year.

This report focuses on [National Indicator 19](#): ‘**Percentage of people living in households in material deprivation**’.

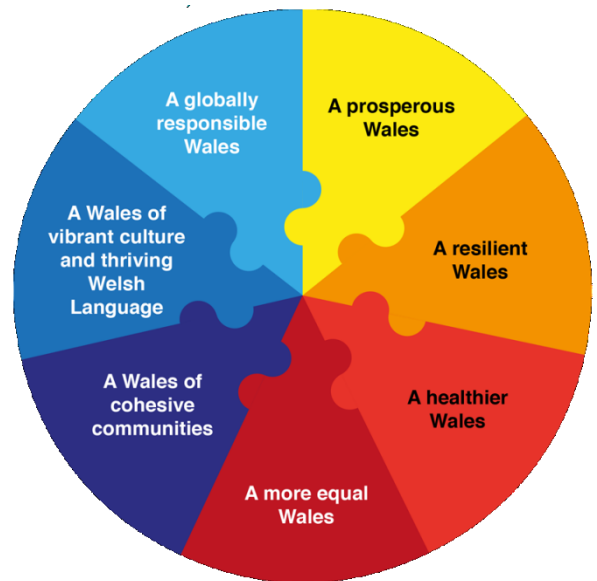


Figure 1. *The Well-being of Future Generations (Wales) Act 2015: seven well-being goals².*

2. Questions used in the National Survey

Material deprivation is a measure which is designed to capture the consequences of long-term poverty on households, rather than short-term financial strain. The National Survey uses a standard approach for measuring material deprivation, the same as that used in the UK-wide [Family Resources Survey](#).

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 focussed on whether they could afford these items either for themselves or the household.

Pensioners were asked 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’. Respondents who could not afford each item were asked why this was, e.g. whether it was because of 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 materially deprived and pensioners with a score of 20 or more were classed as deprived. Further details of the methodology used can be found [here](#).

² Well-being of Future Generations (Wales) Act 2015: The Essentials, which can be viewed [online](#).

The non-pensioner and pensioner measures of deprivation are combined to provide an ‘adult’ deprivation variable (representing individuals or households, depending on context) and it is this combined measure that is used in the report.

Overall, 14% of adults in Wales were classified as being materially deprived.

3. Method of analysis

To get a clear understanding of how particular factors contribute to material deprivation, we used a **statistical technique³ to explore the link⁴ between each factor and people living in households in material deprivation, whilst holding all other factors constant.** Holding other factors constant (also referred to as controlling for other factors) is important because it allows us to look at each predicting factor independently (i.e. ensuring that the effect we are measuring is not influenced by external factors).

For example, we could examine the link between two separate factors (age and children in the household) and people being in material deprivation. We might know that age is linked to people being in material deprivation, however a person’s age could also be linked to whether or not there are children living in the household with them (see **Figure 2**). This can make it difficult to determine whether people being in material deprivation is linked to age or children being in the household. To look at the effect of one factor (e.g. age) on people being in material deprivation, we would need to control for the effects of all other factors. We can then get a much clearer idea of how one single factor links to being in material deprivation, without the influence of other factors.

The complexity of relationships between factors

To understand these results, we cannot always be sure about what factors are *linked to*, and which are *affected by*, people being in material deprivation. For some factors this relationship is clear based on prior knowledge. For instance, being of a certain age might be linked to being in material deprivation; however, we know that being in material deprivation does not change their age. For other factors, however, the relationship is not as obvious. For example, having low mental well-being might cause people to be in material deprivation, or being in material deprivation might cause low mental well-being: the relationship could also work both ways⁵.

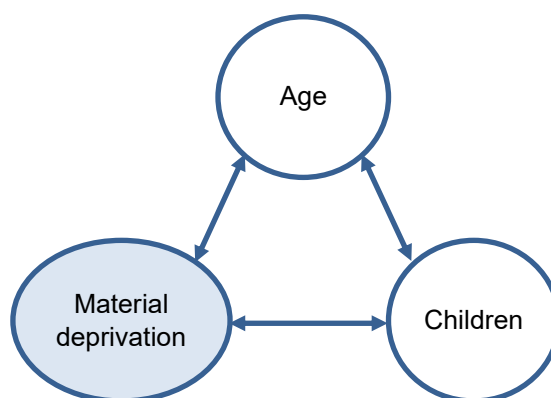


Figure 2. *The importance of holding other factors constant in statistical analysis.*

³ This technique is known as logistic regression. More information about the methods used in this report can be found in the accompanying [regression methodology report and technical report](#).

⁴ While this analysis can tell us about the *likelihood* of relationships between factors, it cannot tell us about causal relationships (e.g. it would be incorrect to say that having a low mental well-being *causes* people to be in material deprivation).

⁵ This relationship can be even more complex, as there could be other factors which we haven’t considered (and are not available from the National Survey) which may be linked to being in material deprivation *and* low mental well-being.

Interpreting the results

All of the factors presented in the charts in this report are statistically significant predictors of living in material deprivation, as tested by our chosen regression model. In this report, we use 'predictive margins' – presented as percentages (%) – to show the probability of a relationship between each factor (whilst holding other factors constant) and the dependent variable (living in material deprivation). The results show within a particular factor (e.g. sex) the likelihood of one 'average' group of people with a shared characteristic (e.g. females) living in material deprivation, compared with another 'average' group of people with a different shared characteristic (e.g. males). Error bars on the charts show the 95% confidence interval of the predictive margins for each group. Overlapping error bars mean that while a factor is a significant predictor of living in material deprivation, it is not entirely clear which group within the factor is the most predictive.

4. Main factors linked to people living in households in material deprivation

Overall, 14% of adults were classified as living in households in material deprivation. Figure 3.1 shows all the individual factors (**whilst holding other factors constant**) which were found to be characteristic of people living in households in material deprivation. Within each factor, the group with the highest probability of living in material deprivation is highlighted in light blue. The following sections provide a more detailed analysis of each of these factors.

Figure 3.1 Main factors linked with people living in households in material deprivation.

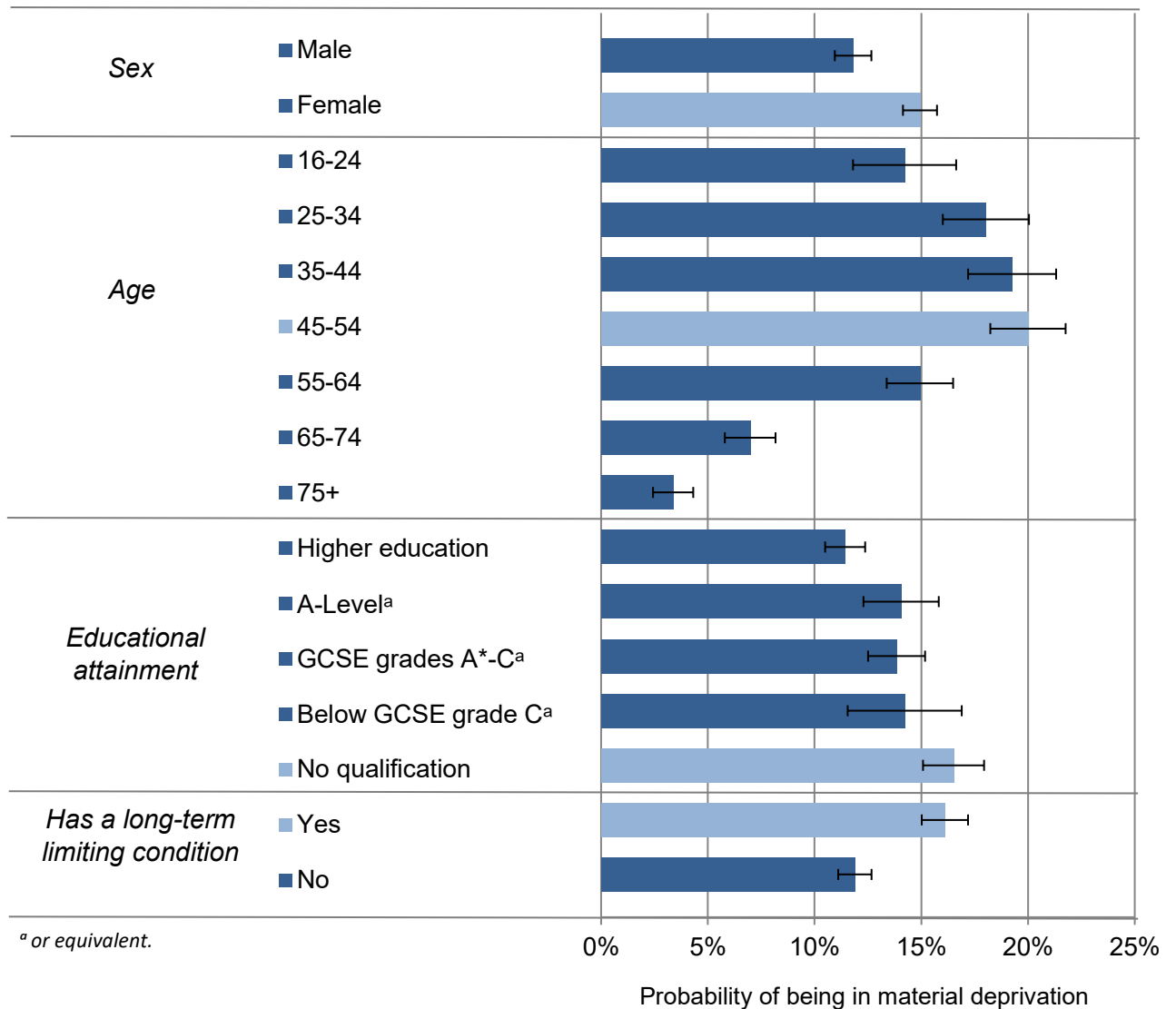
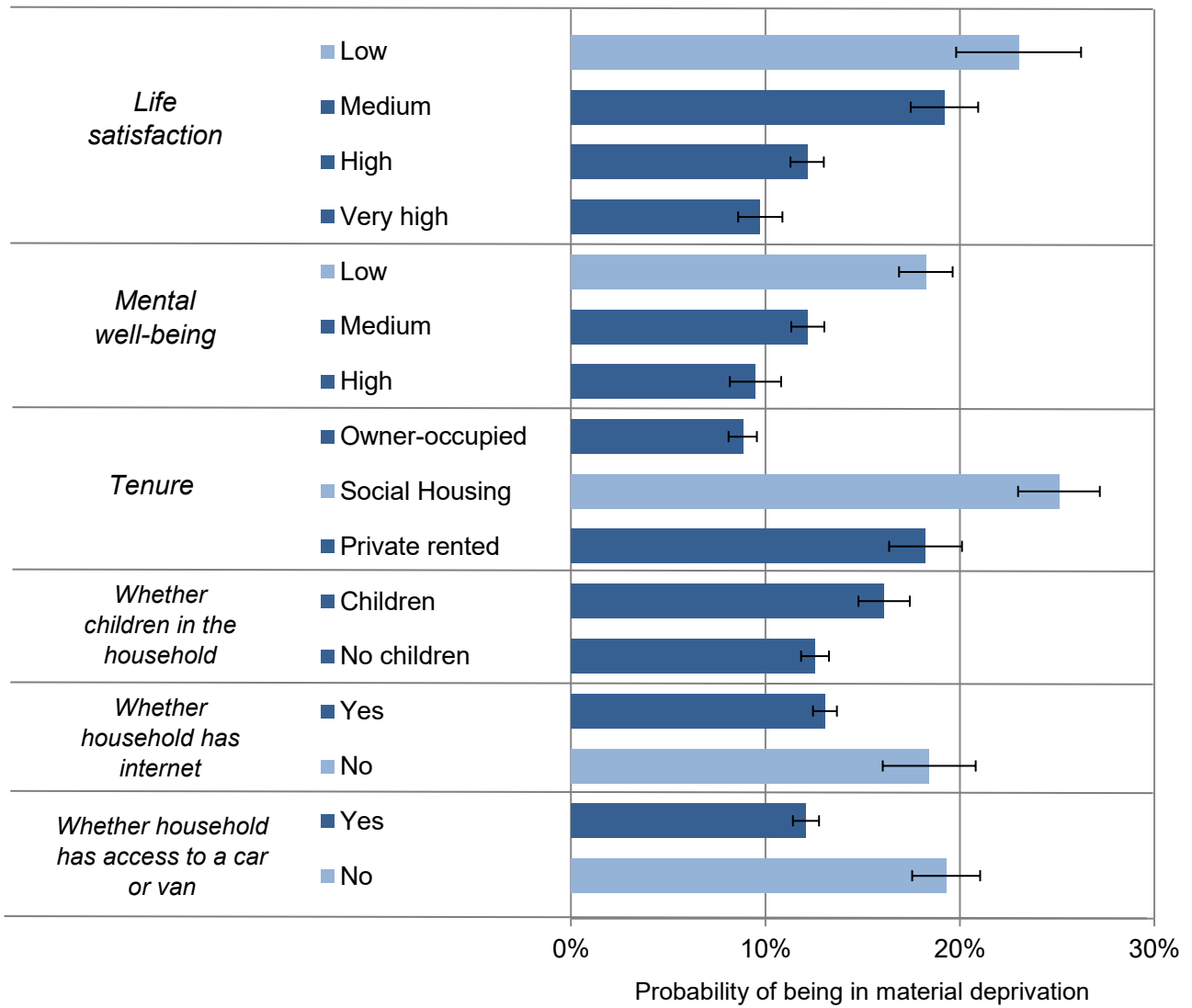


Figure 3.1 (continued) Main factors linked with people living in households in material deprivation.



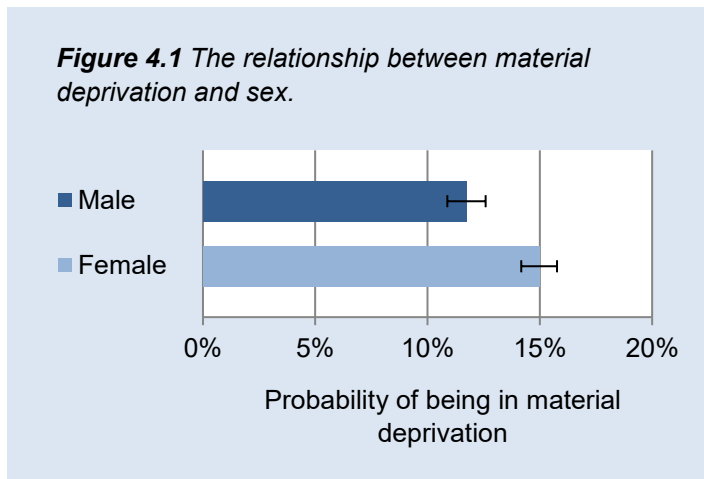
4.1 Analysis

Holding all other factors constant, the following factors and associated themes were found to be linked with living in household material deprivation. Individual factors which share a similar characteristic are grouped into **themes** (e.g. demographic factors). Factors **not** found to be linked to people being in material deprivation are listed in [Section 4.2](#).

4.1.1 Demographic factors

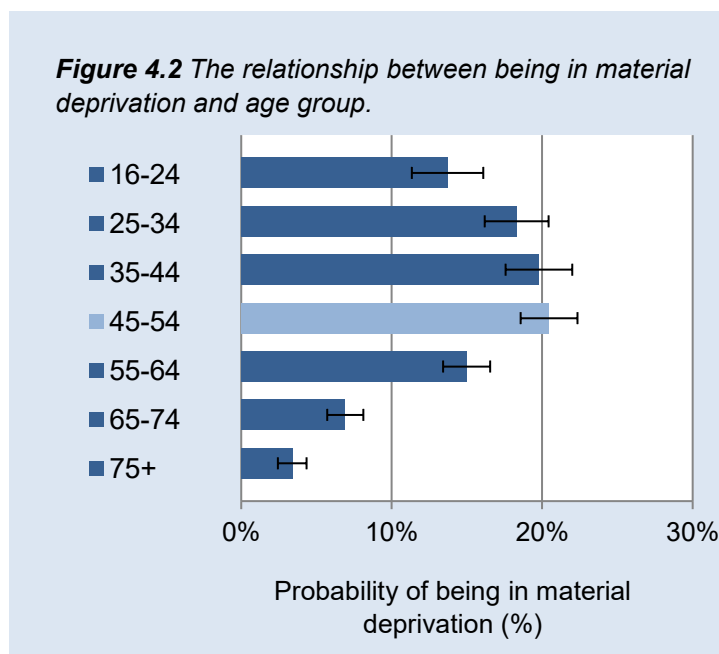
Sex

Females were found to be more likely to be living in material deprivation, compared with males. See [Figure 4.1](#).



Age group

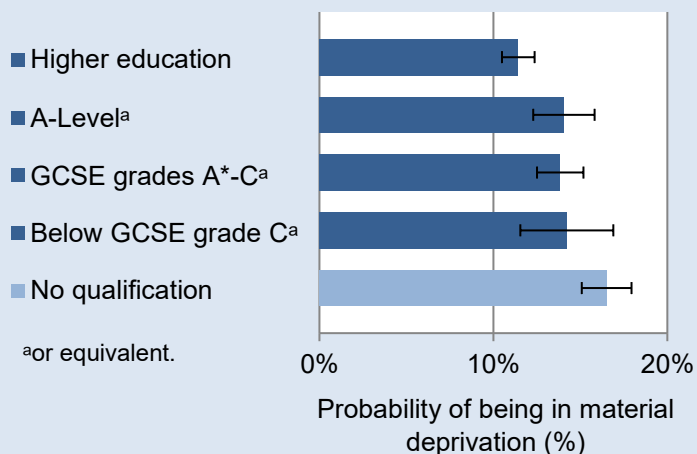
People aged **45-54** were the age group most likely to be living in material deprivation, closely followed by people aged **35-44** and people aged **25-34**. People least likely to be materially deprived were aged 75+. See [Figure 4.2](#).



Educational attainment

Overall, people who had **no qualifications** were more likely to be living in material deprivation than people who had some form of qualification. People who had achieved a higher education qualification were least likely to be materially deprived. See **Figure 4.3**.

Figure 4.3 The relationship between being in material deprivation and educational attainment.

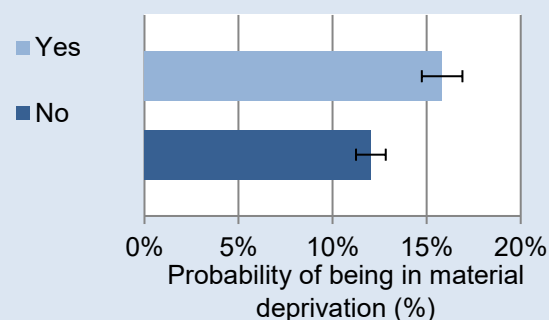


4.1.2 Health factors

Long-standing illness, disability or infirmity

People with a **long-term limiting condition** were more likely to be living in material deprivation, compared with those who did not. See **Figure 4.4**.

Figure 4.4 The relationship between being in material deprivation and having a long-term limiting condition.

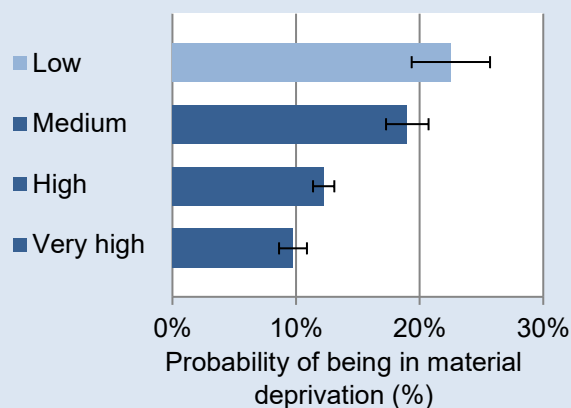


4.1.3 Well-being factors

Overall life satisfaction

Overall, people with **low or medium life satisfaction** were more likely to be materially deprived compared with those with high or very high life satisfaction. People with low life satisfaction had the highest probability of living in material deprivation, and those with very high life satisfaction had the lowest probability of being materially deprived. See **Figure 4.5**.

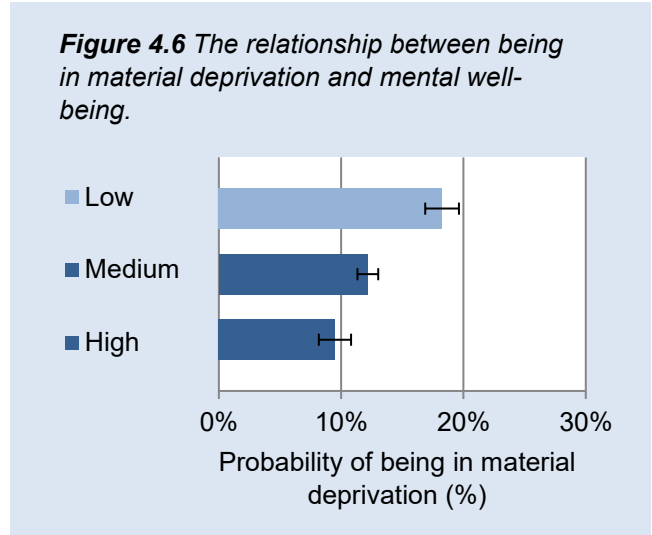
Figure 4.5 The relationship between being in material deprivation and overall life satisfaction.



Mental well-being

The National Survey for Wales includes a measure of mental well-being⁶.

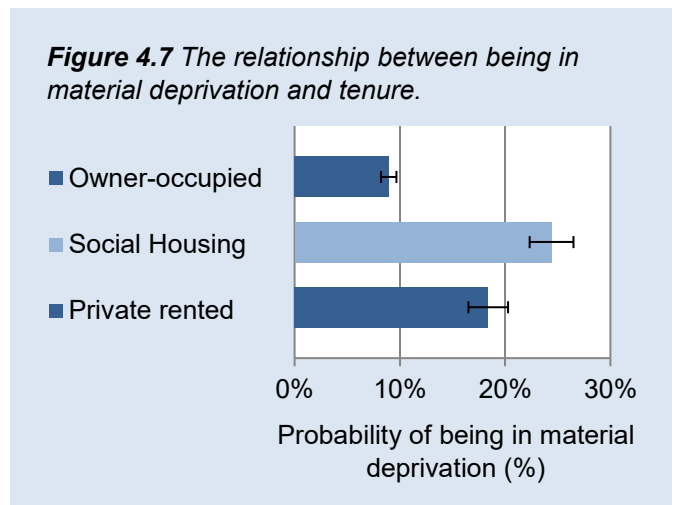
Using this measure, people with **low mental well-being** were more likely to be living in material deprivation, compared with those who had medium or high well-being. People with high mental well-being were least likely to be materially deprived. **See Figure 4.6.**



4.1.4 Household characteristics

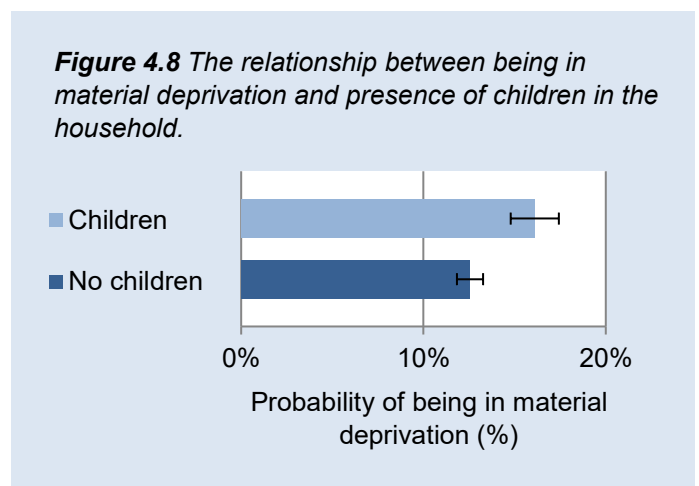
Tenure

Overall, **people who lived in social housing** were more likely to be living in material deprivation, compared with people who owned their house or privately rented. The group least likely to be in materially deprived were owner-occupiers. **See Figure 4.7.**



Presence of children in the household

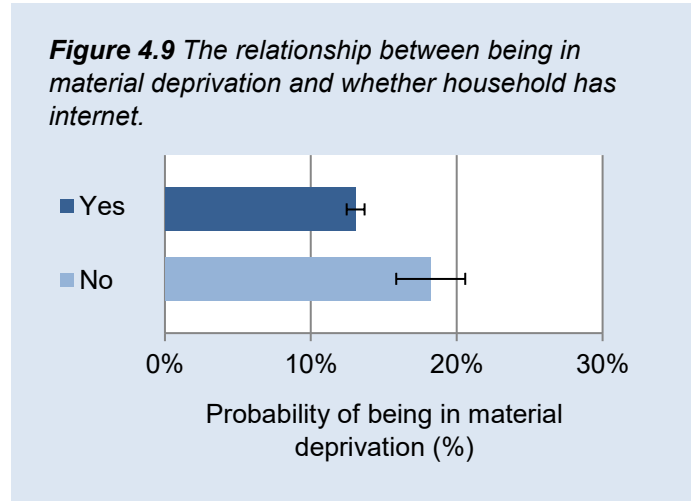
People who have one or more **children living in their household** were more likely to be living in material deprivation, compared with people who had no children living in their household. **See Figure 4.8.**



⁶ The Warwick-Edinburgh Mental Wellbeing scale was developed to enable the monitoring of mental wellbeing in the general population and the evaluation of projects, programmes and policies which aim to improve mental wellbeing. For more information, [follow this link](#).

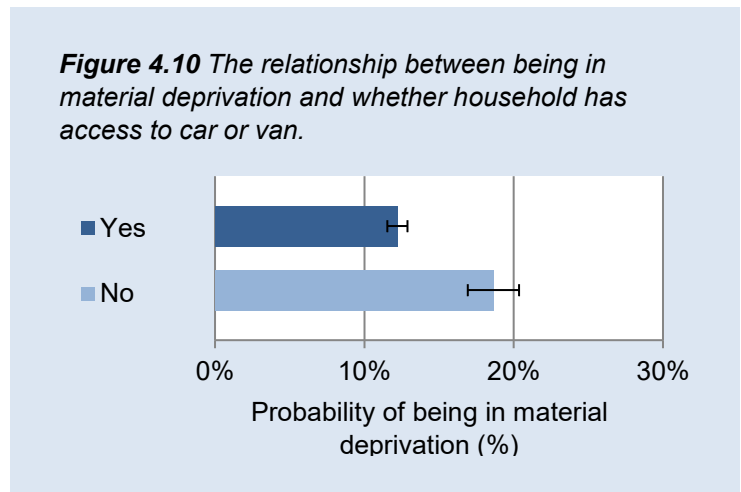
Whether household has internet

People who **did not have access to internet in their household** were more likely to be materially deprived, compared with those who did have access. See [Figure 4.9](#).



Whether household has access to a car or van

People who lived in households which **did not have access to a car or van** were more likely to be living in material deprivation, compared with those who had access to personal transport ([Figure 4.10](#)).



4.2 Factors not linked to people living in households in material deprivation

In this analysis, other factors were included in our regression model, but we did **not** find a link between the following factors and the probability of living in household material deprivation⁷:

- Sexual orientation
- Religion
- Ethnicity
- Participation in sporting activities
- Marital status
- Whether lives in an urban or rural area.

⁷ Local authority area was also considered in this report, however was not compatible with the techniques and were removed from later stages of analysis.

5. Summary and recommendations for further research

In summary, we have provided an analysis of individual factors (and overall themes) linked to **Future Generations National Indicator 19: 'Percentage of people living in households in material deprivation'**.

Overall, four themes⁸ emerged from our analysis of factors linked to the probability of living in household material deprivation:

1. Demographic factors
2. General health
3. Well-being factors
4. Household characteristics.

The relationship between factors and material deprivation could be more complex than suggested in this analysis, and the results could **vary** between and within different areas. To help make sense of this complex relationship, further research could include more small-scale investigations involving qualitative⁹ or mixed-methods¹⁰ approaches.

⁸ In total, we looked at factors linked to **7 National Indicators for Well-being** as part of a project using data from the 2018-19 National Survey for Wales. As some factors were found to be linked to more than one National Indicator, we have provided a separate document which highlights the similarities and differences between the individual factors, and overall themes, found to be linked to all National Indicators. This document is available online: Hafferty, C. (2020). *Key themes linked to a selection of National Indicators for Well-being in Wales*. Cardiff: Welsh Government, GSR Report. Available at: <https://gov.wales/national-survey-wales-april-2018-march-2019>.

⁹ **Qualitative research** is often used to understand people's underlying reasons, opinions, and motivations; to uncover trends in people's thoughts and opinions to provide a better understanding of a particular issue. Qualitative data collection methods are often small-scale and collect non-numeric data by using techniques such as interviews and focus groups. On the other hand, *quantitative* research seeks to understand a problem by collecting numerical data which can be used in statistical analysis, often to produce generalised results for a large sample of a population (e.g. attitudes, behaviours, and opinions). For example, the National Survey for Wales predominantly collects and analyses information in this way.

¹⁰ **'Mixed-methods'** is an approach to research which involves the collection and analysis of *both* qualitative and quantitative data within the same study. As policy makers, practitioners, and others in applied areas strive to produce well-informed research based on multiple forms of evidence, such as the multi-faceted well-being of communities and future generations, mixed-methods research can be an important and sophisticated way to explore these complex social situations in increasingly **diverse ways**.

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Views expressed in this report are those of the researchers and not necessarily those of the Welsh Government.

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Mae'r ddogfen yma hefyd ar gael yn Gymraeg.

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