
#  Welsh Government: Key predictors for Future Generations indicators using the National Survey for Wales

## Background

The [National Survey for Wales](http://www.gov.wales/nationalsurvey) is the main social survey commissioned by the Welsh Government and its partners across Wales. It gathers information about a wide range of topics, from views on education to health and the NHS, wellbeing, and sports and council services.

The survey involves face-to-face 45 minute interviews with a random sample of over 11,000 people each year. Fieldwork is carried out by ONS and runs continuously. It is designed to capture information that is needed to feed into policy decisions, so that the survey results make a difference to life in Wales.

Over the past two years, the team responsible for running the National Survey has hosted a number of PhD internships. The interns have produced a range of outputs, for example:

* Short “key predictors” research reports on [material deprivation](https://gov.wales/docs/caecd/research/2017/170301-national-survey-which-households-most-likely-material-deprivation-en.pdf), [job satisfaction](https://gov.wales/docs/caecd/research/2017/170301-national-survey-who-most-likely-satisfied-with-job-en.pdf), [influencing local decisions](https://gov.wales/docs/caecd/research/2017/170301-national-survey-who-most-likely-influence-decisions-affecting-local-area-en.pdf), [feeling of safety](https://gov.wales/docs/caecd/research/2017/170301-national-survey-who-most-likely-feel-safe-local-area-en.pdf), [sense of community](https://gov.wales/docs/caecd/research/2017/170301-national-survey-who-most-likely-strong-sense-community-en.pdf), and [Welsh speaking](https://gov.wales/docs/caecd/research/2017/170301-national-survey-who-more-likely-speak-welsh-en.pdf).
* Short statistical bulletins on [loneliness](https://gov.wales/docs/statistics/2018/180213-national-survey-2016-17-loneliness-en.pdf), and [volunteering and caring](https://gov.wales/docs/statistics/2017/171220-national-survey-2016-17-volunteering-caring-en.pdf).
* In-depth report on [poverty](https://gov.wales/docs/statistics/2018/180425-national-survey-2016-17-poverty-en.pdf).

The internship will provide an opportunity to gain an insight into the work of the Welsh Government, to use your research and statistical skills in an applied setting, and to further develop skills such as writing for a non-technical audience.

More information on the National Survey for Wales is available [here](http://www.gov.wales/nationalsurvey).

## Project brief

The [Well-being of Future Generations (Wales) Act](http://gov.wales/topics/people-and-communities/people/future-generations-act/?lang=en) is one of the key policies of the Welsh Government, designed to put wellbeing at the centre of policy decision-making in Wales. Progress against the goals of the Act is measured by 46 national indicators.

The National Survey for Wales collects information for 15 of the 46 national indicators:

3 Percentage of adults who have fewer than two healthy lifestyle behaviours.

19 Percentage of people living in households in material deprivation.

20 Percentage of people who are satisfied with their jobs.

23 Percentage who feel able to influence decisions affecting their local area.

24 Percentage of people satisfied with their ability to get to/ access the facilities and services they need

25 Percentage feeling safe at home, walking in the local area, and when travelling.

26 Percentage satisfied with local area as a place to live.

27 Percentage agreeing that they belong to the area; that people from different background get on well together; and that people treat each other with respect.

28 Percentage who volunteer.

29 Mean mental well-being score.

30 Percentage who are lonely.

35 Percentage attending or participating in arts, culture or heritage activities at least 3 times a year.

36 Percentage who speak Welsh daily and can speak more than just a few words of Welsh.

37 Percentage who speak Welsh.

38 Percentage participating in sporting activities three or more times a week.

The aim of this project is to analyse the National Survey for Wales data to identify the areas where policy and service delivery could have a key role to play in influencing the national indicators.

The proposed project involves carrying out regression analysis and potentially latent class analysis to identify the key drivers (such as demographics, income, qualifications, wellbeing, experiences and views) of outcomes of interest.

The outputs will be a series of short reports. Details of outputs by previous PhD interns can be found in the Background section above.

The researcher will:

1. Analyse the relationships between a selection of the national indicators and other survey responses using descriptive statistics and correlation analysis. There is some flexibility over exactly which national indicators will be investigated, depending on the successful applicant’s background and interests.
2. Investigate the best way of grouping and coding variables for analysis (e.g. deprivation scores and qualifications)
3. Carry out logistic regression analyses to identify the key predictors for the indicators identified above when other factors are controlled for.
4. Optional element: carry out latent class analysis. An example of previous LCA using National Survey data can be found [here](https://gov.wales/docs/caecd/research/2014/140430-national-survey-wellbeing-wales-2012-13-en.pdf); any LCA carried out as part of the internship would necessarily be less in-depth.
5. Draft a short report on the results of the regression analyses.
6. Give a presentation on the results of the project.
7. Assist the team with regression analysis on other topics, time permitting.

The internship would last for a period of around 4 months (exact length can be negotiated).

**The anticipated project outcomes**

* A set of short reports (one for each selected indicator) summarising the approach taken and the results. We are keen that the findings are presented in a simple and engaging way that is accessible to a non-technical audience, to help ensure that they are used in policy decision-making.
* Annotated syntax for carrying out the analysis, including all data preparation work (e.g. recoding of variables).
* A presentation to analytical colleagues on the findings of the analyses.

**Student specification**

## The student must have:

* Strong data analysis skills including of regression analysis and experience of working with quantitative survey data.
* Experience in handling/manipulating data, in Stata.
* The ability to produce cross-tabulations, well designed charts and to produce concise, well written documents presenting technical material in an accessible format.

Desirable but not essential:

* Ability to carry out latent class analysis in Stata 14 or R.

## Start date of internship

## January 2019 (exact start date negotiable)

## Security

The Welsh Government’s vetting procedures (which apply to temporary as well as permanent staff) involve the completion of a Baseline Personnel Security Standard (BPSS) application form and a Security Questionnaire for the purpose of security vetting.

This process requires the applicant to produce in person three original forms of identification documents, one of which should be photographic (passport, new driving license), one document should showing their current address, plus one of: a utility bill, birth certificate, P45 or P60.

## Queries

Any queries relating to the post or application process should be directed to Chris McGowan (chris.mcgowan@gov.wales / 03000 251 067).