

Statistical Annex: Volunteering in Health and Social Care¹

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The British Social Attitudes Survey included two questions about volunteering in health and social care in 2015. The questions asked were specifically:

- Have you ever volunteered for health or care services in your local area? This could include things like helping out in a local care home or hospice, welcoming and guiding people around your local hospital or volunteering on a helpline for people who need emotional support?
- Would you ever consider volunteering for health or care services in your local area in the future?

These questions only appeared on one of the four questionnaires (Version B) that were completed by respondents in that year. Therefore, information was obtained for around a quarter of sample - 1,062 out of the 4,328 people taking part in the survey. To some extent, this limits the types of analysis that it is possible to undertake but for the purposes of this example, statistical techniques may be applied to the data, especially to demonstrate the potential use of such surveys.

The responses to each question are reported in Tables 1 and 2. These reveal relatively small variations across the three countries that make up Great Britain. Firstly, Table 1 indicates that the percentage of respondents who were volunteering in health and social care in 2015 was highest in Wales but people in Scotland were more likely to have previously volunteered. The highest percentage of people who had never volunteered in the sector could be found in England.

Table 1: Percentage of Residents Who Have Volunteered in Health and Social Care

	England	Scotland	Wales	Britain
Yes, I currently volunteer	3.5	1.7	4.6	3.4
Yes, I have done so in the past	8.8	14.8	12.5	9.4
No, I have not	87.8	83.4	83.0	87.2
Unweighted number of observations	924	84	53	1,061

Note: The percentages reported in the table have been weighted using the sample weights that accompany the data. One respondent (from England) refused to give an answer. This observation has been excluded.

¹ We gratefully acknowledge the UK Data Service for providing access to the British Social Attitudes Survey.

The percentage of respondents who would not consider volunteering was lowest in Wales, as shown in Table 2. However, Wales had the highest percentage of residents reporting that were unable to volunteer due to illness. As a result, the percentage of Welsh residents who indicated that they would consider volunteering in health and social care in the future was slightly above the average for Britain.

Table 2: Percentage of Residents Who Would Ever Consider Volunteering in Health and Social Care

	England	Scotland	Wales	Britain
Yes, I would consider volunteering	50.2	55.7	51.7	50.8
No, I would not consider volunteering	35.3	30.4	27.6	34.5
Unable to due to illness	14.5	13.9	20.6	14.7
Unweighted number of observations	916	83	53	1,052

Note: The percentages reported in the table have been weighted using the sample weights that accompany the data. Nine respondents from England and one from Scotland answered 'Don't know'. These observations have been excluded.

From the responses to these questions, four dependent variables have been constructed in order to undertake regression analysis. These are:

- *CurrVol*: Takes a value of 1 if the respondent currently volunteers in health and social care, and otherwise zero (Unweighted Mean = 0.035; N=1054)²
- *PastVol*: Takes a value of 1 if the respondent has volunteered in health and social care in the past, and otherwise zero (Unweighted Mean = 0.107; N=1054)
- *EverVol*: Takes a value of 1 if the respondent has ever volunteered in health and social care, and otherwise zero (Unweighted Mean = 0.142; N=1054)
- *ConsiderVol*: Takes a value of 1 if the respondent would ever consider volunteering in health and social care in the past, and otherwise zero (Unweighted Mean = 0.581; N=838).³

Table 3 contains four sets of results from the logit regressions that have been estimated on each of the dependent variables defined above. This provides us with a statistical test for the question: what individual characteristics affect the likelihood to volunteer (either now, in the past or ever) or to consider volunteering? The logit regressions enable us to control for all other factors when considering the importance of each individual characteristic, including how these characteristics vary across countries.

The first point to note from the table is that there are no statistically significant differences between the three countries (the estimates for Scotland and Wales are reported relative to the base category of England). This indicates that levels and the consideration of volunteering

² Means and number of observations based on the four regression models that have been estimated. The number of observations is slightly lower than in Tables 1 and 2 because a small number of respondents did not provide positive answers to all of the questions used to construct the explanatory variables.

³ This model contains fewer observations because respondents who reported that they were unable to volunteer because of ill-health have been excluded from this dependent variable.

in health and social care are fairly similar in Wales and England (and Scotland), even after controlling for a range of socio-demographic characteristics including age and education. However, Table 3 also reveals that these variables do have a significant influence on volunteering in the sector. In terms of age, older people (aged 65 and over) are significantly more likely than people from the younger age groups to have volunteered in health and social care in 2015, whereas this result reverses with regards to the consideration of volunteering in the sector. More highly educated people have a higher probability of volunteering in the sector, both in 2015 and previously to that, as well as being significantly more likely to consider volunteering. These effects are generally strongest for graduates (relative to people with no or other qualifications), although the patterns are less clear in the first model – where only a small percentage of the sample currently volunteers. The female dummy is significantly different from zero in each of the models, which indicates that women are more likely to be or have been volunteers in the sector and to have considered doing so. The controls for marital status, children, rural residence, ethnicity and country of birth are not statistically significant in any of the models indicating that these factors are not influential in the decision to volunteer in health and social care. A few of the religious effects do suggest some levels of importance but these are at fairly low levels of significance.

Table 3: Estimates from Logit Regression Models

	<i>CurrVol</i>		<i>PastVol</i>		<i>EverVol</i>		<i>ConsiderVol</i>	
	Coef.	p-value	Coef.	p-value	Coef.	p-value	Coef.	p-value
Scotland	-0.492	0.508	0.447	0.180	0.277	0.385	0.354	0.214
Wales	-0.107	0.892	0.319	0.460	0.218	0.570	0.422	0.252
Female	1.033	0.011	0.711	0.001	0.846	0.000	0.368	0.018
Age 18-29	-1.465	0.022	0.119	0.764	-0.378	0.264	1.323	0.000
Age 30-44	-1.319	0.007	0.285	0.423	-0.211	0.485	1.488	0.000
Age 45-64	-1.172	0.008	0.344	0.270	-0.124	0.635	1.084	0.000
Married	0.276	0.406	-0.636	0.007	-0.415	0.035	-0.382	0.018
Children in house	-0.066	0.863	-0.026	0.916	-0.083	0.698	-0.300	0.097
Degree	1.347	0.043	0.825	0.011	1.036	0.001	0.854	0.000
Higher Ed.	1.758	0.011	0.544	0.146	0.911	0.007	0.857	0.004
A level or equiv.	1.171	0.088	0.219	0.558	0.499	0.137	0.771	0.002
O level or equiv.	1.538	0.020	-0.420	0.329	0.185	0.602	0.493	0.049
CSE or equivalent	2.016	0.003	0.078	0.866	0.705	0.073	0.545	0.093
Lives in rural area	-0.452	0.334	0.041	0.879	-0.100	0.678	0.205	0.280
Ethnic Minority	0.198	0.791	0.573	0.093	0.525	0.106	0.607	0.044
Born in the UK	-0.524	0.436	0.601	0.112	0.306	0.372	-0.166	0.541
C. of E./Anglican	-0.169	0.718	-0.784	0.031	-0.630	0.027	0.196	0.376
Catholic	-0.138	0.853	-0.925	0.066	-0.754	0.073	-0.002	0.995
Other Religion	0.188	0.678	0.036	0.887	0.064	0.778	0.212	0.316
Pseudo R-Squared	0.091		0.079		0.064		0.093	
N	1054		1054		1054		838	

Note: See Table 4 for details of reference categories and means of the explanatory variables. Estimates are based on unweighted data and p-values have been calculated using robust standard errors.

The mean values of the explanatory variables as well as the reference categories that have been used in the first and final regression models are presented in Table 4. For example, it can be seen that people living in Wales account for a slightly smaller percentage of the sample used in the *Consider Volunteering* regression because individuals who indicated that they were unable to volunteer due to illness have been removed from the regression analysis.

Table 4: Means of Explanatory Variables

Dependent Variable	CurrVol	ConsiderVol
England*	0.871	0.872
Scotland	0.080	0.082
Wales	0.049	0.045
Male*	0.439	0.455
Female	0.561	0.545
Age 18-29	0.128	0.152
Age 30-44	0.241	0.274
Age 45-64	0.342	0.363
Age 65 and over*	0.289	0.211
Unmarried*	0.480	0.461
Married	0.520	0.539
No Children in Household*	0.676	0.654
Children in Household	0.324	0.346
Degree	0.220	0.247
Higher Education below degree	0.102	0.106
A level or equivalent	0.181	0.203
O level or equivalent	0.174	0.175
CSE or equivalent	0.080	0.076
No or Other Qualifications*	0.243	0.192
Lives in an urban area*	0.788	0.791
Lives in a rural area	0.212	0.209
White*	0.897	0.889
Ethnic Minority	0.103	0.111
Born outside the UK*	0.119	0.124
Born in the UK	0.881	0.876
Church of England/Anglican	0.202	0.187
Catholic	0.084	0.078
Other Religion	0.234	0.227
No Religion*	0.479	0.508
Number of Observations	1,054	838

Note: * indicates the base category in the logit regressions.

The British Social Attitudes Survey also contains a number of questions on views about funding in the NHS in 2015. Table 5 contains the answers to a question that asked about

whether respondents thought that the NHS faces a funding problem. The overwhelming majority of the sample thought that it did, with 35% indicating that it faced a severe funding problem and a further 46% a major funding problem. Responses were relatively similar across different socio-demographic categories, including country of residence, as shown in Table 5. The only real variation was observed in relation to age, where 18-39 year olds were less likely to think that the NHS was experiencing a funding problem. In addition to this age group typically using the NHS to a lesser extent than others, it may also reflect the influence of other factors such as having a higher percentage of people who were born outside of the UK.

Table 5: Views on Whether NHS Faces a Funding Problem

	Country of Residence			Age Group			Great Britain
	England	Scotland	Wales	18-39	40-64	65 & over	
% no funding problem	3.4	6.0	5.7	4.6	3.1	3.6	3.7
% minor funding problem	12.8	7.1	7.6	15.3	12.8	10.0	12.1
% major funding problem	46.3	50.0	43.4	53.1	42.9	48.2	46.4
% severe funding problem	34.5	34.5	43.4	21.5	38.7	36.6	34.9
% Don't Know	3.1	2.4	0.0	5.6	2.5	1.6	2.9
Chi-Squared (8)	8.235			31.064			
p-value	0.411			0.000			
Number of observations	925	84	53	294	459	306	1,062

Note: The percentages reported in the table have been weighted using the sample weights that accompany the data. Three respondents did not provide their age.