Are rural residents happier?

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There is a growing interest in supplementing economic, social and environmental measures of how economies are performing with measures of human wellbeing. Various measures of wellbeing exist, some of them based on physical, economic or social indicators (objective measures of wellbeing), others on people's own perception and assessment of their lives under given circumstances (subjective or personal measures of wellbeing).

Rural residents may face structural disadvantages in terms of limited labour market opportunities, limited availability and/or access to health services, training and education. However, they are often said to benefit from supportive communities and positive environmental externalities. Thus their overall wellbeing compared to non-rural residents is unclear. Further, it is possible that rural residents inherently value things differently and thus may have different levels of subjective wellbeing.



This research explores whether there is evidence of higher levels of subjective wellbeing in rural areas of Scotland after controlling for individual characteristics of residents and by distinguishing between residents in accessible and remote rural parts of the country. Two different measures of subjective wellbeing are considered, one focusing on life satisfaction, the other quality of life.

Key Points

- There is statistically significant evidence of higher life satisfaction among residents of remote rural areas of Scotland compared to those living in non-rural areas of Scotland
- There is no evidence of differences in life satisfaction of residents from accessible rural areas compared to those living in non-rural areas of Scotland.
- The quality of life measure of subjective wellbeing was not found to vary across rural-urban space.
- Other factors significantly affect both measures of subjective wellbeing including age (with wellbeing initially decreasing with age, then increasing), being married or cohabiting, having excellent health, talking to neighbours and playing sport (all positively related to wellbeing) and being in a worse financial situation than last year (which has a negative affect). Relative income level was not significant after having controlled for other factors.
- The analysis provides a benchmark of subjective wellbeing at the individual level. Future analysis using the same source of data could usefully explore how changes in policy affect quantitative measures of subjective wellbeing in Scotland over time and across rural-urban space.

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What are the implications for policy?

- Measures of subjective wellbeing provide a useful supplement to other measures of objective wellbeing and can be used to track the impact of new policies.
- Policy makers should consider more than one measure of subjective wellbeing in order to capture the different dimensions of how citizens perceive and assess their lives.
- Differences in life satisfaction across remote rural areas as compared to accessible and non-rural areas of Scotland suggest a need to track spatial differences over time (as where people live does influence their perceived level of wellbeing).
- The findings have implications for spatial planning although more research is required to understand the factors which influence perceptions of both quality of life and life satisfaction and whether rural residents value things differently.

What is wellbeing?

ALL WAY

Human wellbeing is how well the needs of people in a society are met by various aspects of life (physical, economic, social, environmental, emotional, religious), and the extent to which people are satisfied with what they have and the way in which society operates (Jowell and Eva, 2009).

Understanding and measuring wellbeing has grown in importance in both academic and political arenas over the last decade. A distinction is often made between objective and subjective wellbeing. The former focuses on levels of provision of human needs such as housing, health, education, income and employment and is measured using physical, economic or social indicators. In contrast, subjective (or personal) wellbeing depends on people's own perception and assessment of their lives under given circumstances. It is measured on the basis of the responses of individuals to questions regarding their feelings and satisfaction with various aspects of their life.

Why should we be interested in subjective wellbeing?

Some argue that countries with a high level of subjective wellbeing are likely to be at an advantage as happier people work harder, produce more, are healthier and are more self-reliant (Cummins et al., 2009). It is therefore in a government's interest to monitor and, if possible, improve subjective wellbeing (Stiglitz et al., 2009). Others argue that the increased focus on wellbeing may perpetuate the status quo and that subjective wellbeing in particular should not be a focus for public policy (Dolan and White, 2007).

While there is some debate about whether it is government's role to measure and influence subjective wellbeing, subjective wellbeing measures are generally viewed as a useful supplement to other economic, social and environmental measures and can help policy makers focus on what matters to people (ONS, 2014).

Does where you live matter?

Previous studies have found some evidence from other countries or case study areas that wellbeing varies spatially, with rural residents reporting a high level of subjective wellbeing despite the structural disadvantages associated with rural economies (including limited labour market opportunities, limited availability and/or access to health services, training and education). This is attributed to either the non-material characteristics of rural areas which positively affect wellbeing, such as supportive communities and positive environmental externalities, and/or to rural residents inherently valuing things differently.

There is a lack of evidence on a) the importance of residence on difference measures of subjective wellbeing and b) whether the type of rural area individuals live in matters. These two matters are the focus of this research.

What did we do?

Descriptive analysis and statistical models were used to look at what influences wellbeing, and to see if there are significant differences in wellbeing levels across remote rural, accessible rural and non-rural parts of Scotland. Data were drawn from the 2008/9 wave of the Scottish component of the British Household Panel Survey (BHPS), plus an extension sample of 1,500 households in Scotland. The total number of individuals analysed was 2,473.

Two measures of subjective wellbeing are examined. Following previous studies, the first is based on responses to a set of 12 questions (see Table 1 below). This is labelled the quality of life measure. The second is a measure of life satisfaction based on responses to the question "How dissatisfied or satisfied are you with your life overall", with values running from 1 to 7, with 1 being not satisfied at all, and 7 being completely satisfied.

Table 1: Questions from which the quality of life measure of subjective wellbeing was derived

| Question Text: Have you recently |
|---|
| been able to concentrate on whatever you are doing? |
| lost much sleep over worrying? |
| felt that you were playing a useful part in things? |
| felt capable of making decisions about things? |
| felt constantly under strain? |
| felt you couldn't overcome your difficulties? |
| been able to enjoy your normal day-to-day activities? |
| been able to face up to problems? |
| been feeling unhappy or depressed? |
| been losing confidence in yourself? |
| been thinking of yourself as a worthless person? |
| been feeling reasonably happy, all things considered? |
| |

The definition of rural employed was the Scottish Government 3-fold Urban Rural Classification (see Figure 1).

The choice of explanatory variables employed in the analysis was informed by the literature and included various characteristics such as age, marital status, health and social activities. Table 2 shows the mean level of the explanatory variables included in the analysis by place of residence.



Figure 1: Definition of remote rural, accessible rural and non-rural areas used in the analysis

Table 2: Average values of explanatory variables

| Rem | note Accessibl Non- |
|--|---|
| Variable rur | ral e rural rural |
| Age 55.99 | 91 ^{ar,nr} 49.076 ^{rr} 47.371 ^{rr} |
| Male 0.4 | 0.437 0.474 |
| Income variables | |
| bottom quartile 0.1 | .95 0.226 0.255 |
| quartile 2 0.2 | 0.246 0.244 |
| quartile 3 0.2 | 0.273 0.245 |
| top quartile 0.2 | 0.255 0.255 |
| Education variables | |
| No qualifications 0.1 | .61 0.154 0.175 |
| O-levels and equivalent 0.2 | 0.184 0.213 |
| A-levels and equivalent 0.1 nursing and other | .03 0.158 0.141 |
| higher qualifications 0.3 | 0.307 0.285 |
| first degree and higher 0.1 | .41 0.197 0.186 |
| Unemployed 0.0 | 000 0.009 0.032 |
| Retired 0.2 | 0.271 0.232 |
| Married, cohabiting, civil partnership 0.6 | 51 0.673 ^{nr} 0.589 ^{ar} |
| Divorced, separated 0.0 | 0.073 0.089 |
| Widowed 0.1 | 0.097 0.081 |
| No. of children under 16 0.4 | 0.525 0.507 |
| Health last 12 months excellent/good 0.65 | 51 ^{ar} 0.784 ^{rr,nr} 0.703 ^{ar} |
| Financial position worse than last year 0.3 | 0.351 0.294 |
| Meet friends & family once/twice a week 0.80 | 02 ^{nr} 0.814 ^{nr} 0.880 ^{rr,ar} |
| Talk to neighbours once/twice a week 0.7 | 777 0.778 0.759 |
| Attend local group once a month 0.2 | .41 0.215 0.192 |
| Play sport/exercise once a month 0.18 | 83 ^{nr} 0.112 0.096 ^{rr} |
| Religious service/meetings once a month 0.2 | 245 0.172 0.204 |

nr: significantly different from non-rural at 5%; ar: significantly different from accessible rural at 5%; rr: significantly different from remote rural at 5%

An ordered logit model was used to look at what influences quality of life and life satisfaction. Such models estimate the relationship between an ordinal dependent variable (in this case, both measures of subjective wellbeing which have a rank order) and a group of independent variables (listed in Table 2).

What did we find?

The results are summarised in Table 3. Remote rural and accessible rural identifiers were included in both versions of the model, with the omitted variable being non-rural. This means the coefficients on these variables reflect the difference in the wellbeing of residents from these two types of areas compared to residents from non-rural areas in Scotland, after having controlled for the other characteristics which theory suggests affect subjective wellbeing.

From Table 3, living in a remote rural area is associated with higher levels of life satisfaction than living in non-rural areas, and this result is statistically significant. In other words, the results indicate that residents in remote rural areas systematically report higher levels of life satisfaction than those based in non-rural parts of Scotland, after taking into account differences in other factors. The accessible rural variable is not statistically significant in either model suggesting no difference in life satisfaction of residents in such areas compared to those living in urban Scotland. In contrast, in the quality of life model, the coefficients on both types of rural are not significant, reflecting the fact that the two measures are capturing different dimensions of subjective wellbeing.

The other results in the table are consistent with expectations. There is a U-shaped relationship between age and wellbeing, initially decreasing with age then increasing. Having excellent/good health over the last 12 months and playing sport at least once a month are linked to higher levels of both measures of subjective wellbeing while being in a worse financial situation than last year is associated with a lower level of subjective wellbeing regardless of measure. For both measures the income variables (shown in Table 2) were not statistically significant. Table 3: Results from the two statistical models of subjective wellbeing: (selected variables only)

| | Quality of Life | | | Life satisfaction | | |
|---------------------------------|-----------------|------|-----|-------------------|------|------|
| | | | | | | |
| | Coeff. | SE | Sig | Coeff. | SE | Sig. |
| Remote rural | 0.294 | 0.18 | | 0.675 | 0.20 | * |
| Accessible rural | 0.083 | 0.11 | | 0.178 | 0.13 | |
| Age | -0.055 | 0.02 | * | -0.074 | 0.02 | * |
| Age squared | 0.001 | 0.00 | * | 0.001 | 0.00 | * |
| Male | 0.449 | 0.09 | * | 0.068 | 0.09 | |
| Retired | -0.003 | 0.18 | | 0.444 | 0.18 | * |
| Married, cohabiting, civil | | | | | | |
| partnership | 0.282 | 0.17 | | 0.875 | 0.16 | * |
| Health in the last 12 months | | | | | | |
| excellent/good | 1.219 | 0.11 | * | 1.454 | 0.12 | * |
| Financial position worse than | | | | | | |
| last year | -0.592 | 0.10 | * | -0.650 | 0.10 | * |
| Meet friends & family | | | | | | |
| once/twice a week | -0.127 | 0.14 | | 0.317 | 0.12 | * |
| Talk to neighbours once/twice a | | | | | | |
| week | 0.183 | 0.11 | | 0.284 | 0.11 | * |
| Play sport/exercise once a | | | | | | |
| month | 0.565 | 0.15 | * | 0.276 | 0.13 | * |
| Religious service/meetings | | | | | | |
| once a month | -0.035 | 0.12 | | 0.310 | 0.12 | * |

There are several other factors which positively and significantly affect life satisfaction but not the quality of life measure of subjective wellbeing. These include being retired, married/cohabiting, meeting friends and family, talking to neighbours and attending religious services/ meetings.

Further analysis showed that, all other things remaining constant, living in a remote rural area increases the probability of being "completely satisfied" with life by almost 8% while it reduces the probability of recording being "not satisfied at all" with life overall by 0.4%.

Further information

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