Supplementary analysis for Wellbeing Kaleidoscope report

Briefing Note

This briefing note describes analysis conducted supplementary to chapter 3 of the report *Looking through the Wellbeing Kaleidoscope*. These analyses, and chapter 3 were both written by Saamah Abdallah at the New Economics Foundation (NEF). The overall report was edited by Dr. Eric Harrison, Annie Quick and Saamah Abdallah, and was the product of a collaboration between City University London, the University of Cambridge and NEF.

Research question

Is there a differential impact of having children on the wellbeing of men and women in the UK? Does that differ from the impacts seen in the rest of Europe?

Methodology & results

We carried out analysis on the sixth wave of the European Social Survey (2012), which was the data source for all analyses in Chapter 3 of the main report.

We carried out an OLS regressions with life satisfaction as the dependent variable, and the following demographic variables as independent variables:

- Whether someone is unemployed (and either seeking or not seeking employment)
- Whether someone’s main activity is housework
- Age (and age squared, so as to capture the non-linear relationship between age and wellbeing)
- Household income

In the first instance, this regression was carried out only for respondents from the UK.

We calculated the residuals from this regression for each UK respondent. This is the difference between the actual life satisfaction for that respondent, and the life satisfaction that the model above would predict.

We then looked at the average residual broken down by gender and whether the respondent has children living at home, which is shown in Table 1:

<table>
<thead>
<tr>
<th></th>
<th>No children living at home</th>
<th>Children living at home</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>-0.04 (532)</td>
<td>0.14 (306)</td>
<td>0.18</td>
</tr>
<tr>
<td>Female</td>
<td>0.14 (500)</td>
<td>-0.23 (381)</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Table 1: Life satisfaction residual calculated based on OLS model, UK respondents.

Numbers in brackets represent Ns for each cell.

We then replicated the methodology for the entire ESS sample, across all countries, with the results shown in Table 2:

<table>
<thead>
<tr>
<th></th>
<th>No children living at home</th>
<th>Children living at home</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>-0.02 (532)</td>
<td>0.09 (306)</td>
<td>0.11</td>
</tr>
<tr>
<td>Female</td>
<td>0.04 (500)</td>
<td>-0.09 (381)</td>
<td>0.14</td>
</tr>
</tbody>
</table>
We also carried out second step regression models, with the residual as the dependent variable, and three independent variables:

- Gender
- Whether respondent has children living at home
- Interaction term between gender and whether respondent has children living at home.

We did this both for UK alone, and for Europe as a whole.

In both cases, the interaction between gender and having children was significant, indicating that women’s life satisfaction is lowered by having children significantly more than men’s.

**Conclusions**

The difference in life satisfaction between females who live with children and those that don’t in the UK is 0.47, which is three times greater than the difference Europe-wide (0.14).