

# THE LIVING WELL INDEX

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## AIMS

The Living Well programme is major piece of innovative research, which aims to:

- **Define and quantify** what it means to live well in the UK today
- **Track** how well the nation is living over time
- Derive practical, **actionable conclusions** about how we can live better

The results of the programme aim to inform:

- **Policymakers** and the researchers
- **National debate** about how well British households are living
- **Sainsbury's** own contribution to households' wellbeing

## Developing the questionnaire

- Rapid evidence scan, focusing on high quality indexes, and snowballing out
- Public dialogue work done by What Works Wellbeing
- Iterative feedback from a small group of academic experts
- Generation of a long list of domains and indicators
- Feedback from experts to refine domains and indicators, final indicators agreed across project team
- Focus group work and cognitive testing to generate new questions on immediate hopes and fears

## The questionnaire

- 60 questions covering key domains: physical health, diet, mental health, relationships, leisure, community, work
- Questions taken from range of high quality national surveys (NDNS, USoc, BSA etc)
- New questions on immediate hopes and fears
- AND
- Demographic variables pulled through from BSA
- Calibration variables to allow for propensity matching

## Data Collection

### NatCen Panel (n=2223)

#### High-quality 'core'

- Probability-based sampling approach
- Give everyone a chance to take part
- Encourage the 'disengaged'
- Inclusion of 'digitally excluded'

### PopulusLive Panel (n=6026)

#### Boost sample

- Analysis of smaller sub-groups & regions
- Enhanced understanding of relationships between variables

Propensity matching

## Post-fieldwork adjustments

	APS estimate	NatCen Panel estimate (Standard Weight)	Populus estimate (Propensity matching)	Populus estimate (Calibration Weight)
Life Satisfaction	7.7	7	6.6	6.3
What you do is worthwhile	7.9	7.4	6.9	6.6
Happiness yesterday	7.5	7	6.5	6.3
Anxiety yesterday	2.9	3.9	4	4.1



OXFORD  
ECONOMICS

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# **OXFORD ECONOMICS – DEVELOPING THE LIVING WELL INDEX**

## FROM WELLBEING TO LIVING WELL

- Some determinants of wellbeing relate to **'who you are'** – our personal characteristics.
- Others relate to **'how you live'** - income, friendships, physiological health; lifestyle choices; children etc.

**To 'live well' is to maximize how you live given who you are.**





## CHOICE OF DEPENDENT VARIABLE

- NatCen survey included the four questions on subjective wellbeing now integrated into many ONS surveys:
  - “Overall, how **satisfied** are you with your life nowadays?”
  - “Overall, to what extent do you feel that the things you do in your life are **worthwhile**?”
  - “Overall, how **happy** did you feel yesterday?”
  - “On a scale where 0 is ‘not at all anxious’ and 10 is ‘completely anxious’, how **anxious** did you feel yesterday?”
- Following consultation, we decided to use a composite measure of wellbeing as our dependent variable in the regression model.
- Composite measure developed by taking the mean response to the four questions – anxiety scores are inverted so that a higher score corresponds to a less anxious outcome.

## VARIABLE TRANSFORMATION

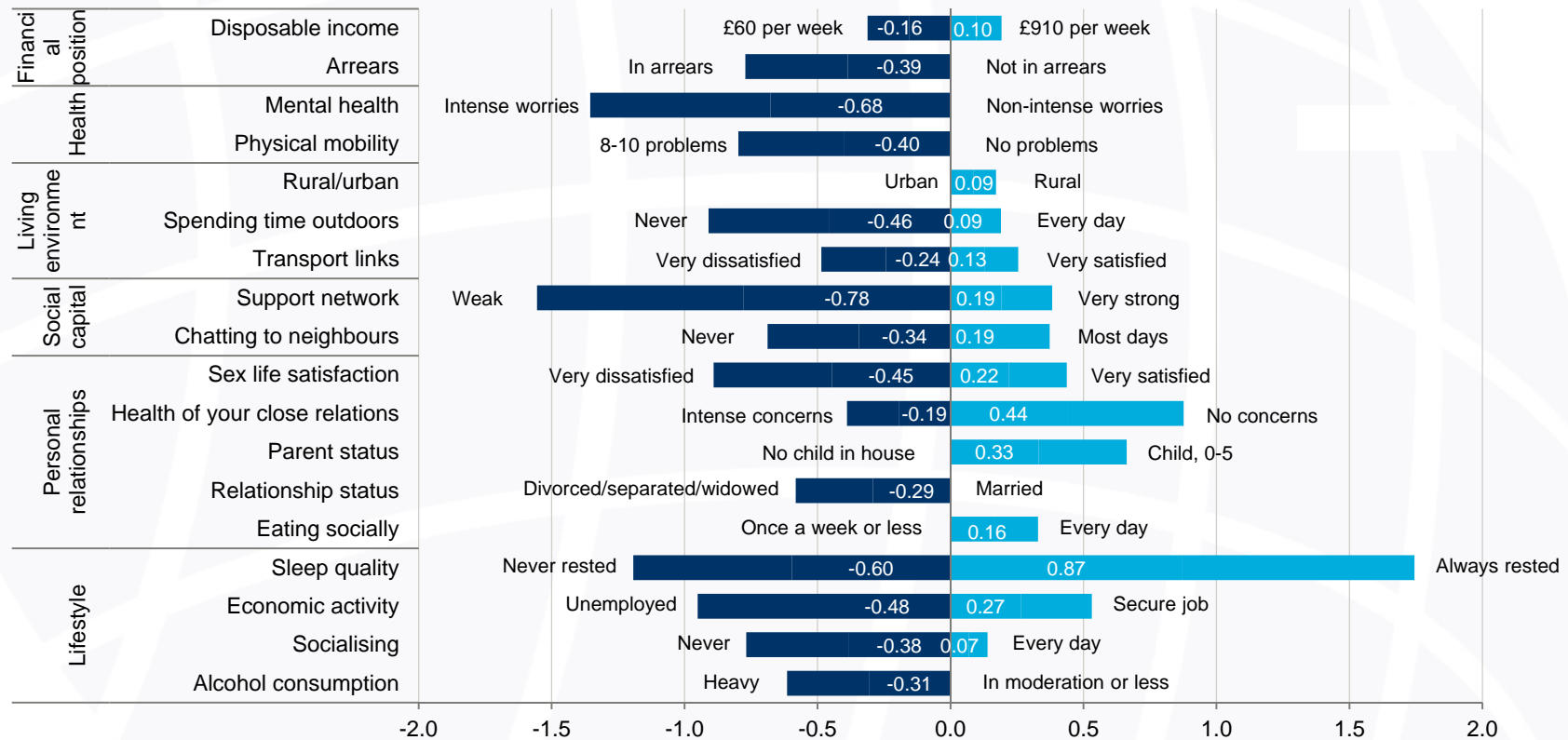
- Most data was in a non-continuous format. We chose to enter all explanatory variables as binary options per question.
  - The disadvantage of this approach is that it consumes degrees of freedom as the model has more parameters to estimate ... but
  - given that there were over eight thousand observations per question, the loss of degrees of freedom was less of an issue for this study.
  - Moreover, the alternative of a continuous variable approach assumes that the distance between each category is equal. This may create distortions for a variable on a Likert scale.
- In two cases, we created new indicators by pooling together information from more than one question.
  - **Support networks:** For the seven questions in the survey that related to the quality of an individual's social support network we created an aggregate variable for each interviewee using their average response. Answers to these questions had a high level of correlation among respondents so it was felt that this technique would not lead us to miss more granular insights but would have the advantage of parsimony.
  - **Relations' health:** We also created an aggregated variable from the three questions which asked respondents about the extent to which they worried about the health of their close relations (parents, children or spouse/partner). This took the average (mean) of the three responses.

## REGRESSION MODEL: OLS VS ORDERED LOGIT

- Dependent variables (wellbeing questions) are coded on Likhert (0-10) scales. An ordered logit regression is technically better at capturing a discrete choice variable as it does not impose an assumption of equidistance between each response.
- However, coefficients estimated via an OLS model are easier to interpret and communicate. Moreover, by using the composite measure of wellbeing as our dependent variable it had 44 possible outcomes. In this situation, the restrictions imposed by an OLS model have been shown to be less distortionary.
- As a robustness check we have also run the models using an ordered logit specification. Although the coefficients are not directly comparable they did provide a qualitatively similar picture e.g. the relative strength of the *ceteris paribus* association between each question response and composite SWB.

# HOW YOU LIVE – RELATIVE IMPORTANCE OF DIFFERENT FACTORS

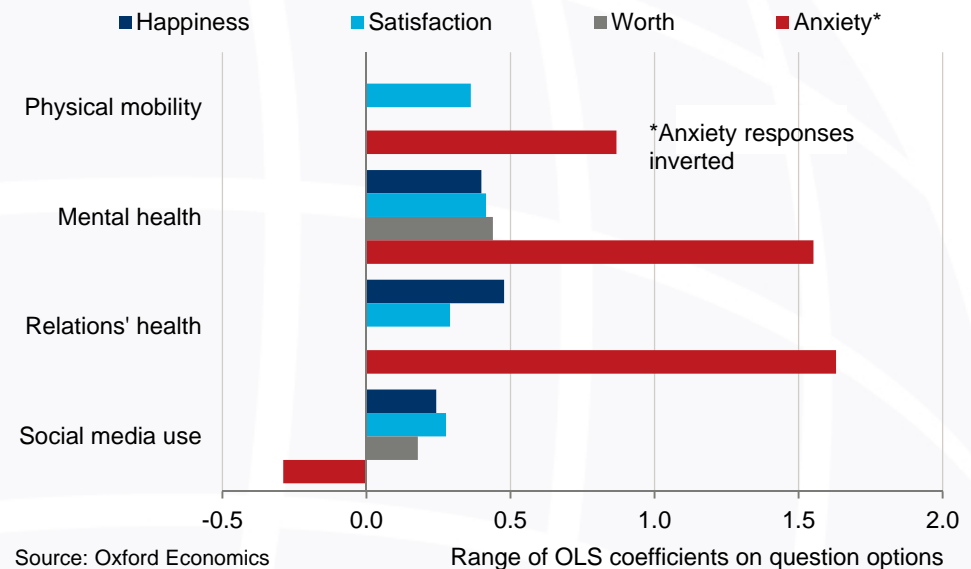
Contribution to wellbeing vs median question response, 0-10 scale



Source: Oxford Economics

## THE INDIVIDUAL COMPONENTS OF WELLBEING

- In general, there was a strong degree of overlap between factors which could explain variation in happiness, satisfaction and worth but **anxiety** had quite a different profile.
- Many variables that had explanatory power for other elements of wellbeing lost statistical significance.
- Question responses related to the person's **physical and mental health** had stronger associative significance.
- **Social media** consumption was shown to have a positive association with happiness, satisfaction and worth but was linked to higher levels of anxiety among respondents, all else equal.



## SUMMARY FINDINGS

- Being **over 55** associated with much higher scores all else equal
- Face-to-face **interactions with people** very strongly associated with a sense of wellbeing, but **virtual interactions** are not.
- A strong **support network** of friends and family is integral to wellbeing.
- Being **socially active, eating socially** and **chatting to neighbours** all more strongly associated with wellbeing than healthy lifestyle habits such as **exercise** or **fruit and vegetable** consumption.
- Good quality **sleep** has the strongest association with wellbeing among lifestyle factors.
- Our **financial** position also matters – but the sensitivity of our wellbeing to disposable income is relatively low.
- **Renters** have same sense of wellbeing as owners, all else equal.

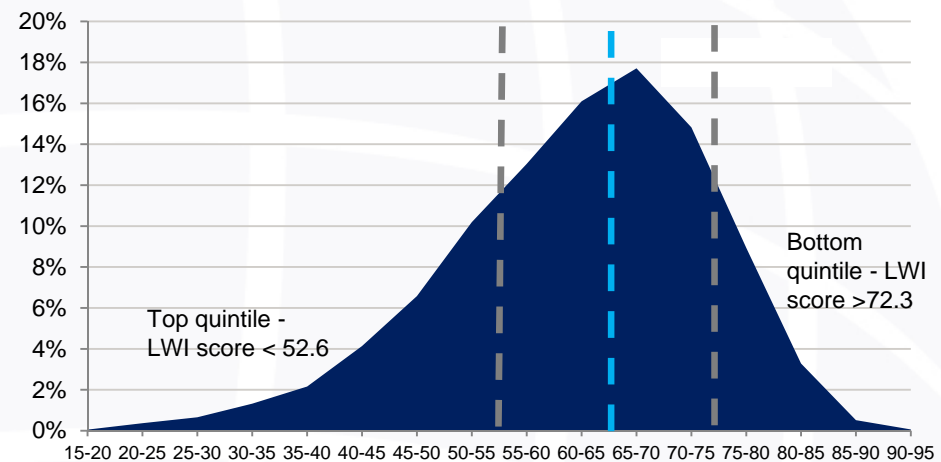
## FROM THE REGRESSION RESULTS TO AN INDEX MEASURE

- Regression coefficients used to identify question responses which predicted wellbeing.
- To identify drivers of '**living well**' we stripped out the impact of variables linked to 'who you are' – the only significant variable after controlling for other factors was age.
- Remaining 19 question responses used to construct our LWI measure.
- Distance to frontier method – score of 100 assigned to set of responses that would maximise predicted wellbeing. Each person's score then scaled in terms of gap to this hypothetical maximum.
- Missing data generated via mean imputation. In general, a very small issue – less than 1% of responses.
- Responses weighted to ensure a representative sample based on NatCen's

## THE LIVING WELL INDEX

- Our 'living well' index focuses on how people are living – stripping away the impact of 'who they are'.
- Creates an objective measure of living well out of the subjective responses about wellbeing.
- The index is calculated on a 0-100 scale.
- National mean score is 62.2.

Distribution of sample by reported LWI score



Source: Oxford Economics





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