



## **Measuring Well-being**

A guide for practitioners

# Contents

<b>About this handbook.....</b>	<b>4</b>
<b>Measuring well-being at BIG – A Case Study .....</b>	<b>5</b>
<b>1. Understanding Well-Being.....</b>	<b>6</b>
<i>What is ‘well-being’ and what is meant by the ‘potential drivers of well-being’? .....</i>	<i>6</i>
<i>Why is a well-being approach important?.....</i>	<i>8</i>
<b>2. Measuring Well-Being .....</b>	<b>9</b>
<b>2.1. The Principles.....</b>	<b>9</b>
<i>What are the basic principles of measuring well-being?.....</i>	<i>9</i>
<i>What can you do with information on people’s well-being? .....</i>	<i>9</i>
<b>2.2. How can you measure well-being? .....</b>	<b>10</b>
<i>Using questionnaires to gather information on well-being .....</i>	<i>10</i>
<i>Overview of our three recommended sets of well-being questions.....</i>	<i>10</i>
<i>The Centre for Well-being at nef’s recommended well-being measures</i>	<i>11</i>
<i>About the measures.....</i>	<i>12</i>
<i>Why we’ve selected these questions .....</i>	<i>12</i>
<i>Additional information .....</i>	<i>13</i>
<b>2.3. How can you administer well-being questions? .....</b>	<b>14</b>
<i>How to administer well-being questionnaires .....</i>	<i>14</i>
<i>Things to consider when deciding how to administer well-being questionnaires .....</i>	<i>15</i>
<b>2.4. Things to consider when designing your well-being questionnaire .....</b>	<b>15</b>
<i>Question order .....</i>	<i>15</i>
<i>Informed consent.....</i>	<i>15</i>
<i>Sample (the group of people answering a questionnaire) .....</i>	<i>16</i>
<i>Additional information .....</i>	<i>16</i>
<i>Anonymity and confidentiality.....</i>	<i>16</i>
<i>Language issues.....</i>	<i>17</i>
<i>Timing of data collection .....</i>	<i>17</i>
<i>Who will do the measuring.....</i>	<i>17</i>
<i>Cost.....</i>	<i>17</i>
<i>Sensitive topics.....</i>	<i>17</i>
<i>Response bias.....</i>	<i>17</i>
<i>Analysis .....</i>	<i>17</i>

<b>3. Analysing and interpreting results.....</b>	<b>19</b>
<i>By the end of this section you should:.....</i>	19
<i>Analysis .....</i>	19
<i>Reliability of data for a sample .....</i>	20
<i>Reliability of data for a population .....</i>	20
<i>Interpretation.....</i>	21
<i>Making meaningful comparisons.....</i>	22
<i>Taking it further: exploring different aspects of well-being.....</i>	22
<i>Conclusion: results that are ‘fit for purpose’ .....</i>	23
<b>4. Using Well-Being Data .....</b>	<b>25</b>
<i>Making use of the findings .....</i>	25
<i>Disseminating the findings .....</i>	25
<b>5. Checklist .....</b>	<b>27</b>
<b>6. Find Out More... .....</b>	<b>28</b>
<b>Appendix: National Accounts Of Well-Being Components And Subcomponents .....</b>	<b>30</b>
<b>Endnotes.....</b>	<b>32</b>

# About this handbook

This short handbook on measuring well-being is produced by the Centre for Well-being at **nef** (the new economics foundation) with input from **nef** consulting. It is designed primarily for voluntary organisations and community groups delivering projects and services, to help them kick-start the process of measuring well-being outcomes.

By measuring the well-being of the people we aim to support, information can be gathered which can be used, for example, to improve the design and delivery of projects and services, to target projects and services at the people who are in most need, to tailor provision to suit needs, and to support funding applications.

This handbook provides:

- Tools for thinking about well-being and its measurement. These will help to ensure that when you measure people's well-being, you do so from an informed position. Part I of this handbook is Understanding Well-being.
- Part II describes our recommended practical tools for measuring well-being: this will help you to get measuring!

An earlier version of this handbook was originally created as part of a project commissioned by NHS Lambeth and funded through its Well-being and Happiness Programme, for projects and service providers in the London Borough of Lambeth. We have re-written the handbook so that it reflects updates in our thinking about well-being and its measurement, and we gratefully acknowledge the role that NHS Lambeth played in the creation of the original version.

**nef** consulting have added Part III, which provides guidance on analysis and interpretation, building on their experience of working with dozens of organisations to undertake impact evaluation projects. This document is available alongside a range of other resources which can help measure social impact through the SROI Centre for Excellence, which can be accessed at [www.nef-consulting.co.uk/sroicfx](http://www.nef-consulting.co.uk/sroicfx).

Based on our experience of working with Big Lottery Fund, **nef** is confident that using a standardised approach to measuring well-being is a good use of time for organisations in a range of settings – Big Lottery Fund have provided a Case Study on the following page.

# Measuring well-being at BIG – A Case Study



The Big Lottery Fund understands the importance of hard-headed analysis of what secures a lasting impact on people and communities, but it is keen that a focus on impact measurement should enhance rather than reduce creativity and innovation. As a result BIG has embarked on a comprehensive evaluation of its Well-being programme. Nearly 100 projects have successfully used a standardised well-being measurement tool to capture the benefits from taking part in well-being activities, with over 3,000 people completing the questionnaires.

BIG's Well-being programme, launched in 2005, has invested over £160 million across England in hundreds of projects that aim to improve mental health, healthy eating and physical health. **nef** and the Centre for Local Economic Strategies (CLES) developed a set of questionnaires that measure the impact of the programme across a wide variety of activities and the distance that people have travelled as a result of taking part in these activities. This analysis is also complemented by qualitative case study research.

The tools have been developed to assess the impact of different types of well-being projects for different groups of people across the programme's three domains of well-being – mental health, healthy eating and physical activity. The evaluation captures people's well-being status when they first join a project, when they leave a project and three months after they leave a project. The questionnaires have been specifically designed to help BIG track the well-being of participants over time, with specially designed self-completion tools for primary school-age children, young people at secondary school, adults aged 16-65 and adults over 65.

This approach has enabled BIG to collect standardised data from community groups that has provided a robust picture of the difference the funding has made to people's well-being and an understanding of which approaches are most effective. It has also helped BIG to contribute to the growing body of evidence of how to measure well-being.

**nef's** Well-being [Evaluation Tools Report<sup>1</sup>](#) for BIG comprehensively describes the tools and indicators used. The questionnaires were empirically tested for fitness for purpose and for how effectively the measurement model worked. BIG welcomes recent advances in well-being measurement as set out in this handbook.

Sarah Cheshire  
Big Lottery Fund

# 1. Understanding Well-being

By the end of this section you should:

- Understand what 'well-being' means and understand what is meant by the 'potential drivers of well-being'
- Be familiar with nef's dynamic model of well-being
- Understand why a well-being approach is important

## What is 'well-being' and what is meant by the 'potential drivers of well-being'?

Well-being can be understood as how people **feel** and how they **function**, both on a personal and a social level, and how they **evaluate** their lives as a whole. To break this down, how people **feel** refers to emotions such as *happiness* or *anxiety*. How people **function** refers to things such as their *sense of competence* or their *sense of being connected to those around them*. How people **evaluate** their life as a whole is captured in their satisfaction with their lives, or how they rate their lives in comparison with the best possible life.

You can think of someone as having high well-being if they function well, have positive feelings day-to-day and overall and think their lives are going well; we call this 'flourishing'. Similarly, you can think of someone as having low well-being if they do not function well and have negative feelings day-to-day and overall.

It is worth pointing out that well-being is not exactly the same as happiness. **Happiness** often refers to how people are feeling moment-to-moment and does not always tell us about how they evaluate their lives *as a whole* (although it can do), or about how they *function* in the world. **Well-being is a much broader concept** than moment-to-moment happiness: it includes happiness but also other things such as *how satisfied people are with their lives as a whole*, and things such as *autonomy* (having a sense of control over your life), *purpose* (having a sense of purpose in life).

Whilst well-being covers more than happy feelings, recent research suggests that positive feelings like happiness can actually lead to better well-being overall. This is because positive feelings broaden people's potential responses to challenging situations and build their personal resources and capabilities.<sup>2</sup> We should think of feeling happy not only as a goal in itself, but also as a way of increasing people's potential for doing well.

For the purpose of clarity, it is useful – and important – to separate the notion of well-being from the things that help to drive, or influence it. 'Well-

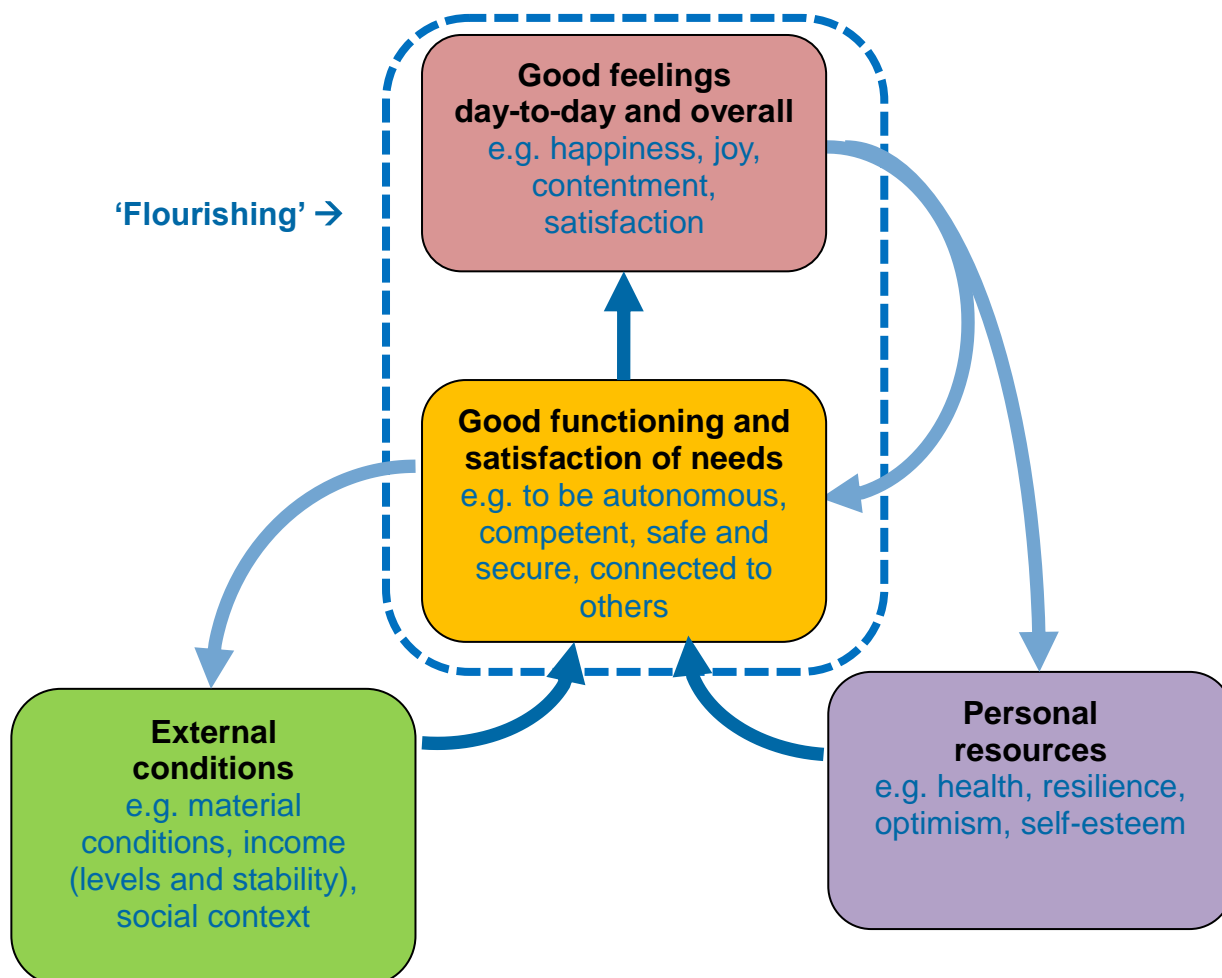
being' refers to how people are in themselves – their emotions, judgements and experiences. The 'potential drivers of well-being' refers on the one hand to external things such as income, housing, education and social networks, and to certain 'internal' things such as health, optimism and self-esteem, all of which influence how people feel and function.<sup>3</sup> These ideas are usefully captured in the dynamic model below.

*nef's dynamic model of well-being*

In 2008 **nef** developed a model of well-being and its drivers (as part of the Government Office for Science's *Foresight Project on Mental Capital and Well-Being*).<sup>4</sup> The model describes how an individual's external conditions (bottom left) – such as their income, employment status and social networks – act together with their personal resources (bottom right) – such as their health, resilience and optimism – to allow them to function well (middle) in their interactions with the world and therefore experience positive emotions (top). When people function well and experience positive emotions day-to-day and overall, we can think of them as 'flourishing'.

In the following sections we focus on how to measure the top two boxes – how people feel, and their judgements about their lives (in the top box) and how people function (in the central box) and how people function (in the central box).

**Figure 1: nef's dynamic model of well-being**



## Why is a well-being approach important?

A well-being approach is important because it enables us to do the following:

- Move beyond a narrow focus on what can go wrong in people's lives, to look also at what makes people's lives go well.
- Move beyond looking only at what people lack or need, and look at the positive things people bring to situations and communities – their assets. This in turn can help us think about the ways that people can be empowered to contribute to improvements in their own lives.
- Move beyond just focusing on economic circumstances to include the important areas of people's emotional and social needs.

When we understand what makes people's lives go well, see the positive things people bring to situations, and understand people's emotional and social needs, projects and services can be better designed to respond to the many aspects that make up people's lives.

There is growing interest among political leaders, local statutory agencies and others in measuring something that really matters – people's well-being. This is reflected most clearly in the Coalition Government's 2010 commitment to measuring national well-being, which has led to the Office for National Statistics' (ONS) *Measuring National Well-being* programme.

*“Well-being can be understood as how people **feel** and how they **function**, both on a personal and a social level, and how they **evaluate** their lives as a whole.”*



## 2. Measuring Well-Being

### 2.1. The Principles

By the end of this section you should:

- Understand the basic principles of measuring well-being
- Understand what you can do with data on well-being

#### What are the basic principles of measuring well-being?

Measuring well-being can be done in a number of ways – there is no ‘one size fits all’ approach. In general, however, well-being measurement tends to be based on:

- *Individuals*. Individuals, rather than groups, are the ‘unit of measurement’, even if we are ultimately interested in the well-being of a particular group of people.
- *Subjective indicators*. Subjective, rather than objective, indicators provide the data. ‘Subjective indicators’ refers to questions which ask about feelings, experiences and judgements about life.

#### What can you do with information on people’s well-being?

There are several related things that you can do with information on people’s well-being, such as:

- Help evaluate the impact of your project or service on people’s lives
- Develop a baseline of information against which you can measure changes over time in people’s feelings and experiences, for example over the course of a particular intervention.
- Find out which aspects of their lives people feel most dissatisfied with, for example in order to help tailor interventions.
- Help raise awareness of the different components of well-being among a particular population, for example in order to help facilitate community-led action to increase well-being.

## 2.2. How can you measure well-being?

By the end of this section you should:

- Understand why questionnaires are a good way of gathering information on well-being
- Be familiar with three sets of well-being questions and understand why it is best to use all three, if possible
- Understand why we have selected these questions
- If necessary, be able to choose which set is most appropriate for your purposes and understand the different benefits of each set
- Be familiar with a range of additional questions you may wish to ask your respondents.

### Using questionnaires to gather information on well-being

Questionnaires are a good way of gathering information on people's well-being: they provide information in the form of numbers ("quantitative data") and they offer the advantage that they can be repeated at different times to show trends and patterns in results.

There are other ways of gathering information on well-being. These include:

- research interviews
- discussion groups and focus groups
- community consultation events
- research diaries (where people write down their feelings, behaviours and activities over a set timeframe)

Most of these methods provide information in the form of words ("qualitative data") and can be used alongside questionnaire data to help explore findings in more detail. This handbook focuses on measuring well-being using questionnaires.

### Overview of our three recommended sets of well-being questions

On the following pages you will find three sets of established questions that we recommend are used to measure well-being (followed by some short background information on each); the *Short Warwick-Edinburgh Mental Well-being Scale* (SWEMWBS), the *ONS subjective well-being questions* and a question on social trust, which is known to be a key factor for well-being. If possible (i.e. if resources permit), we recommend that you use all three measures, as this should enable you to do more with your data.

## The Centre for Well-being at nef's recommended well-being measures

### SWEMWBS

Below are some statements about feelings and thoughts. Please choose the answer that best describes your experience of each over the last two weeks.

Statements	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future					
I've been feeling useful					
I've been feeling relaxed					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling close to other people					
I've been able to make up my mind about things					

### ONS

Below are some more questions about feelings. Please give a score of 0 to 10 where 0 means extremely dissatisfied/ unhappy or not at all anxious/ worthwhile and 10 means extremely satisfied/ happy/ anxious/ worthwhile.

Questions	0	1	2	4	5	6	7	8	9	10
Overall, how satisfied are you with your life nowadays?										
Overall, how happy did you feel yesterday?										
Overall, how anxious did you feel yesterday?										
Overall, to what extent do you feel the things you do in your life are worthwhile?										

### Social trust question

Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? Please give a score of 0 to 10, where 0 means you can't be too careful and 10 means that most people can be trusted.

Can't be too careful							Most people can be trusted				
0	1	2	3	4	5	6	7	8	9	10	

## About the measures

### *The Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS)<sup>5,6</sup>*

SWEMWBS is a scale of seven positively worded items, with five response categories, which have been specifically designed to measure both the feeling and functioning aspects of positive mental well-being, i.e. flourishing. It is therefore our recommendation for measuring flourishing overall. These questions meet various statistical tests of robustness, and they also have 'face validity' as measures of aspects of flourishing within the dynamic model, i.e. on the face of it, the questions really are about well-being! For example, good feelings ('feeling relaxed'), sense of meaning ('feeling useful') and good relationships ('feeling close to other people'). The SWEMWBS is a shortened version of the longer Warwick and Edinburgh Mental Well-being Scale (WEMWBS). Warwick and Edinburgh Universities were commissioned to develop this in 2006, and it has been academically validated as having good psychometric properties, good validity and reliability with the ability to distinguish between population groups. It has been widely used in population surveys in the UK and elsewhere, including in the Health Survey for England in 2011. The user guide for the measure is available at <http://www.healthscotland.com/understanding/population/Measuring-positive-mental-health.aspx>. Note that **permission should be sought** for use of the measure via the email address given on this website, although it is free to use.

### *The Office for National Statistics' (ONS) subjective well-being questions*

The Office for National Statistics' subjective well-being questions are a set of 4 questions with a response scale of 0-10, intended to capture what people think about their well-being. From April 2011 these questions have been included in the Integrated Household Survey, which is a composite survey that gathers information from over 200,000 people in UK.

### *Social trust question*

As in our National Accounts of Well-being framework, we are led by the findings from well-being research to recommend that social well-being is included as a headline measure of well-being given its importance – within functioning – to overall well-being. The single survey question which measures social trust is very widely used, often within social capital research, and therefore will enable well-being analysis to be linked to this further rich research area.

## Why we've selected these questions

We've selected the questions presented here because:

- Each is a succinct measure amenable to being used in a relatively short survey (unlike some of the other measures used in well-being research, which are often based on relatively long scales based on a large number of measures).
- There is coherence with our conceptual framework, represented in the dynamic model of well-being found on page 7 of this handbook.
- They will allow you to make comparisons to data gathered in other research.

### Choosing well-being questions

- As noted earlier, if you have the resources – **we recommend that you ask all three sets** of questions, as this should enable you to do more with your data. However, we understand that this has resource implications that might make it difficult for you. So:
  - If you are only going to use one well-being question (for example due to limited time and money) – you can use one on life satisfaction. The single life satisfaction question is the most widely used subjective measure of well-being, having been used in national surveys in the US, UK and elsewhere for a number of decades. While, as a single question, it has limitations, it has shown to be a good overall measure, related to a number of objective factors in people’s lives. It is by far the most widely used measure in research on well-being.
  - If you particularly want to compare your data to the national picture – you can use the ONS’ well-being questions.
  - If you particularly want to measure well-being before and after an intervention – you should use the **SWEMWBS**.
- If you want to explore **particular aspects of well-being in more detail** – you should supplement key measures with **additional well-being measures**. This may be particularly appropriate for targeted measurement where there are reasons to expect a particular initiative to have an impact on specific aspects of well-being. For ideas on additional subjective well-being questions see the Appendix, or you can visit: <http://www.nationalaccountsofwellbeing.org>.

### Additional information

It may be useful to collect some basic demographic information in addition to data on well-being, so that you can explore, for example, how well-being varies among your target group according to gender, age, ethnicity, working status, post code etc. This form is intended as an example only. You will need to think about what you want to know and how you will analyse your data, and ask the relevant additional questions.

**Age (please write)** .....

**Gender (please circle)**      Female                      Male                      Other

**What do you do at the moment? (Please circle)**

Full time Education / Part Time Education (less than 16 hours) / Apprenticeship

Working full time / Working Part time (less than 16 hours) / Internship / Stay at Home Parent / Volunteering / Other (please specify)

**Postcode (please write)** .....

## Ethnicity (*please circle*)

### A. White

- English/Welsh/Scottish/Northern Irish/British
- Irish
- Gypsy or Irish Traveller
- Any other White background, write in \_\_\_\_\_

### C. Asian / Asian British

- Indian
- Pakistani
- Bangladeshi
- Chinese
- Any other Asian background, write in \_\_\_\_\_

### E. Other ethnic group

- Arab
- Any other ethnic group, write in \_\_\_\_\_

### B. Mixed / multiple ethnic groups

- White and Black Caribbean
- White and Black African
- White and Asian
- Any other Mixed / multiple ethnic background, write in \_\_\_\_\_

### D. Black / African / Caribbean / Black British

- African
- Caribbean
- Any other Black / African / Caribbean background, write in \_\_\_\_\_

## 2.3. How can you administer well-being questions?

Administering a questionnaire means implementing it in practice – collecting responses from the people you're interested in. By the end of this section you should:

- Understand the main ways to administer well-being questionnaires
- Understand some of the things to consider when deciding how to administer a well-being questionnaire.

### How to administer well-being questionnaires

Once you have decided which well-being questions to ask, you will need to decide how to administer your questionnaire. There are different ways of doing this:

#### *Self-completion questionnaire*

- This is where the respondent fills in the questionnaire by themselves. This tends to be by either:
  - pen and paper
  - email
  - on the web

#### *Interview<sup>7</sup>*

This is where an interviewer asks the respondent the questions. This tends to be either:

- in person (face-to-face)
- by telephone

## Things to consider when deciding how to administer well-being questionnaires

There are benefits and challenges to each of these ways of administering questionnaires – you should think through which is the most appropriate given your own objectives. For example: literacy issues may make the pen and paper format difficult for some potential respondents; online access issues may make email or web-based questionnaires tricky; and sensitivity and ‘response bias’ issues may make face-to-face interviews problematic (see the next section, page 17, for details of ‘response bias’).

It is important to note that there is no ‘right’ way to go about administering a well-being questionnaire – you will need to make an informed judgement about the best way to do it, taking into consideration factors such as the resources you have at your disposal, your data needs, and the respondents you will be surveying.

## 2.4. Things to consider when designing your well-being questionnaire

By the end of this section you should:

- Understand some of the main issues to take into account when planning a well-being questionnaire

### Question order

While it is common for answers to survey questions to be affected by earlier questions in the same survey, these effects have been found to be particularly strong for subjective well-being measures such as life satisfaction. If you are asking well-being questions as part of a larger questionnaire, they should be asked as early as possible, although ideally after a few basic introductory questions to allow respondents to feel relaxed within the survey answering context.

### *Frequency of measurement*

You will need to think about how often to measure well-being in your sample, if you are not doing a simple ‘before and after’ measurement. More frequent measurement (e.g. quarterly) will allow more detailed tracking of levels of well-being, picking up short-term variation in response to particular events and seasons. This may not be necessary for overall monitoring, but on the other hand the time gap between measures should be short enough to enable a meaningful time series to be built up, hence measurement should be undertaken at least once a year. It is important to repeat the same contact methodology and question ordering to be able to compare survey data collected at different times.

### Informed consent

You will need to think about obtaining informed consent from your respondents. First, this means that you should *inform* respondents fully about the purpose of the exercise and what you are going to do with the well-being data about them. Second, it means you should seek *consent* to collect well-being data from them, and only collect such data if they have consented to it. You may wish people to sign a short consent form as a

record that consent has been given – examples of such forms can readily be found on the internet.

### **Sample (the group of people answering a questionnaire)**

How many people will you involve, what groups of people will you approach? Where will you find them?

It may not be feasible to get data from everyone you would like. The most important thing to consider in your sample is that you will want the responses that you receive to represent as closely as possible the group of people (the 'population') you are seeking to understand.

It is always good practice to ask more people than you strictly need, because not everyone you ask is likely to complete a questionnaire. For example, if you were measuring the well-being of new mothers through parenting classes, and half of the participants had English as a second language (ESL), you would ideally hope that the sample of questionnaires you received back included about half from mothers with ESL. It may be that you need to ask more mothers with ESL than mothers with English as a first language, in order to receive equal responses from both, as it is possible that if you are doing a questionnaire in English, the rate of response may be lower among those with ESL.

### **Additional information**

What other information might you need to know alongside the well-being data? Some examples are:

- Demographic information like age, gender, ethnicity, marital status, residential postcode of respondents (see part iii)
- To what extent have respondents participated in an intervention? Have they participated in other similar interventions simultaneously?

Collecting such pieces of information can allow for more detail when you analyse data (see Part III below), and help put your results in context. For example, if the sample of responses you receive is not a good representation of the population (group of people) you are trying to understand, then you can at least know which people within a population have been adequately covered by your sample

### **Anonymity and confidentiality**

In many cases of collecting data for social research, responses to questions are given anonymously – without any personal information. If you are collecting answers through interviews, the interviewer may know at least the name of the person giving the answers. However, there is usually no need to put down someone's name or address on paper. As well as informing people why you are seeking to measure their well-being, you can reassure people that you will not use their data for any other purposes, and that the data will be kept confidential – not accessible to anyone else. If respondents feel that their responses will be anonymous and confidential, they are more likely to answer questions honestly. Personal data (which includes identifying details of the respondents like names and addresses) needs to be collected and stored in accordance with the Data Protection Act 1998.



It is not usually necessary to collect information that can identify individual respondents to your survey: you don't need names to measure well-being, but using ID numbers to identify individuals (especially if doing before and after measurement) can be useful. In some settings you will be able to assure respondents that their answers will be confidential. At the very least, you should confirm that the information people provide will only be used for the purposes that they have agreed to (see informed consent above).

### Language issues

Are there any language barriers in terms of literacy or non-English speakers? Is there a need to re-phrase questions if using them with children, or use more creative techniques to try and engage people? (On this note, see the link to the work of the Children's Society on measuring children's well-being, on page 29 of this handbook).

### Timing of data collection

During the day or evening? Weekday or weekend? Will there be local events/activities which may affect people's responses (positively or negatively).

### Who will do the measuring

A community group leader or a project officer? Local residents who are trained/supported? An organisation commissioned to do the work?

### Cost

Are there costs involved in the well-being measurement process (e.g. to pay for external research support/community researchers)? How will these costs be covered?

### Sensitive topics

You may wish to think about whether any of the well-being issues you are measuring are likely to be sensitive for people. This may particularly be the case if, for example, you are working with a group of people who have experienced mental illness. This may affect how you administer the questionnaire, for example you may decide to ask people to complete it themselves. You should ensure that you can signpost people towards appropriate support in the event that they disclose anything particularly sensitive to you.

### Response bias

Sometimes people respond to questions in terms of how they think they *should* respond rather than how they *actually* feel. Technically, this is known as "social desirability bias". You may want to consider whether this is likely to be a significant issue in your well-being measurement work.

If you are considering other methods of gathering well-being data such as group discussions, you may wish to consider whether group settings are more likely to encourage people to give responses they think they *should* give, or that are socially acceptable.

### Analysis

You will need to think about how you are going to analyse your well-being data. Have you identified someone with experience of handling quantitative

data? What information do you want to know? Who will do the analysis, and do they understand statistics? What analysis software is available? In the following section we explore in more detail some of the issues around analysis and interpretation.

## 3. Analysing and interpreting results

By the end of this section you should:

- Be familiar with issues around reliability
- Better understand how to interpret the results you gather, using the data comparison calculator on **nef** consulting's website.
- Understand some of the things you can do to go further with your analysis, be familiar with **nef**'s National Accounts of Well-being and the bespoke service that **nef** consulting can provide.
- Be comfortable judging whether your well-being analysis is "fit for purpose" – good enough to provide meaningful insight about the programme or activity you want to understand.

### Analysis

Analysis is the process of turning lots of individual responses into an aggregate picture of the data. You might start with a pile of completed paper questionnaires, administered before and after an intervention, and process them to produce aggregate data. For example, on average, people's well-being in your study may have gone from 6.8 to 7.5 on a ten point scale. Or it may be that the number of people who are often or always optimistic about the future has changed from 42% to 51%. The main analysis task is to find average scores across the sample of individuals. You could have a look online to learn more about data analysis.

To analyse a large amount of data, it will be easiest to manage this electronically, using a computer and software. There are free online survey tools which will be sufficient for data entry and basic analysis of the well-being questions which we recommend – such as Survey Monkey ([www.surveymonkey.com](http://www.surveymonkey.com)). Spreadsheet software such as Microsoft Excel is useful for holding data. There are free spreadsheet programmes which can be downloaded from the internet as part of packages such as Open Office ([www.openoffice.org/download/](http://www.openoffice.org/download/)) and Google Docs (<https://docs.google.com/>).

Finally, you may wish to combine scores from several indicators into a single well-being *composite* score, which takes an average of several indicators. We recommend combining your scores for SWEMWBS, and we have a template showing you how to do this at:

[www.nef-consulting.co.uk/services/wellbeingmeasurement](http://www.nef-consulting.co.uk/services/wellbeingmeasurement).

## Reliability of data for a sample

Survey based data is not very useful if collected for single individuals or very small groups. Therefore, we recommend reaching as **large a number of respondents as possible**, and if your sample numbers are small, we recommend **collecting data at multiple points in time**, with consistent approaches to measurement each time.

Let's consider an analogy: researchers are trying to find out if free toothbrushes made a difference to the dental health of 200 children at a primary school over the course of one year. This is measured by dental checkups every three months throughout the year.

The results of dental checks for one child would not tell you meaningfully whether this is an effective intervention. There are likely to be many other factors which affect this child's dental health. Indeed we wouldn't expect the dental health of all children to improve. Some will have eaten more chocolate – others might have lost their toothbrush on the way home from school.

However, in aggregate, across 200 children, we could expect this intervention to have a positive impact. We might expect that although there will be a background of many different factors for many different children, the average level of dental health will improve because of the toothbrushes.

Well-being outcomes are similar. There is unlikely to be any programme, activity or intervention which can improve the well-being of 100% of participants. If the well-being of an individual has gone up, or gone down, it may very well be that there were other factors which were an influence. This is why it is important to reach as large a number of respondents as possible, as the greater the numbers, the less chance that average scores are the result of specific, individual factors.

## Reliability of data for a population

In this context, we are using the word "population" to refer to the people who you are trying to understand better by collecting well-being data. This may be everyone who participates in an activity, or everyone who lives in a local community, but the key point is that it is a broader group than the sample of people who answer well-being questions: it is the group which the sample aims to represent.

You will want to know if the data that you have received back from your sample and analysed is reliable enough to make a meaningful judgement about the well-being of the population. There are two basic processes you can go through to build confidence in the reliability of your well-being data.

Firstly, it may be that you have surprising results, in aggregate. The change in well-being may have been smaller, or larger than you expected. It may be that this is because the sample of people who responded does not represent the population well. It may be possible to "weight" the sample, which is a process of undertaking a mathematical calculation which balances the sample of responses you have to reflect the population you want to understand. For example, if you want to understand the children at a primary school, and you know the school has 100 boys and 100 girls, you would want your sample to have 50% boys and 50% girls. If in reality you achieved 20 responses from girls and 60 responses from boys, you could

count each of the responses from each of the girls three times (give it a weighting of 3), to make the sample better reflect the gender split among the whole school.

Secondly, it may become obvious through your analysis that underneath the aggregate changes shown through your overall analysis, the well-being data actually shows different things for different types of people within the sample. It should be possible for you to see how changes in well-being may be different for different age ranges or gender groups, for example; that is, to look at the way well-being scores vary between different types of people. This might be one of the most interesting results, although to know this you will need to have collected demographic information alongside asking well-being questions. Even if you have adjusted your sample to reflect your population characteristics (weighting, described above), you may find that well-being scores are higher for boys than for girls, or higher for older people than for younger people, for example. You can then go on, in your interpretation, to explore *why* this might be the case.

Finally, it is worth remembering that well-being data which aims to capture changes in well-being levels over time are just one indication of the true, messy reality of change in people's lives. Don't worry too much about the exact scores and numbers. What is important to be sure of is that you understand the scores in context (are they generally high or low), the direction of well-being change (getting better or getting worse over time), and the magnitude of change (a big change or a small change over time).

## Interpretation

If you are confident that your data is reliable and aware of ways in which it might not be reliable, interpretation of the data is the next step. Interpreting the results of your data analysis means developing ideas about what you think the data *mean*: what do the results tell us and why this might be the case?

We've come up with a list of **three simple questions** which can help start a useful conversation about interpretation. It is best if this conversation is with colleagues and others who work with the people whose well-being you are measuring. People with experience of research in a range of different fields could also be helpful.

*Interpreting your data: what does it mean?*

- **Are the results surprising in any way?** Do they show you what you expected to see?
  - If there were surprises, or differences from your expectations, why were you surprised? Why did you expect results to be different?
  - If there weren't surprises, what did you know in advance that allowed you to be accurate in expecting what the analysis would show?
- **Can you see patterns within the overall results?**
  - Did some questions produce answers which were not in line with the others? Why?
  - Did some types or groups of people answer questions very differently than other types or groups? Why?
- **How did results change over time?** Why do you think this is the case?
  - Did they change for some people and not others?

- Did the results for certain questions and not others?

## Making meaningful comparisons

One useful way to understand more about what your results mean is to compare the results against regional and national averages. Visit <http://www.nef-consulting.co.uk/services/wellbeingmeasurement> to compare your scores using the comparison spreadsheet which can be downloaded for free. This will allow you to identify how your scores compare against:

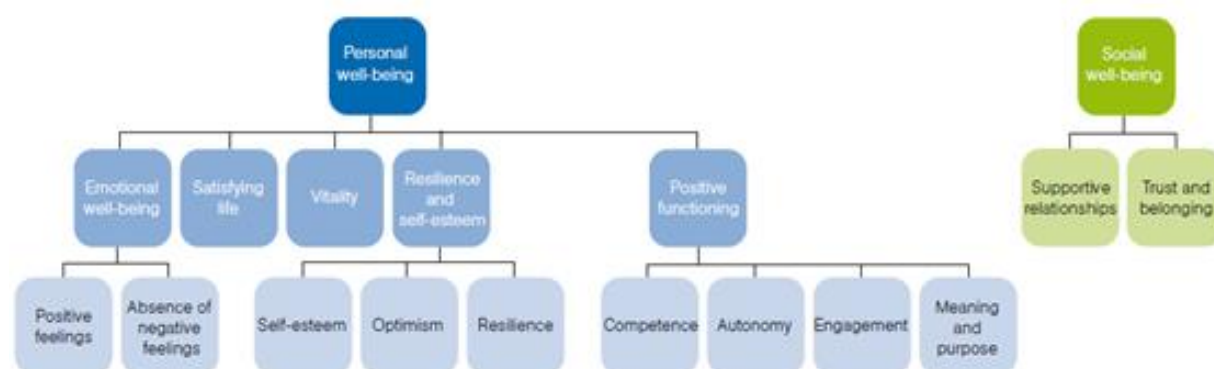
- against the UK national average for SWEMWBS,
  - and understand whether your combined scores are among the top or bottom 20% of scores recorded nationally.
- against the regional average, or national average, for the four ONS well-being questions.
  - and understand whether your combined scores are among the top or bottom 20% of scores as measured through the Integrated Household Survey.

## Taking it further: exploring different aspects of well-being

For many organisations, an interest in well-being measurement may develop over time to a focus on certain aspects of well-being that they want to know about in greater detail. It may be that you want to investigate specific aspects of well-being, some of which might be particularly relevant to the changes you are seeking to understand.

As part of **nef**'s work to develop a potential national accounting system to measure well-being, an indicator framework was developed to understand well-being in more detail: National Accounts of Well-being. In the framework, shown in Figure 2 below, the first distinction is between two domains of well-being: personal well-being and social well-being.

**Figure 2. Indicator structure within the example national accounts framework.**



**Personal well-being** can further be considered to have five components, and social well-being two components. These are shown as the middle row of boxes. (Note that in terms of the diagram on page 7 (dynamic model), *Emotional well-being* and *Satisfying life* fit into the top box – ‘Good feelings day to day and overall’, *Vitality*, *Positive functioning* and *Social well-being*

fit into the middle box – ‘Good functioning and satisfaction of needs’ - and *Resilience and self-esteem* fit into the bottom right box – ‘Personal resources’). Certain components of personal well-being, such as positive functioning, can then be understood to be comprised of several subcomponents. Subcomponents are shown as the bottom row of Figure 1. Social well-being – supportive relationships and a sense of trust and belonging – are also important. The appendix to this handbook features a full description of each box in the table. Fifty well-being questions, asked through the European Social Survey, are combined to produce indicators on the components and subcomponents of well-being, and they are listed at Appendix 3 of the National Accounts [report](#)<sup>8</sup>.

**nef** consulting has worked with many organisations who are interested in finding evidence that their programme is achieving specific outcomes, such as increased self-esteem, which make up part of overall well-being. We have used many of the National Accounts questions to help organisations understand how their work affects specific aspects of well-being. For examples of this work, take a look at this [report](#)<sup>9</sup> published with the Community Development Foundation and the [report](#)<sup>10</sup> *Building Social Capital*.

There are lots of other ways in which you could understand well-being as having different components, and it’s worth remembering that different aspects of well-being are usually related: people who score highly in one component or subcomponent also tend to score highly across the others.

## **Conclusion: results that are ‘fit for purpose’**

### *Analysing and interpreting the toothbrush example*

In the case of toothbrushes, data analysis could tell us that the intervention was more effective among girls than boys in improving dental health. If the difference in dental health results was 1% between boys and girls, this may not be enough of a difference to draw strong conclusions, and may suggest a need for further investigation. A 10% difference would be a better indication of a pattern that meant something. A rule of thumb is that a bigger sample size means that we can be more confident that the difference in scores between two groups of respondents is *statistically significant*.<sup>11</sup> If we had only received responses from 3 boys, and 45 girls, the sample size is too small to rely on to understand whether gender was a factor in the effectiveness of the intervention.

Interpreting a 10% differential in dental health between boys and girls, and assuming each gender had an adequate sample response, we might then try and identify factors which could help to explain the difference.

Once results are collected, organisations are often keen to understand their results in context. Are the results good or bad? What can they be compared against? Evaluating the effectiveness of the dental intervention, we could seek to compare our results about dental health improvement in a number of ways. We could investigate dental health indicators for a similar population (e.g. primary school aged children), or look at another evaluation that had considered a similar or contrasting type of dental health intervention.

The key question you need to make a judgement on is this: are the analysed results of well-being measurement ‘fit for purpose’? Are they *useful enough* to use in improving a service, or evidencing impact? Does

the direction of change over time (up or down) and the magnitude of change (big or small) feel sensible against other information you have about what is happening “on the ground”. If the answer to these questions is yes, then the exercise of collecting well-being data has been worthwhile: the subjects of the intervention are validating the judgements of the organisers, staff and evaluators.



## 4. Using the results of well-being analysis

By the end of this section you should:

- Understand some of the things to consider when deciding how to use results from well-being measurement and analysis
- Understand some of the things to consider when deciding how to disseminate results from well-being measurement and analysis

### Making use of the findings

Measuring well-being is of little benefit unless you act on the results. If you do this, measurement can ultimately help to improve people's lives, for example by pointing to where projects and services can be made more effective in enhancing people's well-being.

How you use your well-being findings will depend on which aspects of well-being you explored, and on the results obtained. However, it might be possible to think about using them in order to:

- **Tailor your intervention.** By using well-being data as a springboard for further exploration with participants, you may be able to improve your programme or project so as to improve well-being outcomes.
- **Demonstrate outcomes and impact.** By showing that people's well-being has improved over time, you may be able to better demonstrate the impact of your project/service
- **Help with fundraising.** By demonstrating evidence on the needs or issues you are trying to address, you may be able to make a funding application more convincing.
- **Bring about service change.** By informing local agencies about the well-being issues facing your community or group, you may be able to encourage service providers to think about how their services affect people's well-being, and to think about adjusting them so as to maximise well-being outcomes.

### Disseminating the findings

Related to the above, measuring well-being is of greater benefit if you share the results. In this way, measurement can help to better inform local residents, organisations, groups and service providers. It is useful to begin by considering who you would like to share your well-being findings with. Your list may include:

- Local residents

- Service users/project participants
- Community and voluntary groups
- Project officers
- Local statutory organisations (local council, NHS)
- Regional or national organisations
- Funding bodies

There are many ways in which you can share and disseminate the results. Select whatever methods are best suited to your needs and resources.

Some ideas you might consider include:

- Showing the findings in a newsletter
- Distributing a short report to local agencies/project participants/local residents/local media
- Presenting the findings at an event or meeting
- Reporting to funders
- Using in application to funders

## 5. Checklist

Congratulations! You have nearly reached the end of our handbook for measuring well-being. By now we hope you are:

- Familiar with the **concept** of well-being, the difference between well-being and its drivers, and **nef**'s dynamic model of well-being
- Familiar with issues around **measuring** well-being
- Familiar with some useful steps to meaningfully **analyse** and **interpret** your results.
- Familiar with some of the things to think about when deciding **how to use results** from well-being measurement

## 6. Find Out More...

This section provides some information on other resources that may be of use to you in understanding and measuring well-being.

### *Well-being Surveys*

The North West Mental Well-being Survey 2009

<http://www.nwph.info/nwpho/Publications/NorthWestMentalWell-being%20SurveySummary.pdf>

The ONS Spotlight on Subjective Well-being

[http://www.statistics.gov.uk/articles/social\\_trends/spotlight-on-subjective-well-being.pdf](http://www.statistics.gov.uk/articles/social_trends/spotlight-on-subjective-well-being.pdf)

### *Measuring well-being*

**nef's** National Accounts of Well-being – *Measuring Well-being*

<http://www.nationalaccountsofwellbeing.org/learn/measuring/>

Local Wellbeing: Can we measure it?

Steuer, N. and Marks, N. (2008). *Local Wellbeing: Can we measure it?* London; The Young Foundation.

[http://www.youngfoundation.org/files/images/YF\\_wellbeing\\_measurement\\_web.pdf](http://www.youngfoundation.org/files/images/YF_wellbeing_measurement_web.pdf)

The Young Foundation's WARM measure

Bacon, N. and Mguni, N. (2010). *Taking the temperature of local communities: The Well-being and Resilience Measure – WARM*. London: The Young Foundation.

[http://www.youngfoundation.org/files/images/YF\\_WARMREPORT\\_Screen.pdf](http://www.youngfoundation.org/files/images/YF_WARMREPORT_Screen.pdf)

The Mental Well-being Impact Assessment toolkit

Cooke, A., Friedli, L., Coggins, T., Edmonds, N., Michaelson, O'Hara, K., Snowden, L., Stansfield, J., Steuer, N. and Scott-Samuel, A. (2011). *The Mental Well-being Impact Assessment toolkit*. London: NMH DU.

<http://www.apho.org.uk/resource/item.aspx?RID=95836>

### *Increasing well-being*

**nef's** 5 ways to well-being

Aked, J., Marks, N., Cordon, C. and Thompson, S. (2008). *Five Ways to Wellbeing: The evidence*. London: **nef**.

[http://www.neweconomics.org/sites/neweconomics.org/files/Five\\_Ways\\_to\\_Well-being\\_Evidence\\_1.pdf](http://www.neweconomics.org/sites/neweconomics.org/files/Five_Ways_to_Well-being_Evidence_1.pdf)

### *Local and community level well-being*

The role of local government in promoting well-being

Aked, J., Michaelson, J. and Steuer, N. (2010). *The role of local government in promoting well-being*. London: Local Government Improvement and Development.

[http://www.local.gov.uk/c/document\\_library/get\\_file?uuid=867e0406-35a5-4e91-910d-6b13305d2319&groupId=10171](http://www.local.gov.uk/c/document_library/get_file?uuid=867e0406-35a5-4e91-910d-6b13305d2319&groupId=10171)

Improving community health and well-being

Foot, J. (2010). *A Glass Half Full: How an asset approach can improve community health and well-being*. London: Local Government Improvement and Development.

<http://www.idea.gov.uk/idk/aio/18410498>

### *Evaluation*

Monitoring and evaluation in the charity sector

Cupitt, S & Willis, J. (2011). *Next Steps: Monitoring and evaluation on a shoestring*. London: Charities Evaluation Services.

<http://www.ces-vol.org.uk/downloads/meonashoestring-795-803.pdf>

Measuring health improvement

Garrow, V. (2011). *Measuring impact in health improvement: An accessible guide for health practitioners*. London: Local Government Improvement and Development

<http://www.idea.gov.uk/idk/aio/25631442>

### **nef consulting**

**nef consulting** is the social enterprise and consultancy arm of **nef**. It draws on and adapts **nef's** ideas and applies innovative approaches to help a range of public, private and third sector organisations develop better metrics and make better decisions.

<http://www.nef-consulting.co.uk/services/>

### *Children's well-being, including measurement*

The Children's Society Good Childhood Index

<http://www.childrenssociety.org.uk/what-we-do/research/initiatives/well-being/background-programme-0>

### *Well-being at work*

**nef consulting**

<http://www.well-beingatwork.net/>

# Appendix: National Accounts Of Well-Being - Components and Subcomponents

Within the National Accounts of Well-being, the headline personal well-being indicator is made up of five main components, some of which are broken down further into subcomponents. These are:

1. **Emotional well-being.** The overall balance between the frequency of experiencing positive and negative emotions, with higher scores showing that positive emotions are felt more often than negative ones. This is comprised of the subcomponents:

*Positive feelings* – How often positive emotions are felt.

*Absence of negative feelings* – The frequency with which negative emotions are felt, with higher scores representing less frequent negative emotions.

2. **Satisfying life.** Having positive evaluation of your life overall, representing the results of four questions about satisfaction and life evaluations.
3. **Vitality.** Having energy, feeling well-rested and healthy, and being physically active.
4. **Resilience and self-esteem.** A measure of individuals' psychological resources. It comprises the subcomponents:

*Self-esteem* – Feeling good about yourself.

*Optimism* – Feeling optimistic about your future.

*Resilience* – Being able to deal with life's difficulties.

5. **Positive functioning.** This can be summed up as 'doing well'. It includes four subcomponents:

*Autonomy* – Feeling free to do what you want and having the time to do it.

*Competence* – Feeling accomplishment from what you do and being able to make use of your abilities.

*Engagement* – Feeling absorbed in what you are doing and that you have opportunities to learn.

*Meaning and purpose* – Feeling that what you do in life is valuable, worthwhile and valued by others.

The headline social well-being indicator of National Accounts of Well-being is made up of two main components:

1. Supportive relationships. The extent and quality of interactions in close relationships with family, friends and others who provide support.
2. Trust and belonging. Trusting other people, being treated fairly and respectfully by them, and feeling a sense of belonging with and support from people where you live.

In addition to these indicators, as an example of a well-being indicator within a specific life domain, a satellite indicator of well-being at work has also been created. This measures job satisfaction, satisfaction with work-life balance, the emotional experience of work, and assessment of work conditions.

# Endnotes

<sup>1</sup> [http://www.biglotteryfund.org.uk/wellbeing\\_evaluation\\_tools.pdf](http://www.biglotteryfund.org.uk/wellbeing_evaluation_tools.pdf)

<sup>2</sup> B. Fredrickson (2001) *The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions*. *American Psychologist*, 56, 218-226.

<sup>3</sup> See Stoll, L. (2012). *Well-Being Evidence for Policy: A Review*. London: nef for a review of the main drivers of well-being

<sup>4</sup> Thompson, S., & Marks, N. (2008). *Measuring well-being in policy: issues and applications*. Report commissioned by the Foresight Project on Mental Capital and Well-being, Government Office for Science.

<sup>5</sup> If you plan to use the SWEMWBS, you are asked to inform the people who developed it, as they are keen to keep a record of who is using it and how it is being used. Details on how to do this can be found in the appendix to this handbook.

<sup>6</sup> The user guide for the SWEMWBS measure is available at: <http://www.healthscotland.com/understanding/population/Measuring-positive-mental-health.aspx>. Note that permission must be sought for use of the measure via the email address given on this website, although it is free to use.

<sup>7</sup> *Note:* the SWEMWBS questionnaire is designed for people to complete themselves, so completing it through interview is far from perfect. However, we recognise that with issues around literacy etc. it may not be possible for respondents to 'self report', and the questionnaire may have to be administered through interview.

<sup>8</sup> <http://cdn.media70.com/national-accounts-of-well-being-report.pdf>

<sup>9</sup> <http://www.cdf.org.uk/wp-content/uploads/2011/12/SROI-Report-FINAL.pdf>

<sup>10</sup> <http://www.nef-consulting.co.uk/wp-content/uploads/Growing-Social-Capital-SROI-March-2012.pdf>

<sup>11</sup> The statistical significance of a result is the probability that the observed relationship (e.g., between variables) or a difference (e.g., between means) in a sample occurred by pure chance ("luck of the draw"), rather than because there is a real difference or relationship in the population. Findings are "statistically significant" when we have calculated that the probability of getting a different result, if we repeated the data collection under the same conditions again, but with different respondents making up the sample, is very low (typically, a 5% chance is used as a threshold): see [http://www.statsoft.com/textbook/elementary-statistics-concepts/#What is "statistical significance" \(p-level\)](http://www.statsoft.com/textbook/elementary-statistics-concepts/#What%20is%20%22statistical%20significance%22%20(p-level))



Written by: Juliet Michaelson, Sorcha Mahony and  
Jonathan Schifferes

Cover image: Indigo Skies Photography via Flickr

**new economics foundation**

3 Jonathan Street  
London SE11 5NH  
United Kingdom

Telephone: +44 (0)20 7820 6300  
Facsimile: +44 (0)20 7820 6301  
E-mail: [info@neweconomics.org](mailto:info@neweconomics.org)  
[www.neweconomics.org](http://www.neweconomics.org)

Registered charity number 1055254  
© July 2012 **nef** (the new economics foundation)



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.  
To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/> and [www.neweconomics.org](http://www.neweconomics.org)