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On the bright side

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**Developing a questionnaire for charities
to measure children's well-being**



On the bright side

**Measuring the impact of charities
on children's well-being**

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“Do you believe in mental telepathy?” [the psychiatrist asked]

“No. Do you?” [Feynman responded]

“Well, I’m keeping an open mind.”

“What? You, a psychiatrist, keeping an open mind? Ha!” It went on like this for quite a while.

Then at some point near the end he says, “How much do you value life?”

“Sixty four.”

“Why did you say ‘sixty four’?”

“How are you supposed to measure the value of life?”

“No! I mean, why did you say ‘sixty four’, and not ‘seventy three’, for instance?”

“If I had said ‘seventy three’, you would have asked me the same question!”

An extract from Richard Feynman’s interview with a military psychiatrist from *Surely you’re joking Mr Feynman* by R. Feynman.¹ Richard Feynman was rejected for military service on medical grounds.

Introduction

This paper describes the first stages in the development of a questionnaire that charities can use to measure their impact on children's well-being. It is intended to open up the discussion of how and why charities should measure well-being.

NPC believes that funding should go to those charities that have the greatest impact on people's lives. But measuring the effect of a charity on someone's whole life is difficult and charities' total impact is rarely captured. If charities could measure improvements in the well-being of the people they help, they could articulate their impact more fully. In turn this will help charities to improve and encourage donors.

We welcome your comments and suggestions in the future development of this questionnaire.

What is well-being?

When trying to define well-being, we could take a number of different approaches. We could think about how happy people are feeling right now, how able they are to achieve their goals or how well educated and healthy they are.^{2,3} Because well-being has become the focus of so many different professionals, from sociologists to economists and from policy-makers to politicians, there is no single, clear definition of what well-being is.⁴⁻⁶

In the context of this report, 'well-being' is an umbrella term that covers everything a child needs to lead a good life: from friends and family to school and physical fitness.

It is important to cover all aspects of a child's life when considering his or her well-being. A child could have a great relationship with her family, yet she might be bullied. A child might be happy surrounded by his friends, yet have trouble paying attention in school.

During the development of the questionnaire we aim to give particular attention to what children themselves consider to be important for their own well-being.

Well-being and charities

The charitable sector makes a key contribution to well-being in the UK. Projects run by charities, whether funded by the state or by voluntary income, are aimed at tackling a variety of disadvantage and disability. However, it has

proven difficult to identify the impact that these programmes have on people's well-being.

For example, **Salisbury World** is a charity that helps refugee children integrate into local schools. The impact it makes, however, is far more wide-reaching than just improved literacy and exam results; it also offers advice and social activities that make the children feel they belong to their communities and help them to cope with their traumas. Its wider service means that it is expensive, but the longer-term benefits of its work far outweigh this as the children it works with grow into adults who are able to contribute fully to society.

Currently, the only way a charity like Salisbury World can quantify the outcomes of its work is through improved exam results. Developing a tool that measures changes in well-being would help charities like this to demonstrate the broader benefits of their work.

The idea that the broader benefits of charities should be measured is not new. One particularly successful approach to this problem is Social Return On Investment (SROI), developed by the Roberts Enterprise Development Fund.⁷ SROI attempts to capture the value of social benefits by comparing the amount of money invested with all of the financial benefits of a project. For Salisbury World this might include the increased wages that a child would earn after achieving better exam results.

The results of this approach have been clear. The Government's 'Invest to Save' approach has channelled money into projects aimed at improving public services now in order to save money in the future.⁸ Private donors have been attracted to charities that can demonstrate future financial benefit.

SROI, however, currently lacks the tools to account for non-financial benefits, such as increased self-confidence or better family relationships.

NPC Tools

NPC's work on well-being is part of the remit of a new team—NPC Tools—that is developing tools to help charities measure, analyse, manage and report their results.

More information on current and future work at NPC Tools can be found at www.npctools.org.uk.

In an environment where the priority of most funders is value for money, providing hard evidence of impact on well-being will become more and more crucial.

As the measurement of well-being by charities becomes more commonplace, a single recognisable scale of well-being needs to be created. This could lead to a framework that integrates costs and benefits in terms of well-being with financial costs and benefits.

An identifiable scale of well-being is also useful when considering 'distance travelled'. As someone is helped by a charity, they do not move directly from a state of vulnerability towards the final outcome. It can be useful to look at someone's progress as they reach their goal, for example, how well a child feels they fit in at school even if their English is not yet fluent.

All of this information can be used to piece together a more accurate, complete and subtle picture of a charity's impact—what works and what does not. A charity that measures well-being can track its effectiveness as it tries to improve and can demonstrate these results to potential donors.

Interest in well-being is growing with both local and central government looking to improvements in well-being as a measure of success. In an environment where the priority of most funders is value for money, providing hard evidence of impact on well-being will become more and more crucial. Including well-being as an outcome could make the difference between a service being regarded as cost-effective or not.

Growing importance of well-being

The recent increase in research into well-being has been driven, in part, by a desire to understand how policies impact on a person's whole life, rather than on just a narrow objective.^{9, 10} It has also been motivated by recognition that improved well-being is the underlying aim of policies such as reducing unemployment. Employment is good only insofar as it improves the income, inclusion and overall well-being of those who are employed.

The Department for Environment, Food and Rural Affairs (Defra) has made well-being an integral part of its concept of sustainable development. A set of provisional well-being measures is presented in 'Sustainable Development Indicators in Your Pocket 2007', which the UK Government uses to benchmark progress towards its sustainable development goals.¹¹

Local authorities, which are the single largest funder of charities, have had the power to commission services on the basis of well-being since 2000.^{*} This means that they can consider improvement in well-being as well as cost when giving out contracts. However, there is

no universally recognised standard for reporting well-being, meaning that this power has not been fully exploited.

Recent policy has highlighted the importance of children's well-being in particular. The cornerstone of the Government's strategy to improve children's well-being has been the development of the Every Child Matters (ECM) framework, published in 2004.[†] This framework lays out five outcomes that underpin the development of children's services. These outcomes are:

- be healthy;
- stay safe;
- enjoy and achieve;
- make a positive contribution; and,
- achieve economic well-being.

The indicators and evidence required for each of these outcomes have shaped local authorities' approach to the provision of children's services over the last three years.

Last year, UNICEF (the United Nations Children's Fund) published a report on children's well-being in rich countries that rates the UK as the worst 'rich country' in terms of child well-being.¹² This received wide media coverage and prompted reflection from politicians that past policies may not have focused on what is 'really important'. Al Aynsley-Green, the Children's Commissioner for England at the time, commented: 'It's very much in line with what children and young people are telling me about their lives today and I think the shocking conclusion is that as a nation we have been failing our children and young people.'

Yet what policies or programmes contribute to better well-being? Although there has been a lot of interest in using sets of indicators to measure and track children's well-being, there has not been the same enthusiasm for using well-being as a way to assess the impact of specific policies or projects. This report aims to address this gap by describing how charities might use a well-being measure to articulate the results of their work.

Developing a well-being questionnaire

Several scales that measure well-being have already been developed by psychologists and sociologists. The problem is that these existing measures are not easily transferable to the voluntary sector.

However, NPC believes that these different measures provide a useful starting point for constructing a tool that can be used by

^{*}Local Government Act (2000).

[†]Children Act (2004).

charities. Our focus is on devising a tool that can measure children's well-being; specifically children aged 11 to 16 in the UK. We chose to focus on the UK in the first instance because this is where NPC's expertise currently lies. The age range was chosen as a starting point to avoid literacy problems.' This tool is designed to be off-the-shelf for charities that do not have the resources to create a well-being measure themselves.

The questionnaire presented here is not designed to replace existing measures already in place. It is a broad-brush measure and therefore unsuitable as a single tool for measuring treatment for depression or anxiety, for example, where highly specific, clinical scales are more appropriate. It is intended to complement these more specific measures and to fill the enormous gap for charities that do not have the tools to measure some, or any, of their results.

It is important to continue measuring 'harder' outcomes such as exam results because: (a) they are much easier to collect, (b) they are important in themselves, and (c) it is useful to see how these factors correlate with broader well-being measures.

Children's well-being has been chosen as a starting point due to the current policy interest in the area. In the future NPC plans to produce well-being questionnaires aimed at other groups of people eg, adults, young children, children and adults with learning difficulties and older people. More research is also needed into how the concept of well-being should be used when making funding decisions.



Photograph supplied by Family Welfare Association.



Photograph supplied by Community Links

Defining and measuring well-being

This section looks at how the concept of well-being is viewed today and how important it is for charities to measure well-being. A range of well-being measures is presented from a variety of disciplines, and the suitability of these measures for use by charities is assessed.

Defining well-being

In 1948, the founders of the World Health Organisation (WHO) defined health as 'physical, mental and social well-being, not merely the absence of disease or infirmity'. This broad definition of what it means to be 'well' underpins the modern concept of well-being.

In 2006, Defra published a review that identified four main accounts of personal well-being: preference satisfaction—based on fulfilling our desires; flourishing accounts—based on the satisfaction of certain psychological needs; hedonic accounts—based on how we feel; and evaluative accounts—based on how we think and feel.¹³

These varying accounts reflect the range of disciplines that have focused on well-being, from economics to sociology to psychology. Different disciplines tend to use different terms: happiness, life satisfaction, subjective well-being and quality of life are all used interchangeably, confusing the discussion.

Despite the many definitions of well-being, there are three main points of common ground:

- Well-being is more than simply the absence of illness or pathology.
- Well-being is the sum of several different aspects or 'domains' of life, including physical, material, social etc.
- Well-being is an important area for future policy as it accounts for elements in life experience that cannot be defined or explained by economic growth or other indicators such as exam results or employment figures.¹⁴

Children's well-being in particular has become central in the development of policies to improve children's lives. This includes looking at children's present as well as their future, which is often referred to as well-becoming.

Why well-being?

Well-being vs happiness

Just as the concept of well-being is gaining currency in the policy world,^{9,10} so is the idea of 'happiness'. Happiness is most often measured as the answer to a single question. This is often framed as, 'Overall, how satisfied are you with your life?'

Answers to this question have proved to be robust and to correlate positively within populations with leisure time, health and income up to a certain threshold.¹⁵ Happiness scales have been used to understand how and to what extent wages, relationships, sex and a whole host of other factors affect our happiness.¹⁶⁻¹⁸

However, because a simple happiness measure has only one dimension, it cannot be used to explain how or why a policy has a particular effect. The use of a multi-dimensional scale to measure well-being makes it easier to understand and to give greater weight to those things children themselves believe are important to their happiness.

Over the last 50 years, happiness in the developed world has not increased despite massive improvements in our health and standard of living.¹⁹ This has led to doubt over whether happiness is a useful measure over time.

Well-being vs well-becoming

There are two ways of thinking about children's well-being. On the one hand, there is the need to concentrate on children's future well-being (ie, preparing children for a productive and happy adulthood), or 'well-becoming'. On the other hand, it is also important to focus on childhood as a stage in and of itself and concentrate on the present well-being of children.²⁰

Both perspectives are necessary concerns for public policy. However, a contradiction between well-being and well-becoming cannot be ruled out. For example, there is evidence that supports the hypothesis that the smaller the family, the higher the probability that children will perform well in school and succeed

Measuring well-being provides charities with the opportunity to capture what are often thought of as ‘intangible’ or even ‘immeasurable’ outcomes.

educationally, socially and economically as adults. However, children also often prefer to have siblings.²¹

Such contradictions normally arise when a child already has an acceptable level of well-being. When attending to a child’s basic needs, well-being and well-becoming are often the same thing. In this study we have concentrated on well-being, as charities generally target these basic needs, for example, by providing emotional support for children in crisis.

Using a well-being measure for charities

Having a well-being measure for charities would serve several purposes.

Capturing broader benefits: Measuring well-being captures broader benefits that might otherwise be overlooked. For example, a charity providing in-school counselling will not only cut truancy and increase exam results, but will also improve a child’s mental health and behaviour. This, in turn could improve a child’s self-esteem and relationship with their friends and family. Measuring well-being provides charities with the opportunity to capture what are often thought of as ‘intangible’ or even ‘immeasurable’ outcomes.

Looking more deeply at different areas within well-being: A multi-dimensional scale can help to see where the charity is having the most impact on a child’s life. With enough data, it should be possible to see how an increase of well-being in one area (eg, family relationships) might contribute to well-being in other areas (eg, school and behaviour).

Improving how charities run: Understanding their broader impact can help charities to improve, building on their weaknesses and learning from their strengths. It can also provide the basis for sharing lessons with other organisations.

Communicating benefits to funders: Information on well-being can be used to make decisions on funding by both statutory and voluntary funders. Funders can appreciate the further impact that charities have beyond that captured by a narrow measurement of results and the knock-on effects of targeting one aspect of well-being.

A basis for allocating funds: The potential of a well-being measure to compare the effectiveness of different projects with the same desired outcome (namely increased well-being) is great. This measure will allow a diverse range of charitable activities to be assessed on the same scale.

However, the temptation to compare raw numbers must be avoided. Before comparisons

can be made between projects, a framework must be established that accounts for differences in background and severity of need. The development of this framework will be part of NPC’s continuing work on well-being.

Measuring well-being

Well-being is obviously a useful thing to measure, but doing so is relatively complex. However, a number of tools have already been devised to measure well-being. A brief summary of some of these is included in Table 1.

Despite the range of questionnaires designed to assess child well-being as a whole or various aspects of it, individually none of these questionnaires is a suitable tool for charities. In order to be useful for both charities and funders, a successful tool must meet all of the following criteria:^{*}

- easy to use ie, quick to administer and answerable by the children themselves;
- relevant to all aspects of a child’s well-being;
- comparable across time and people; and,
- sensitive enough to capture the impact of charities’ work.

Existing tools do not fulfil all these conditions. Some cover only one or two aspects of well-being. Others, like the UNICEF measure, include indicators such as ‘percentage of infants born with low birth weight’. These kinds of questions are neither appropriate for use in a question-based tool answered by children nor statistically significant in the small groups of children which charities often deal with.

This does not mean that it is impossible for charities to measure well-being. Instead, existing measures provide the building blocks to devise a more appropriate tool.

Summary

Well-being is a broad concept, encompassing all aspects of life. It is a particularly useful concept for charities, which often have a hard time communicating the broad benefits of their work.

A wide variety of measures already seek to assess well-being or aspects of it. These range from extensive quality of life questionnaires to asking simply ‘how satisfied are you with your life?’. Although most of these measures are well suited to the specific task they were designed for, none of them meets all the criteria required by charities to measure their results.

For this reason, we have designed our own questionnaire, which charities can use to measure children’s well-being. In the next section, we describe how we went about developing this questionnaire.

Type of Scale	Description	Suitability for use by charities	Examples
Quality of Life	<p>Quality of Life (QoL), also referred to as Health-related Quality of Life (HRQoL), is often used in the context of healthcare. QoL can be defined as patients' appraisal of their current level of functioning and satisfaction with it, compared to what they perceive to be ideal.</p> <p>The development of QoL measures in healthcare has been encouraged both by the need to assess the relative merits of different health programmes and a desire to be able to assess the wider impact of clinical therapies. They are normally used in randomised clinical trials and in audits by healthcare managers or clinicians.</p> <p>Measures vary in the degree to which they are developed to measure a specific disease or are capable of application to many or all illness states.</p>	<ul style="list-style-type: none"> • One of the advantages of QoL is the fact that it is comprehensive, measuring well-being in multiple domains such as physical, mental and social. • A disadvantage is that often these scales are lengthy and designed for use by professionals. 	<ul style="list-style-type: none"> • Child Health Questionnaire (CHQ).²² A family of generic instruments for children between 5 and 18. • Pediatric Quality of Life Inventory (PedsQL).²³ Combines disease specific modules to a general scale. • KIDSCREEN.²⁴ Developed on the basis of children's opinions about what constitutes HRQoL. Focus groups discussions were organised to explore HRQoL as perceived by healthy children.
Behavioural screening	<p>Behavioural screening can help clinicians or researchers in paediatric healthcare settings to screen patients for Attention-Deficit Hyperactivity Disorder (ADHD), hyperactivity, aggressive behaviour etc.²² They are also sometimes used to measure the output of charities and psychosocial programmes.^{25, 26}</p>	<ul style="list-style-type: none"> • Behavioural screening is a very useful way of assessing one particular aspect of child well-being, but none of the scales are broad enough to measure a charity's full impact. 	<ul style="list-style-type: none"> • Child Behaviour Checklist (CBCL).²² It is often used to measure a child's change in behaviour over time or following a treatment. • Goodman's Strengths & Difficulties Questionnaire (SDQ).²⁷ The scale consists of 25 items divided into five scales: conduct problems, hyperactivity, emotional symptoms, peer problems and pro-social behaviour.



Photograph supplied by Pyramit.

Type of Scale	Description	Suitability for use by charities	Examples
<p>National surveys and indicators</p>	<p>Sociologists and policy-makers are increasingly concerned about monitoring a nation's well-being and children's well-being in particular. Sample surveys and indicators of various kinds collected routinely by international organisations are the main sources of information available on child well-being and used by policy-makers.²⁸</p> <p>The idea is to look at nation-wide (or region-wide or world-wide) data and choose a group of indicators to construct a well-being index.</p>	<ul style="list-style-type: none"> • A lot of baseline data is available, so conclusions about 'normal' well-being are possible. • The indicators are often designed for large samples and are not suitable for small organisations to measure eg, levels of teenage pregnancy. • Even if an indicator is important to well-being it may not be possible for a charity working with children aged 11 to 16 to change it (eg, per cent of children with low birth weights), so it cannot be used to monitor progress. • Often these surveys are extremely lengthy. 	<ul style="list-style-type: none"> • UNICEF's State of the World's Children.¹² In its 27th year, this annual review of basic indicators on children's survival and development has helped to create a global awareness of the need to monitor how children fare. • Health Behaviour in School-age Children Survey (HBSC).²⁹ Cross-national research study conducted in collaboration with the WHO. • Children's Society National Young People's Survey 2005.³⁰ A large UK-based survey of school-age children. • Programme for International Student Assessment (PISA).³¹ Considers how far students near the end of compulsory education have acquired the knowledge and skills that are essential for full participation in society. Although education focused, it also assesses family resources and structure and pupils' own perspective of their school life and peers. • KIDS COUNT.³² Composite index used to track the status of US children. • Department for Environment, Food and Rural Affairs.³³ Defra has assembled a list of well-being indicators, which could be used to monitor the well-being of the nation. • Ofsted Tellus2 Survey 2007.³⁴ An online survey that gathers the views of children and young people.

Type of Scale	Description	Suitability for use by charities	Examples
Subjective well-being	<p>Subjective well-being (SWB) is a field of psychology that attempts to understand people's evaluations of their lives. These evaluations may be primarily cognitive (eg, life satisfaction or marital satisfaction), or may consist of the frequency with which people experience pleasant emotions like joy, and unpleasant emotions like depression.³⁵</p> <p>SWB is defined in terms of the internal experience of the respondent. The usual method of measuring SWB is through self-report surveys in which the respondent judges and reports his or her life satisfaction, and the frequency of his or her pleasant and unpleasant emotions.</p> <p>A growing consensus has emerged within the research community that these global measures do accurately reflect individuals' feelings about their own lives.¹⁴</p>	<ul style="list-style-type: none"> Subjective well-being is easy to measure; however, there are concerns that it does not properly account for aspects of life we consider important beyond simple happiness, for example the ability to cope with problems. 	<ul style="list-style-type: none"> Multidimensional Students Life Satisfaction Scale (MSLSS).³⁶ A scale designed to provide a multidimensional profile of children's life satisfaction judgements. Satisfaction with Life Scale (SWLS).³⁷ A short, five-item scale designed to measure global cognitive judgements of one's life. <p>Other examples of subjective measures of well-being include:</p> <ul style="list-style-type: none"> 'Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy or not too happy?' (from the US General Social Survey³⁸). 'On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?' (Eurobarometer Survey Series³⁹).
Other scales	<p>There are numerous scales that measure one specific aspect or another of well-being.</p>	<ul style="list-style-type: none"> These scales cannot capture a complete picture of well-being on their own, but do look at aspects of well-being not considered by other scales. 	<ul style="list-style-type: none"> Psychological Resilience Scale.⁴⁰ Tries to measure the ability of individuals to cope successfully with change. Curiosity Scale.⁴¹ Used by the New Economics Foundation in their 'Power and potential of well-being indicators' report. This survey asks children if they agree or disagree with statements describing themselves such as 'I like to search for new ways to do things'.



Photograph supplied by Volunteer Reading Help.

Designing the questionnaire

2

This section describes the process of designing a questionnaire that charities could use to assess their impact on children's well-being. As discussed in the previous section, no existing questionnaire is entirely suited to charity use. However, we have drawn on many existing questionnaires, both for their approach to understanding children's well-being and for individual questions.

A questionnaire for children

The measures of well-being described in the previous chapter are a mixture of questionnaires. Some are completed by the children themselves, some are completed by parents and others are completed by teachers or clinicians. They also contain indicators based on large samples, such as infant mortality.

For the sake of practicality and flexibility, we have decided to produce a questionnaire that would be answered solely by the children themselves. To avoid literacy problems, we chose to focus on older children in the 11 to 16 year old range. This means that the questionnaire will be less robust; a question answered by three different people will always be more reliable than the opinion of the child alone. However, many charities do not have access to children's parents or teachers and we do not want to create a tool that cannot, by design, be used by a large number of organisations. In the future, NPC will explore the possibility of adding parent- or teacher-completed questionnaires.

Domains

As mentioned in Section 1, there is general consensus that it is important to recognise the multi-dimensional nature of children's lives when measuring their well-being. This means that a range of aspects including economic situation, education, family or health all play a role in children's well-being.

The choice of dimensions, or 'domains', varies considerably between questionnaires and depends on the research objectives. Authors normally recognise that the domains they choose do not provide a definite categorisation and may not be the only domains, or even the most important domains.

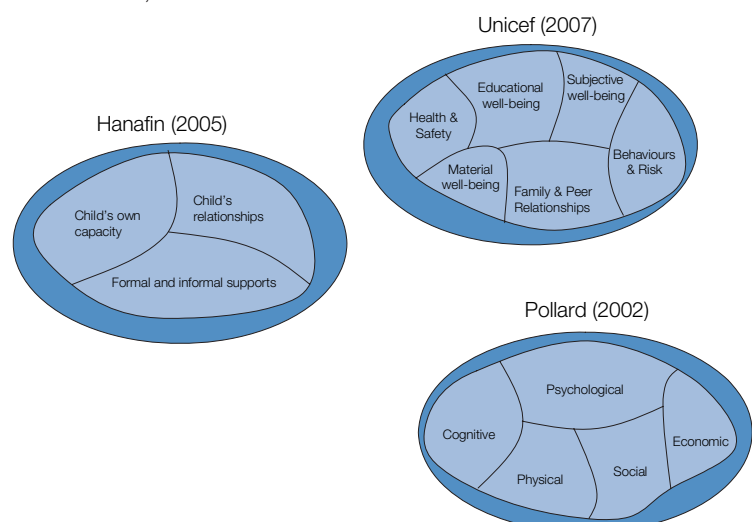
When comparing well-being across different countries, the necessity of applying universal concepts, while at the same time being

culturally sensitive, is the main objective when choosing domains. However, an author looking at the well-being of children in a particular school is not constrained in the same way. Authors often start by defining the set of domains as a conceptual framework around which they build their measurement of children's well-being.

Several literature reviews have identified distinct domains for describing child well-being but there is no consistency in how categorisation takes place.⁴² For example, Pollard et al identified five distinct domains for assessing child well-being: physical, psychological, cognitive, social and economic.⁴³ Ben-Arieh also identified five distinct domains, but defined them differently: civic life skills; personal life skills; safety and physical status; children's activities; and children's economic status.²⁰ There are six domains included in the UNICEF report 2007, while the New Economics Foundation's report on the well-being of young people in Nottingham uses a two-dimensional model of well-being: life satisfaction and personal development (the Curiosity Scale).^{12, 41}

Figure 1 shows three of these examples. If we think of the light blue ovals representing children's well-being, then the darker blue areas are the part of well-being covered by the different studies. The domains are just a way of dividing the different issues that make up well-being.

Figure 1: The concept of well-being can be represented as the sum of individual domains. The choice of domains varies significantly; however, there is a lot of overlap. Schemes represented here are: Hanafin 2005,⁴² UNICEF 2007,¹² Pollard 2002.⁴³



In most cases there is much overlap in the categorisation of domains, and most frameworks incorporate domains of health or physical well-being, education, economic security or economic well-being. Behavioural development and psychological well-being are also widely covered, as are family and social relationships.^{42, 44}

NPC’s survey

When choosing the domains for our study, we looked at these concepts as well as the context in which the questionnaire would be used. The domains should not overlap but should cover *all* the topics that are seen as important when defining well-being.

We chose ten quite specific domains, rather than choosing a smaller number of broader domains, to ensure that we captured all aspects of child well-being affected by charities:

- Physical well-being
- Psychological well-being
- Behaviour
- School
- Relationships with family

- Relationships with friends
- Resilience
- Living environment*
- Subjective well-being
- Material well-being

Table 2 outlines in more detail exactly what we were trying to measure in each separate domain. We used these domains to structure the questions we had already gathered from other sources.

Choosing the questions

The first step in our process was to gather questions from the established well-being measures described in Section 1.[†]

At this stage we had more than 400 questions. All of these questions were framed within our domains; some domains contained more than 50 questions, some contained only 10.

One of the requirements for the questionnaire was that it should not be too long. Ideally it should take less than 15 minutes to complete. Practically this meant choosing about 40 questions from our list of 400.

Table 2: Domains chosen for the well-being questionnaire along with details of what each domain is trying to measure. For the relation between domains, clusters and indicators see Bradshaw 2007.⁴⁵

Domain	What we are trying to measure
Physical well-being	<ul style="list-style-type: none"> • Physical health • Fitness
Psychological well-being	<ul style="list-style-type: none"> • Depression • Mood • Level of worry
Behaviour	<ul style="list-style-type: none"> • Risky behaviours • Level of conflict • Feelings towards others
School	<ul style="list-style-type: none"> • Happiness in school • Safety in school • Trouble with school work
Family	<ul style="list-style-type: none"> • Happiness at home • Amount of quality time with parents • Feelings about whether parents care about them or not
Friends	<ul style="list-style-type: none"> • Feelings towards friends • Fun with friends • Level of loneliness
Resilience	<ul style="list-style-type: none"> • Capability to overcome problems • Positive outlook
Living environment	<ul style="list-style-type: none"> • Feelings towards neighbourhood • Feelings towards house • Safety
Subjective well-being	<ul style="list-style-type: none"> • Satisfaction with life • Self-esteem
Material	<ul style="list-style-type: none"> • Economic background compared with national baseline • Perception of living comfortably/having enough

*This domain was added later during the feedback stage.

†See Appendix 1 for sources of questions used in the survey.

First we talked to experts in various fields to clarify what exactly each domain was trying to measure. For instance, in the school domain we wanted to measure not only happiness in school but also safety in school and difficulties with school work.

After eliminating overlapping questions, we then excluded the questions that did not fit with what we were trying to measure.

Positive and negative questions

During this process there was always an effort to include positive as well as negative questions. Traditionally, there has been a focus on negative measures of child well-being (such as distress and disability), but there is a growing trend towards focusing on more positive measures (such as success in school and satisfaction with life).⁴⁶ This fits in with the idea that well-being is more than just the absence of negative aspects in a child's life.

Since the literature on well-being focuses on both the positive and negative aspects of a child's life, it made sense that the final questionnaire found a balance between the two measures.⁴²

Establishing a baseline

Another consideration during the process of eliminating questions was the availability of existing data to give us a baseline, providing an idea of how the 'average' child might respond. These are questions for which we have national answers (from HBSC or PISA surveys, see Table 1), enabling us to compare scores with national averages in the future.

Gathering consensus

Taking all of this into consideration, we narrowed the focus down to 50 questions (five questions per domain). To reduce the number further and in order to establish consensus on selecting the final questions, we asked NPC analysts and consultants, as well as external experts,[‡] for feedback on the questionnaire; in particular, we asked people to highlight those questions they thought were more or less important. The aim was to provide a structured approach to making a subjective decision. Participants were asked to rate the questions as 'important', 'more or less important' and 'less important'. Experts rated the questions as well but gave more extensive qualitative feedback.

Using the overall ratings and the more specific feedback from experts, the number of questions was cut down to 38. Based on the experts' feedback, two questions that had been eliminated in the first instance were re-introduced, and four questions that had low ratings were replaced by questions forming the new domain 'Living environment'. This left us with the 40-question questionnaire that was

used for our pilot study. (See Appendix 1 for pilot questionnaire).

Wording the questions

As the questions had been gathered from different sources, they were all framed in very different ways. We reformulated all of the questions either as first-person statements, which the child could agree or disagree with (eg, 'I have a happy home life.'). or as direct questions about the frequency of certain situations or emotions (eg, 'have you been bullied?').

The questions were also worded so that there was a balance between positive and negative phrases. For example, you can ask if someone likes their house or whether they wished they lived in a different house. Having a mix of negative and positive questions makes the respondents think more and avoids the tendency to tick the same response for every question.

Since the questionnaire is targeted at children between 11 and 16, the language was kept as simple as possible, but a basic level of literacy was assumed.

Scoring the questions

In our questionnaire, we used a five-point scale in most of the questions.* The choice of responses for the direct questions was:

1. Never
2. Almost Never
3. Some of the Time
4. Often
5. Almost Always

The choice of responses for the first-person statement was:

1. Strongly Agree
2. Agree
3. Not Sure
4. Disagree
5. Strongly Disagree

There were only two questions that did not fit into these two formats. One was the life satisfaction scale, where respondents were asked to mark how satisfied they were with their lives on a scale of zero to ten. All replies were attributed a score from one to five, for example, if the answer was between six and eight the score was four.

The other question was to assess the material well-being of the child. We asked if they had access to any of the following: a desk, a quiet place to work, a computer, educational

[‡]Experts included: G. Rees from the Children's Society; J. Bradshaw and D. Richardson from the University of York; N. Marcs and N. Steuer from the New Economics Foundation; and P. Dolan from Imperial College.

*This kind of scoring, known as the Likert scale, is common in subjective questionnaires.

software, internet connection, a calculator, a dictionary and school text books. Again the responses were matched onto a five-point scale, for example, if the child had two or three of the items then the score was two.

Comparing domains

The number of questions per domain varied between two (resilience) to six (psychological well-being). Bradshaw argues each domain should have equal weight since there is an absence of any theoretical or empirical justification for weighting.⁴⁵ Some domains may contain more questions simply by virtue of being harder to describe, but this does not mean that they are more important. One might argue that material domain is less important than a child's subjective well-being but there is no evidence to support this.

We decided to take this approach and gave each domain the same weight. In the future, as both qualitative and quantitative data builds up from pilot studies, it may be possible to develop a rationale for weighting domains differently.

Each question has a maximum score of 5 so the average score in each domain is between 1 and 5. We work out the average scores in each domain to get the total score for the questionnaire, which is between 1 and 50.

Qualitative questions

While the questionnaire was still untested, we wanted to include some open-ended questions to help evaluate our tool. We wanted these to be quite broad to capture as much as possible and to give us input for our focus group discussion. Three questions were included in the pilot questionnaire:

- 'What do you think are the most important things that make a good life for young people?'³⁰
- 'Who is important to you and why?'⁴⁴
- 'Is there anything else you would like to add?'

Summary

Using a set of ten domains to shape our questionnaire, we pulled together 400 questions from established quality of life and well-being measures. These were reduced to 40 questions through logical elimination and then through consensus-gathering and expert consultations.

NPC's well-being questionnaire (see Appendix 1 for full questionnaire) is of manageable length and covers all aspects of child well-being. In order to check that the questionnaire works in practice and it is statistically robust, we undertook two pilot studies. The next section describes these pilot studies in more detail and discusses the results.



Photograph supplied by Chance UK.

In order to ensure that our questionnaire is a good tool for measuring the impact of charities' work on children's well-being, we need to consider four key points:

1. **Length and complexity:** is the questionnaire appropriate for the 11 to 16-year-old participants?
2. **Internal consistency:** are the individual questions measuring different aspects of the same thing?
3. **Sensitivity:** is the questionnaire able to measure charities' impact?
4. **Robustness:** do we have consistent scores when we repeat the questionnaire?

This section describes two pilot studies. The first, with a group of 15 and 16 year olds on an Outward Bound® course, tested the questionnaire's length and complexity, its internal consistency and its sensitivity. The second, with a group of 14 and 15 year olds, tested the reliability of the questionnaire as well as providing a further test for the length and complexity and internal consistency.

Pilot 1

The context

The Outward Bound Trust is an educational charity that organises adventurous experiences for young people with the objective of 'raising their self-esteem and realising their full potential'. The pilot study was organised with The Outward Bound Trust together with an east London secondary school.

The intervention being tested was a five-day course that included activities such as icebreaker games, trapeze and rope courses, kayaking, rock climbing and an overnight expedition. It also included study sessions to prepare for exams.

Sixty students aged between 15 and 16 took part in the course, just before their GCSE exams. They were all on the borderline between predicted C and D grades in mathematics.

The aim of this pilot was to test the ease of use and sensitivity of the questionnaire, and to find out whether it was measuring the right things.

Results overview

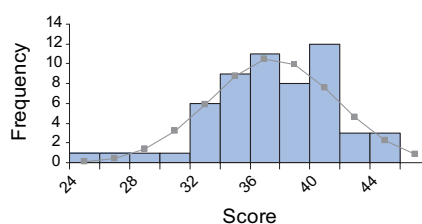
The questionnaires were filled out during the bus trip on the way to the course, on the way back from the course and then three weeks after the course. We received 60 questionnaires filled out on the way to the course (round 1), only 45 on the way back (round 2) and 31 three weeks later (round 3). Table 3 shows how the average total score for the children changes between rounds.

Table 3: Pilot School 1 Results Change in average well-being score (sum of average score in each domain)

Round	Average	Percentage change
1	37.6	
2	38.7	3.1%
3	37.8	0.6%

For most statistical tests, the sample must follow a normal distribution. Figure 2 shows how the distribution of answers from the first round (blue bars) matches a perfect normal distribution (grey line). The small sample size means that the match is not perfect, but a Kolmogorov-Smirnov test (see Appendix 3, Kolmogorov-Smirnov test) shows that the sample follows a normal distribution at a 5% significance level. The distributions for rounds 2 and 3 can be found in Appendix 2.

Figure 2: Distribution of scores for Pilot School 1, Round 1



The results of the statistical tests performed are merely indicative due to the small sample size of this pilot.

Length and complexity

There were no questions or difficulties reported from the students when filling out the questionnaires. There were also no complaints about length and all the children finished it comfortably within 10 minutes.

Is the questionnaire sensitive enough?

The children in the pilot had attended an Outward Bound® course between questionnaire rounds 1 and 2, so we would expect to see an immediate increase in well-being.

Between rounds 1 and 2 there was an increase in the mean score of 3.1%. This suggests a slight short-term improvement on overall well-being. Between rounds 1 and 3 there is an increase in the mean total score of just 0.6%. This suggests that the longer-term effect of the Outward Bound® course on overall well-being was quite small.

However, when we tested the significance of these increases using analysis of variance (see Appendix 3, Analysis of variance), we found that the change was not statistically significant at the 5% significance level.

We then looked at differences in individual domain scores to see if this would tell us more about the kind of impact the Outward Bound® course had made. Individual domain scores can be found in Appendix 2. The only domain to show a statistically significant increase was the physical domain, increasing by 13% between rounds 1 and 2. No domain showed a significant change in their mean between rounds 1 and 2, and round 3.

These results imply that the Outward Bound® course had a large short-term effect on the physical well-being of the children. However, there is no significant long-term effect in either the overall well-being of the children or in any of the individual domains.

The sample of children taking part in the pilot was too small to draw any conclusions about the long-term impact of Outward Bound® courses on children's well-being. It may be that these courses have no long-term effect or that our questionnaire is not sensitive enough to detect this effect, but there is simply not enough data to draw either conclusion.

Future tests of sensitivity

The results highlight the need to test the sensitivity of the questionnaire with more interventions and different populations of children.

There is no reason to think that the children involved in this pilot are a representative sample. To understand properly the sensitivity of the questionnaire it is important to know how the well-being of a group compares to the whole population of 11 to 16 year olds. For example, if a group of children has much higher well-being than the average child then we might expect a charity to have very little effect on their well-being or no effect at all.

In order to get this kind of baseline data we will have to link the items in the questionnaire to questions asked in large national surveys or administer our own questionnaire across the country to a very large sample of children. Although some of the questions in the survey do have large datasets, there are not really enough to make a rigorous comparison.

More baseline data would also help to understand what kind of impact we could expect to see within each domain. The Outward Bound Trust clearly targets the physical domain in the belief that improvement in this domain will lead to improvements in other domains of well-being, such as behaviour. A larger set of data would help to see whether this was a logical approach and also how much improvement we would have to see in particular domains before other domains were affected.

Qualitative results

Answers to the qualitative questions revealed an overwhelming emphasis on family and friends as being important in the children's lives. Only those with serious health problems mentioned physical health and activity at all, but to these children health was important. Education also came up as a dominating factor.

This suggests that the scoring of the questionnaire should be weighted to give more emphasis to the family, friends and school domains. However, further analysis of the questionnaire with a larger sample size is required before any adjustments can be made.

Pilot 2

The context

The main aim of the second pilot was to test that answers to the questionnaire did not change over time when there was no significant change in the children's lives. We also wanted to test further that our questionnaire was measuring the right thing through a combination of quantitative information (Cronbach's alpha) and qualitative information (focus group feedback).

The sample was an entire Year 10 (14 and 15 year olds) from a comprehensive secondary school in Kent, a total of 156 children.

Results overview

The questionnaire was taken twice in exam conditions, three weeks apart.

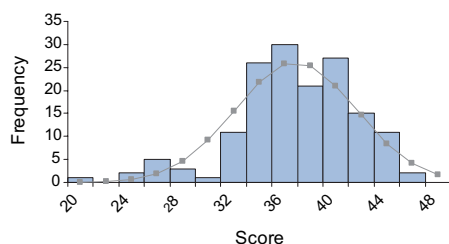
Table 4 gives a brief description of the data from the two rounds.

Table 4: Pilot 2 Results Average and standard deviation of well-being scores (sum of average score in each domain)

Round	Average	Standard Deviation
1	37.9	4.7
2	36.1	5.1

Again we wanted to check that the results followed a normal distribution. Figure 3 shows how closely the results from round 1 (blue bars) fit the normal distribution (grey line). Using the Kolmogorov-Smirnov test (see Appendix 3, Kolmogorov-Smirnov test) the sample follows a normal distribution at a 5% significance level.

Figure 3: Distribution of scores for Pilot School 2, Round 1



Because the sample size for pilot 2 was much larger, the results are statistically significant.

Length and complexity

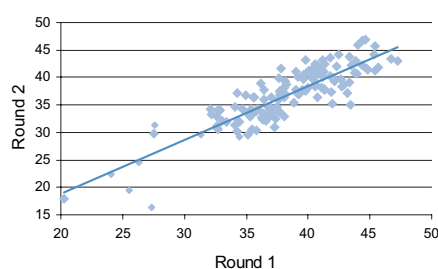
As before, there were no questions or difficulties reported from the students when filling out the questionnaires. There were also no complaints about length and all children were given ample time to finish it.

Did answers to the questionnaire change over time?

Robustness is a measure of how responses to the questionnaire change over time when there has been no change of circumstances.

The same questionnaire was administered on two occasions three weeks apart to the whole Pilot School 2 sample. We have used the 'test-retest' method to measure the robustness of the questionnaire. This measures how responses to the first round correlate to responses in the second round (see Appendix 3, Test-retest). Figure 4 shows the correlation between the scores of the two rounds.

Figure 4: Correlation between Scores in Round 1 and Round 2 at Pilot School 2



The 'standard' threshold for robustness is 0.8. The correlation between rounds 1 and 2 is measured to be 0.87 so we can conclude that the questionnaire is robust over time.

Is the questionnaire internally consistent?

One way of checking that each of the domains in a questionnaire is internally consistent (ie, each question in the domain is measuring aspects of the same thing) is to calculate the 'Cronbach's alpha' of each domain (see Appendix 3, Cronbach's alpha). Values can range from 0 to 1. As a rule of thumb, a value of 0.7 or higher is recommended.⁴⁷

Table 5: Cronbach's alpha scores for the ten domains

Domain	Round 1	Round 2
Physical	0.54	0.70
Psychological	0.70	0.73
Behaviour	0.59	0.66
School	0.70	0.70
Family	0.79	0.85
Friends	0.53	0.60
Resilience	0.36	0.35
Material	0.70	0.27
Living environment	0.62	0.68
Subjective	0.79	0.57

Table 5 shows the Cronbach's alpha for each domain in each round. Three of the ten domains are above the recommended cut-off of 0.7 for both rounds, and the subjective, material and physical domains are above the recommended cut-off for at least one round. In this pilot the sample size is big enough to conclude that three of the domains (psychological, school and family) are internally consistent. However, more thought will need to be put into defining the remaining seven domains, in particular the behaviour, friends, resilience and living environment domains.

Qualitative results

Again, answers to the qualitative questions revealed an emphasis on family, friends and school over other aspects of well-being. We were also given access to two focus groups to get more detailed feedback.

The focus groups had two main purposes. The first was to check that the questionnaire had been understood properly and that all of the questions were straightforward and were being answered in the way we intended. The second was to talk more broadly about well-being to check that nothing was left out of our questionnaire and to guide possible weighting of different domains.

The two focus groups each contained ten students who had filled out the questionnaire. The focus groups were not representative of the student body and in particular did not reflect the ethnic makeup of the school. This highlights the need to test the questionnaire further with differing ethnic compositions and socio-economic backgrounds. The conversation was unstructured, allowing us to cover those topics the students found most important.

Feedback on the questionnaire

The questionnaire seemed to be well understood in general. However, there was a concern about whether the children themselves were being judged. For example, it was pointed out that the question 'Do you worry about your family?' could be taken either as an indication of whether there was anything wrong with the family, or whether the child cared enough about his family.

There was also some confusion over the question 'Can you usually find a way out when you are in a difficult situation?' The key point here is that most children did not think they had actually been in a 'difficult situation' and so the question seemed to be hypothetical for most respondents. The discussion around this question went on to highlight the need for children to have emotional resources to solve their problems, both through friendship ties and trust in adults.

In general it was agreed that the anonymity of the questionnaire would ensure honesty from the participants.

General feedback on well-being

All participants agreed that family and friends were the most important factor in their lives. Many aspects of day-to-day life and 'lots of activities involve spending time with your friends'. Also, many participants were particularly keen to have an 'adult' who was both knowledgeable and available in order to help them with problems 'at a level [their friends] wouldn't understand'.

Certain aspects of well-being were raised that were not included in our questionnaire. The most significant of these was the importance of having a sense of achievement in some area of life, whether in school, sports, music or some other activity.

Thoughts about the future seemed to revolve specifically around getting a good job, which suggests that this should be made more explicit in the questionnaire. Peer pressure as a separate issue to bullying was also a concern for some of the participants.

A significant cause of stress highlighted by all participants was the large amount of homework they were expected to complete. Most children could not socialise during the week after school because of work pressures.

Weighting

Since relationships with friends and family, and school, proved to be by far the most important

component of well-being for children, the results of these domains should be weighted relative to other domains. However, the qualitative data does not give any clues by how much these domains should be weighted.

A first attempt at weighting domains will be made when we have collected a more significant body of data. One approach to weighting might be to see how closely each domain correlates with subjective well-being.

Summary

The two pilot studies undertaken to test the questionnaire give largely positive results. The results showed:

- The questionnaire seems to be easily understood and can be completed easily within ten minutes.
- The questionnaire gives robust results, which remain constant over time.
- The internal consistency of the domains varies. Seven of the domains, in particular the behaviour, friends, resilience and living environment, will need to be refined.

The sample size of the first pilot was too small to reach any conclusions on its overall sensitivity. Further tests of sensitivity will require larger sample sizes, along with a comparison of data taken from a large representative sample of the targeted population. Further pilots will also be required to see how the questionnaire behaves with highly disadvantaged groups, as this is where many charities concentrate their efforts.

The questionnaire will have to be further tested with a variety of interventions targeted at different aspects of well-being and different groups of children. The questionnaire used in the pilot studies was the first draft of a tool that we hope to perfect. The pilot studies were the first step in the fine-tuning process.

Questions will be re-worded and extra questions added to the questionnaire based on feedback from our focus groups and advice from consultative readers. In particular questions relating to a sense of achievement and purpose in life and spirituality* will be added. Effort will be made to improve the internal consistency of some domains. We will also assess which questions or domains are contributing most to changes in well-being. This information will be used to try to weight domains or individual questions depending on their importance to child well-being.

*A recent study from the Children's Society and the Commission on Urban Life and Faith. Found that a sense of purpose had strong associations with other areas of well-being. Dramatically, 51% of young people without a sense of purpose in their lives had considered suicide, compared to 22% of young people who said they did have a sense of purpose in their lives. Similarly, daily prayer was associated with a greater sense that 'life was really worth living'.⁴⁸

Conclusions

This report shows that it is both useful and possible for charities to measure the well-being of children. Results of charities' work tend to be measured in a very narrow way, for example by improved exam results or reduced hospital admissions. Well-being, in contrast, looks at all aspects of life, from psychological and physical to relationships and the living environment.

Well-being can be measured, despite at first appearing to be an intangible concept. The questionnaire developed in this report is tailored to allow charities to measure their impact on well-being. Tests so far have shown that this questionnaire is robust and easy to use.

The questionnaire will be refined and tested on a variety of interventions. NPC welcomes the input of charities, funders and beneficiaries in this process. After this process it will be made available for use by charities so that they can understand and increase their impact, and by donors to direct their money to the most effective charities.

Charities should measure well-being

NPC firmly believes that measuring well-being is useful for charities and for the wider charitable sector. The questionnaire we have developed is timely on a number of levels:

It is a broad and multi-dimensional tool: It can measure a child's well-being across many aspects of his or her life. A charity that measures the well-being of its users can understand where its work is making the most impact. It can see how an improvement in one area, such as behaviour, leads to improvements in other areas, such as psychological well-being. A charity counselling troubled teenagers will not only improve their exam grades but will also improve their relationships and resilience. In this way it can look at both overall impact of its work and the impact in its priority areas.

It fits with changing attitudes of funders:

Interest in well-being is growing; both local and central government are looking to improvements in well-being as a measure of success. There has also been recognition that improved well-being is the underlying aim of individual government programmes. In an environment where the priority of most funders is value for money, providing hard evidence of impact on well-being will become crucial. Individual donors are often motivated by a general desire to improve people's lives rather than a desire to see improvement in narrow outcomes, such as improved exam results. The concept of well-being fits well with this.

It provides a basis for comparison: The breadth of well-being may mean that, in the future, measures of well-being could be used to compare effectiveness across charities and projects. However, any comparison must be made cautiously, using a framework to account for the background and level of need of the children being helped.

Charities can measure well-being

Although several measures of child well-being already exist, none of the existing tools were appropriate for use by charities. This study seeks to address that gap.

Our questionnaire was designed to measure the well-being of children in the UK between the ages of 11 and 16. We pulled together questions from a wide range of existing tools and structured these using ten 'domains', or aspects of well-being. We spoke to several experts from across the well-being field, from sociologists to economists. **The Children's Society** in particular provided a lot of valuable insight from its work on the well-being of children.

Two pilot studies showed the questionnaire to be easy to use and robust. Although some domains were internally consistent, not all were and these will need refining. Qualitative feedback from two focus groups highlighted the need to reword particular questions and to add in questions to cover aspects of well-being that may have been missed, in particular a sense of achievement and purpose in life.

Due to the small sample size of the first pilot, the sensitivity of the questionnaire has not been adequately tested.

Of the four criteria laid out in the first section, our questionnaire has been shown to be easy to use, comparable across time and appropriate for use with small groups of children. A few more questions will have to be included to cover all aspects of children's well-being. Further research is required into the sensitivity of the questionnaire and how answers compare across different types of respondents, including hard-to-reach young people.

Looking to the future

NPC's work on well-being will continue on two fronts. The first will see the continued development of the well-being questionnaire into a robust and reliable tool for charities. The second strand will look at how the concept of well-being can be applied usefully to funding decisions.

Interest in well-being is growing; both local and central government are looking to improvements in well-being as a measure of success.

Refining the tool

The two pilot studies presented here are the first step in the development of NPC's well-being questionnaire. Once the questionnaire has been refined it will need to be tested again in further pilots. So that meaningful comparisons can be made a large body of data, representative of the whole population of 11 to 16 year olds, will need to be built.

It will also be necessary to look at a wide range of charitable interventions to test the sensitivity of the questionnaire when different aspects of child well-being are targeted.

Particular attention will be paid to how well the questionnaire works for disadvantaged children (eg, refugee children struggling to fit into a new community or children with behavioural problems at risk of being excluded from school), as these are the target population for much charitable work.

Once the children's well-being questionnaire has been refined, NPC plans to develop further questionnaires to measure the well-being of other groups including younger children, older people and people with disabilities.

Refining the concept

As measurement of well-being becomes more widespread it must be accompanied by research to clarify how a scale of well-being might be used to make funding decisions. This research will address questions such as:

- Can all groups of people be measured on the same scale?
- Can we assign a financial value to well-being (as with QALYS*) or should it be understood as a stand-alone scale?
- Does an improvement at the bottom of the scale mean the same as an improvement at the top of the scale?
- How does this scale fit in with national and local government priorities for children's well-being (eg, the Every Child Matters framework)?

By making the idea of well-being common currency, charities will be able to show the many different ways in which their work helps to improve people's lives. Donors will be able to see which activities work best for particular populations and circumstances. In turn, this will help them to invest their money to achieve the biggest social impact.

This represents an ambitious agenda. But our growing understanding of well-being and our ability to design questionnaires to capture and measure it mean it is not beyond reach. For the first time, there is a real promise of accurately capturing the results of charities' work. Pursuing this agenda requires more work. Input from charities is needed to help road-test, pilot and refine the questionnaire; more data needs to be collected across organisations and types of intervention (see Box above). The goal is sufficiently valuable to make the effort worthwhile.

Want to know more?

If you are interested in helping NPC pilot future versions of a children's well-being questionnaire or would like to use the questionnaire for your own evaluation, please visit www.npctools.org.uk or email us at npctools@philanthropycapital.org.

NPC Tools is dedicated to helping charities measure, manage and report their impact, and wants this questionnaire to be as useful for charities as possible. We welcome your comments and suggestions on any aspect of this report.

*Quality-adjusted life years (QALYs), are a way of measuring both the quality and the quantity of life lived, as a means of quantifying the benefit of a medical intervention. They are based on the number of years of life that would be added by the intervention. Each year of perfect health is assigned the value of 1 down to a value of 0 for death. The National Institute for Health and Clinical Excellence values one QALY between £20,000 and £30,000.⁴⁹

Appendices

Appendix 1: The questionnaire

Each questionnaire began with the text:

‘This is a survey about issues that affect your life. **This is NOT a test**—there are no right or wrong answers. Your responses will only be used for evaluating programmes—not for evaluating or reporting on you as an individual. This questionnaire is **anonymous** (please don’t put your name on the questionnaire) and **confidential** (we won’t know who you are and will not pass on any information you give us). You don’t have to answer any questions you don’t want to.’

These are the questions used in both pilot studies described in Section 3:

Table 6: Questions asked in the pilot study

Question	Domain	Possible Answers	Source
Male/Female (M/F)	-	Male, female	HBSC ²⁹
Age	-	11-16	HBSC ²⁹
Do you feel fit and well?	Physical well-being	Never, almost never, sometimes, often, almost always	KIDSCREEN ²⁴
Have you been physically active (eg, running, climbing, biking)?	Physical well-being	“ “	KIDSCREEN ²⁴
How often have you felt depressed?	Psychological well-being	“ “	HBSC ²⁹
Do you forget things?	Psychological well-being	“ “	PedsQL ²³
Do you worry about your family?	Psychological well-being	“ “	Tellus2 survey ³⁴
Do you worry about school?	Psychological well-being	“ “	Children’s Society ³⁰
Do you worry about your future?	Psychological well-being	“ “	PedsQL ²³
Have you been in a good mood?	Psychological well-being	“ “	KIDSCREEN ²⁴
Do you care about other people’s feelings?	Behaviour	“ “	SDQ ²⁷
Do you get very angry and often lose your temper?	Behaviour	“ “	SDQ ²⁷
Have you been drunk more than twice (in the past 2 months)?	Behaviour	“ “	HBSC ²⁹
Have you used cannabis?	Behaviour	“ “	HBSC ²⁹
Have you had unprotected sex?	Behaviour	“ “	HBSC ²⁹
Do you like being in school?	School	“ “	HBSC ²⁹
Do you feel safe at this school?	School	“ “	HBSC ²⁹
Do you feel you belong at this school?	School	“ “	HBSC ²⁹
Have you been bullied?	School	“ “	HBSC ²⁹
Do you have trouble keeping up with your school work?	School	“ “	PedsQL ²³
I have a happy home life	Family	Strongly agree, agree, not sure, disagree, strongly disagree	HBSC ²⁹
I have a lot of arguments with my parents	Family	“ “	HBSC ²⁹
My parents spend time just talking to me	Family	“ “	HBSC ²⁹
I am happy at home	Family	“ “	HBSC ²⁹
My parents are interested in what happens to me at school	Family	“ “	HBSC ²⁹
There are lots of fun things to do where I live	Living environment	“ “	MSLSS ³⁶

Question	Domain	Possible Answers	Source
This town is filled with unfriendly people	Living environment	“ “	MSLSS ³⁶
I like my neighbourhood	Living environment	“ “	MSLSS ³⁶
I wish I lived in a different house	Living environment	“ “	MSLSS ³⁶
Do you find the students in your class kind and helpful?	Friends	Never, almost never, sometimes, often, almost always	HBSC ²⁹
Do you play alone and keep to yourself?	Friends	“ “	SDQ ²⁷
Do you have fun with your friends?	Friends	“ “	KIDSCREEN ²⁴
Do you usually find something to laugh about?	Resilience	“ “	Psychological Resilience Scale ⁴⁰
Can you usually find a way out, when you are in a difficult situation?	Resilience	“ “	Psychological Resilience Scale ⁴⁰
Do you have enough money for your expenses?	Material	“ “	KIDSCREEN ²⁴
Do you have enough money to do things with your friends?	Material	“ “	KIDSCREEN ²⁴
Here is a picture of a ladder, the top of the ladder, 10, is the best possible life for you, and the bottom, 0, is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment?	Subjective well-being	0,1,2,3,4,5,6,7,8,9,10	HBSC ²⁹
I am happy the way I am	Subjective well-being	Strongly agree, agree, not sure, disagree, strongly disagree	KIDSCREEN ²⁴
I am worried about the way I look	Subjective well-being	“ “	KIDSCREEN ²⁴
I would change things in my life	Subjective well-being	“ “	SWLS ³⁷
I feel I do everything badly	Subjective well-being	“ “	KIDSCREEN ²⁴
Do you have: <ul style="list-style-type: none"> • Desk for study • Quiet place to work • Computer for school work • Educational software • Internet connection • Calculator • Dictionary, or • School textbooks? 	Material	Yes, no	PISA ³¹
Are any of your parent(s)/guardian(s) employed?	Material	None, one, two or more, not sure	HBSC ²⁹
What do you think are the most important things that make a good life for young people?	-	Open ended	Children's Society ³⁰
Who is important to you and why?	-	“ “	V. Morrow ⁴⁴
Is there anything else you would like to add?	-	“ “	No source

Appendix 2: Data from pilot studies

Pilot 1

Table 7: Summary of the data from pilot 1

Round	Minimum	Maximum	Average	Standard deviation
1	24.6	46.0	37.6	4.2
2	27.0	45.7	38.7	4.4
3	27.6	44.9	37.8	4.2

Figure 5: Comparison of round 1 data with a normal distribution, mean 37.6 and standard deviation 4.2

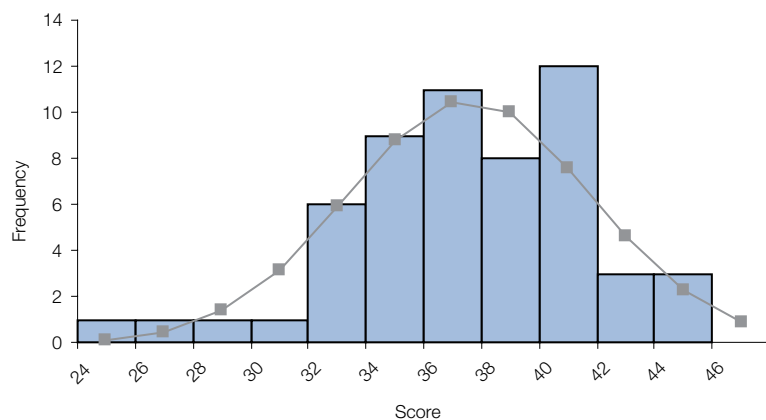


Figure 6: Comparison of round 2 data with a normal distribution, mean 38.7 and standard deviation 4.4

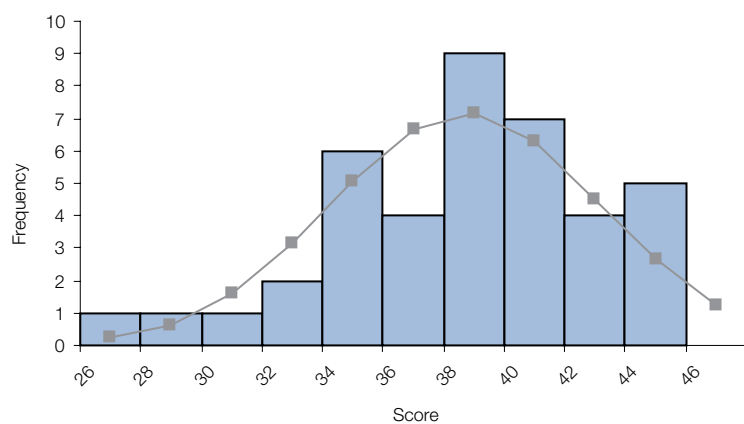


Figure 7: Comparison of round 3 data with a normal distribution, mean 37.8 and standard deviation 4.2

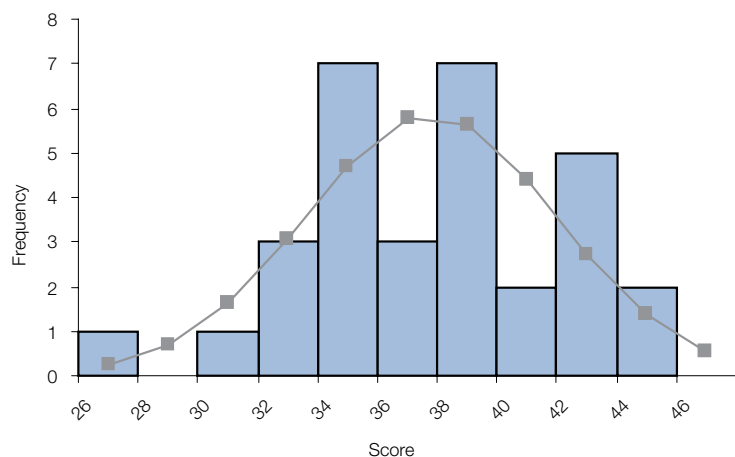


Table 8: Average domain scores for each round

	Round		
	1	2	3
Physical	3.8	4.3	3.9
Psychological	3.0	3.1	3.0
Behaviour	4.1	4.4	4.2
School	3.6	3.7	3.7
Family	4.0	4.1	4.0
Friends	4.0	4.1	3.8
Resilience	4.3	4.4	4.3
Material	4.0	4.1	4.2
Living environment	3.1	3.2	3.1
Subjective	3.6	3.4	3.6

Pilot 2

Table 9: Summary of the data from pilot 2

Round	Minimum	Maximum	Average	Standard deviation
1	20.2	47.2	37.9	4.7
2	16.3	46.9	36.1	5.1

Figure 8: Comparison of round 1 data with a normal distribution, mean 37.9 and standard deviation 4.7

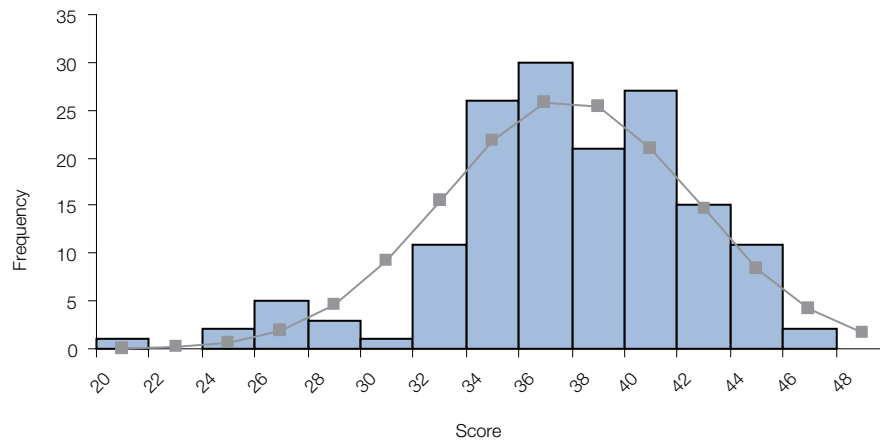
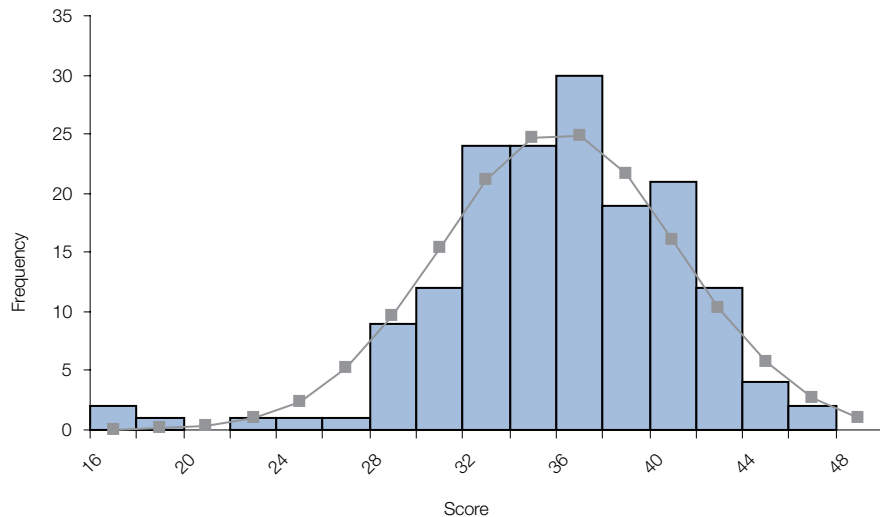


Figure 9: Comparison of round 2 data with a normal distribution, mean 36.1 and standard deviation 5.1



Appendix 3: Statistical details

Kolmogorov-Smirnov test

The Kolmogorov-Smirnov test tests the hypothesis that a data sample is drawn from a population with a particular distribution. From the sample the cumulative distribution is determined and plotted as a step function. The cumulative distribution of the assumed population distribution is also plotted on the same diagram. The maximum difference between these two cumulative distributions is the test statistic, called D.

If D, the maximum difference, is greater than the threshold chosen for statistical significance (usually 5%) then the null hypothesis that the data sample is drawn from a population with that distribution is rejected and the alternative hypothesis that the data sample is drawn from a population with a different distribution is accepted.

The significance level of the test shows how likely it is that the result happened by chance. If the test finds that the data sample does come from a population with the assumed distribution at a significance level of 5% then there is a 5% chance that the result occurred by chance and actually the sample is not from a population with the assumed distribution.

Analysis of Variance (ANOVA)

Analysis of variance is a statistical technique that tests the hypothesis that the means of two or more populations, from which sample data sets have been drawn, are all the same. If not all of the means are the same, using ANOVA will not show which population means are the same and which are different; further tests would be required. The tests used in this report assume that the underlying distributions of the two datasets are normal and that their variances are equal.

If the F-value that is calculated is above the threshold chosen for statistical significance (usually 5%), then the null hypothesis that the populations' means do not differ is rejected in favour of an alternative hypothesis, which typically states that some of the means do differ.

The significance level of this test is a measure of how likely it is that the result occurred by chance. So, if an ANOVA test shows that the means of several populations differ at a significance of 5% then there is a 5% chance that this result happened by chance and there is actually no difference in the means.

Test-retest

Test-retest is a statistical method used to examine how stable the results of a test are. A test is performed twice (eg, the same test is given to a group of subjects at two different times). If the test is reliable and the subjects have not changed in the interval then each subject should score the same in both tests. The score is basically the correlation coefficient between the two rounds. Ideally the correlation should be 1, but in reality scores will change slightly and so anything above 0.8 is generally considered acceptable.

Cronbach's alpha

Cronbach's alpha is a measure of the internal consistency of a questionnaire. It increases as the correlations between the individual questions increase and so can be thought of as measuring how much the different questions are measuring aspects of the same thing.

Cronbach's alpha is defined as

$$\frac{N}{N-1} \left(\frac{\sigma_X^2 - \sum_{i=1}^N \sigma_{Y_i}^2}{\sigma_X^2} \right)$$

where N is the number of questions, σ_X^2 is the variance of the observed total score, and $\sigma_{Y_i}^2$ is the variance of question i . A value of over 0.7 is the generally accepted standard.

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References

- 1 Feynman, R.P. (1985) *Surely You're Joking, Mr. Feynman*. Unwin Hyman Limited: London.
- 2 Dolan, P.P.T. (2007) *Measuring well-being for public policy: preferences or experiences?*, in *Conference on the legal implications of the new research on happiness: Chicago*.
- 3 Michalos, A. (2007) *Education, Happiness and wellbeing, in Is happiness measurable and what do those measures mean for public policy*. OECD: Rome.
- 4 Ben-Arieh, A. (2000) *Beyond Welfare: Measuring and Monitoring the State of Children – New Trends and Domains*. Social Indicators Research (52): p. 235-257.
- 5 Bradshaw, J., Hoelscher, P. and Richardson, D., (2007) *An Index of Child Well-being in the European Union, Chapter 2 Conceptualisation of Child Well-being and Deprivation, 2.1 A Rights-Based Approach*.
- 6 Diener, E., Suh, E., Lucas, R.E., & Smith, H.E. (1999) *Subjective Well-being: Three Decades of Progress*. Psychological Bulletin, (125): p. 276-302.
- 7 The Roberts Enterprise Development Fund (2000) *SROI Overview*.
- 8 Invest to save budget website, <http://www.isb.gov.uk/hmt.isb.application.2/index.asp> [accessed on 12 December 2007].
- 9 DWP, HSE and Department of Health (2000) *Health, work and well-being – Caring for our future*.
- 10 Levett-Therivel (2007) *Wellbeing: International Policy Interventions*.
- 11 Office for National Statistics (2007) *Sustainable development indicators in your pocket 2007*. National Statistics.
- 12 UNICEF (2007) *Child poverty in perspective: An overview of child well-being in rich countries*. UNICEF Innocenti Research Centre.
- 13 Dolan, P., Peasgood, T. and White, M. (2006) *Review of research on the influences on personal well-being and application to policy making*. Department for Environment Food and Rural Affairs.
- 14 McAllister, F. (2005) *Wellbeing Concepts and Challenges*. Sustainable Development Research Network.
- 15 Layard, R., *Happiness: has social science a clue?*, in *Lionel Robbins Memorial Lectures*.
- 16 Malek, M. website, www.evidence-based-medicine.co.uk [accessed on 5 July 2007].
- 17 Oswald, A. (1997) *Happiness and Economic Performance*. Economic Journal, 107: p. 1815-1831.
- 18 Oswald, A. and Gardner, J. (2007) *Money and Mental Wellbeing: A longitudinal study of medium-sized lottery wins*. Journal of Health Economics, 26: p. 49-60.
- 19 Easterlin, R. (1974) *Does Economic Growth Improve the Human Lot?*, in *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*, P. David, ed. Academic Press, Inc: New York.
- 20 Ben-Arieh, A. (2000) *Beyond welfare: measuring and monitoring the state of children - New trends and domains*. Social Indicators Research, 52: p. 235-257.
- 21 Blake, J. (1989) *Family size and achievement*. University of California Press: Berkeley.
- 22 Naar-King, S., Frey, M.A. and Ellies, D.A., ed. (2003) *Assessing Children's Well-Being: A handbook of measures*. Lawrence Erlbaum Assoc Inc.
- 23 PEDS QL website, <http://www.pedsql.org/> [accessed on 16 July 2007].
- 24 Detmar, S.B., Bruil, J., Ravens-Sieberer, U., Gosch, A., Bisegger, C. and European Kidscreen Group (2006) *The use of focus groups in the development of the KIDSCREEN HRQL questionnaire*. Quality of Life Research, 15: p. 1345-1353.
- 25 Broadhead, P., Bolden, D., Constable, H. and Pearson, D. (2006) *Evaluation of the integrated care programme for at-risk children and their parents*. Northumbria University.
- 26 Loughry, M., Ager, A., Flouri, E., Khamis, V., Afana, A.M. and Qouta, S. (2006) *The impact of structured activities among Palestinian children in a time of conflict*. Journal of Child Psychology and Psychiatry, 47(12): p. 1211-1218.
- 27 Goodman, R. (1999) *Comparing the strengths and difficulties questionnaire and the child behaviour checklist: is small beautiful?* Journal of Abnormal Child Psychology, 27(1): p. 17-24.
- 28 Bradshaw, J., Hoelscher, P. and Richardson, D. (2007) *An Index of Child well-being in the European Union*. Social Indicators Research, 80: p. 133-177.
- 29 Health Behaviour in School-Age Children website, <http://www.HBSC.org> [accessed on 26 March 2007].
- 30 The Children's Society (2005) *National Young People's Survey*.
- 31 PISA website, <http://www.pisa.oecd.org> [accessed on 28 March 2007].
- 32 O'Hare, W.P. and Bramstedt, N.L. (2003) *Assessing the KIDS COUNT composite Index*. Annie E. Casey Foundation.
- 33 National Statistics and DEFRA (2007) *Sustainable development indicators in your pocket 2007*.
- 34 Ofsted website, <http://www.ofsted.gov.uk/portal/site/Internet/menuitem.455968b0530071c4828a0d8308c08a0c/?vgnextoid=69e46c472b6b1110VgnVCM1000003507640aRCRD> [accessed on 10 December 2007].
- 35 Diener, E. (2000) *Subjective well-being: The science of happiness, and a proposal for a national index*. American Psychologist, 55: p. 34-43.

- ³⁶ Huebner, S. (2001) *Manual for the Multidimensional Students' Life Satisfaction Scale*.
- ³⁷ Pavot, W. and Diener, E. (1993) *Review of the satisfaction with life scale*. *Psychological Assessment*, 5(2): p. 164-172.
- ³⁸ General Social Survey website, <http://www.gss.norc.org/> [accessed on 6 July 2007].
- ³⁹ Eurobarometer website, http://ec.europa.eu/public_opinion/index_en.htm [accessed on 5 July 2007].
- ⁴⁰ Wagnild, G.M. and Young, H.M. (1993) *Development and psychometric evaluation of the Resilience Scale*. *Journal of nursing measurement*, 1(2): p. 165-178.
- ⁴¹ New Economics Foundation (2005) *The power and potential of well-being indicators*.
- ⁴² Hanafin, S. and Brooks, A.-M. (2005) *Report on the Development of a National Set of Child Well-being Indicators in Ireland*. The National Children's Office.
- ⁴³ Pollard, E.L. and Lee, P. (2002) *Child well-being: a systematic review of the literature*. *Social Indicators Research*, 61: p. 59-78.
- ⁴⁴ Morrow, V. (2004) *Children's "social capital": implications for health and well-being*. *Health Education*, 104(4): p. 211-225.
- ⁴⁵ Bradshaw, J. (2007) *Beyond child poverty*, in *Wellchi Network Final Conference*: Pompeu, Italy.
- ⁴⁶ Ben-Arieh, A., Hevener-Kaufman, N., Bowers-Andrews, A., George, R.M., Joo-Lee, B. and Aber, J.L., *Measuring and monitoring children's well-being*.
- ⁴⁷ Nunally, J. and Bernstein, I. (1994) *Psychometric Theory*, ed. McGraw-Hill: New York.
- ⁴⁸ Rees, G., Francis L. J., & Robbins, M. (2005) *Spiritual Health and the Well-being of Urban Young People*.
- ⁴⁹ National Institute for Health and Clinical Excellence (2005) *Social Value Judgements: Guidelines for the Institute and its Advisory Bodies*. National Institute for Health and Clinical Excellence.

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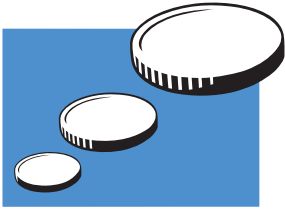
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