The power and potential of well-being indicators
Measuring young people’s well-being in Nottingham
A pilot project by nef and Nottingham City Council.
nef is an independent think-and-do tank that inspires and demonstrates real economic well-being.

We aim to improve quality of life by promoting innovative solutions that challenge mainstream thinking on economic, environmental and social issues. We work in partnership and put people and the planet first.

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The idea that government should be concerned with people’s well-being or happiness is no longer frivolous. There has been a surge of interest in this area, sparked not least by the devastating research finding that whilst economic output has nearly doubled in the last 30 years, life satisfaction levels in the UK have remained flat. Whilst the Government is slowly adjusting to this new reality, there are signs of change. For example, the Prime Minister’s Strategy Unit has reviewed the policy implications of psychological research on life satisfaction. At the local level, councils have gained new powers to promote economic, social and environmental well-being. These new directions for policy thinking raise questions about how to define, promote and measure well-being. In order to shed more light on these challenges, nef and Nottingham City Council (NCC) undertook a pilot project to measure the well-being of young people in Nottingham. This was a unique project to:

- Explore ways of using the new power of well-being that local authorities have been given.
- Examine and test out theories about what is meant by well-being.
- Learn more about ways to measure well-being, particularly using a multi-dimensional approach.
- Illuminate factors that influence young people’s well-being.
- Understand how such research can shed light on policy making.

The project was at the cutting edge in many ways — theoretically by using a multi-dimensional model of well-being, and practically by looking at new ways of using the local government well-being powers. The focus on young people was also new, and we believe that the measurement of the well-being of young people in schools was the first of its kind. We surveyed over 1,000 children and young people in Nottingham, aged 7-19. The questionnaires used were designed to enable scales of life satisfaction and curiosity (used as an indicator of children’s capacity for personal development) to be calculated. Other scales used included those that assessed children’s satisfaction with different aspects or domains of their lives such as their families, friendships, neighbourhoods and schools, as well their tendency to display characteristics of ‘pro-social’ behaviour and their favourite weekly activities.

One of the key findings of the research is that there is more to life than satisfaction. Many researchers measure well-being only in terms of people’s satisfaction with their lives — commonly called life satisfaction. Our research, however, confirms the view that there is at least a second dimension to well-being, which we call ‘personal development’. It has important implications for the future of research and policy-making. Other research suggests that this second dimension of well-being is related particularly to long-term health outcomes and to the ability to cope flexibly and creatively with life’s challenges.

A two dimensional model of well-being

**Life satisfaction** captures satisfaction, pleasure, enjoyment, and contentment.

**Personal development** captures curiosity, enthusiasm, absorption, flow, exploration, commitment, creative challenge and also, potentially, meaningfulness.

Measuring the well-being of young people created a new picture of Nottingham which complements but also contrasts with what was already known. Local authorities tend to focus on problems — anti-social behaviour, crime, teenage pregnancies, or ill-health — rather than focusing on finding out what helps to make people’s lives worthwhile. This could potentially be effective in tackling some of the problems at source.

Even from a relatively small pilot study we are able to show that focusing attention on young people’s well-being sheds light on some key policy areas, from schooling and crime to activities that promote well-being.

The research also shows that the very process of using such shared indicators across local government can begin to transform the way in which local government operates — both practically and in the kinds of questions it asks. Nick Lee at NCC noted that

“By creating indicators that give us evidence regarding outcomes for all young people, this pilot has naturally supported the change of culture that all councils are seeking; demonstrating how cross-cutting policy development can facilitate positive outcomes.”

Therefore well-being indicators are a practical way in which the ‘power of well-being’ can be used to join local services and functions to better meet people’s needs.
Findings from the pilot about well-being in Nottingham

General
- Just over half of young people score well on both categories of life satisfaction and personal development. Twelve per cent, however, score poorly on both.

- In particular, nine per cent of young people in Nottingham have ‘very low’ life satisfaction and can be considered at very high risk of depression. Twenty three per cent of young people who are scoring ‘low’ in life satisfaction are also at risk from depression, forming a large group of 32 per cent of young people in Nottingham who are, at the very least, unhappy in life and may be at risk of mental health problems.

- Well-being falls substantially as children get older. When comparing 9–11-year-olds with 12-15-year-olds, average scores for life satisfaction and curiosity fall by five per cent and ten per cent respectively.

Schools
- Sixty five per cent of primary school children rate their school experience as positive whereas this drops by more than half to 27 per cent at secondary school. This seems to go beyond the recognised ‘transition’ effect of changing schools, as well-being does not rise again after the transition period. Further work is needed to consider what is going on here. The key question is whether the fall in satisfaction with age is inevitable or whether it is the environment at secondary schools which is causing this drop? The sudden and dramatic step-change suggests that the school environment is likely to be partly responsible.

- The quality of children’s experience at school appears to be a crucial factor in enhancing their capacity for personal development; however it is less important in terms of their life satisfaction.

- The academically-top-performing primary school has significantly lower well-being than the other primary schools surveyed. This raises a range of interesting questions, including whether there are trade-offs between academic achievement and the fostering of children’s curiosity. Obviously with samples from just four primary schools these results cannot be generalised, but this certainly suggests that more detailed well-being research with larger sample sizes and a range of schools would be very worthwhile.

- Secondary school children seem to become bored, stop learning and no longer enjoy the activities available at school. All of these problems are certain to undermine children’s curiosity and satisfaction. The percentage of children who agree with the statement, “I learn a lot at school” falls from 71 per cent to 18 per cent between primary and secondary. Responses to “I enjoy school activities” drops from 65 per cent to 18 per cent.

- Girls lose more curiosity than boys at secondary school. We need further investigation into what is causing this, particularly as it is well-known that girls do better in terms of academic results than boys. Are there schools which do not suffer from this and what do they do differently?

Pro-social behaviour
- nef had hypothesised that having greater well-being would lead to someone to engage in more ‘pro-social’ behaviour — in other words displaying behaviour that enhances other people’s well-being. The research shows that whilst pro-social behaviour is more strongly correlated to the personal development component of well-being than life satisfaction, it predominantly displays independent characteristics. It seems that the promotion of pro-social behaviour may not be the same thing as the promotion of well-being. It is not clear if this is true only for younger people or whether it is the case for older people as well. Further work needs to be done to explore the relationship between personal well-being, pro-social behaviour and social well-being or social capital.

Poverty
- We found that although both the figures for levels of life satisfaction and curiosity are lower for children from households with no employed adults, only the differences in life satisfaction are statistically significant. Despite the small sample size within this category the data does support the hypothesis that poverty is associated with lower life satisfaction. Whilst this may seem obvious, it has not been easily proven in the past. Whether there is an additional effect on personal development would have to be further investigated, but this realm seems to be less affected.

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1 All percentage figures should be treated with some caution. They are quoted here to the nearest percentage. Due to the sample sizes, however, they should be considered as indicative only.
Families
- The data shows that children from non-step two-parent families have significantly higher well-being on average. There are difficulties in drawing simple conclusions from this result as by definition children from previously ‘unhappy’ parental unions (those that no longer live together) are excluded from this group. Better understanding of the links between family and well-being would require more longitudinal data or targeted studies. A child-centred approach such as this, however, does provide a completely different angle on this very important issue.

- Perhaps not surprisingly, children’s satisfaction with their family life falls as they become teenagers.

- Children who are unhappy at home are three times more at risk of being amongst the 12 per cent of young people who fall into the trap of having both low life satisfaction and curiosity.

Crime
- Boys feel safer than girls across all the age ranges, and children feel safer as they get older.

- Despite boys being more likely to be victims of crime, girls are more likely to be worried about it.

- If a young person has been a victim of crime then on average their scores are lower for both the headline indicators of well-being and their satisfaction with different aspects of their lives.

- Being a victim of crime makes young people worry more about crime and it is also associated with lower overall well-being. In contrast, being very worried about crime does not have such a strong relationship to overall well-being. This suggests that the focus on dealing with victims of crime is crucial, and that the fear of crime is not necessarily a disabler of well-being for younger people.

Local differences
- The pilot showed that well-being data can be broken down into geographical areas and fruitfully reviewed against other indicators. This approach is of real interest for policy-makers who wish to map (literally) this important aspect of the populations they serve.

Favourite activities
- Boys and girls tend to have different favourite activities and the patterns change as children get older.

- The striking finding is that those children who listed sports as their favourite activity were significantly more likely to have higher levels of well-being than any other group.

- Creative activities are more associated with enhanced curiosity than higher life satisfaction, which is in line with what might be expected.

Different kinds of young people
- We find some clearly different groups of young people in relation to life satisfaction, personal development and pro-social behaviour.

Cluster A – those who score low on all the categories (a rather high 13 per cent of young people in Nottingham).

Cluster B – those who score well on all categories (16 per cent).

Cluster C – those who are not at all happy but still somewhat interested in developing themselves and are good citizens (18 per cent).

Cluster D – the largest group – those who are happy and pro-social, but have lost sight of developmental challenges for themselves (30 per cent).

Cluster E – those who have high life satisfaction and curiosity but are uninterested in pro-social behaviour (22 per cent).

- Boys are more likely to be found in Clusters B or E whereas girls are more likely to be in Clusters C or D. There is clearly some support for differences in gender stereotypes here.
Policy implications of the pilot data
Libertarians would argue that the state should leave people alone to pursue their own conception of the good: who knows what makes us happy and well better than ourselves? Equally, there is a danger in putting well-being or a more narrow focus on happiness as the goal of all policy. However, not understanding the impacts of well-being nor recognising a full concept of well-being and its implications for health, relationships, and ability to cope with life and success would mean that we, as a society, are not paying attention to what really matters to people. The lack of a link between economic growth and life satisfaction clearly illustrates this.

The state’s primary aim should be to promote those conditions that allow us to pursue well-being. Asking “what would this existing policy area look like if one of its primary aims were to promote well-being?” is a useful exercise.

Some of the clear policy directions emerging from this work include:

Education for well-being
The worryingly high number of children at risk of depression as a result of low well-being suggests that a part of the education curriculum should focus on ‘living the good life’. We need to think about what components the curriculum requires to provide young people with the ability to live flourishing lives and to enjoy high levels of well-being. Such a curriculum may include ‘skills for life’—positive attitude, dealing with stress, self-confidence, emotional literacy and self-esteem. It might also include values, and a space for reflection. It would link not only to mental health issues but to motivation at school. Promoting well-being may create more motivated, curious and entrepreneurial citizens and this could have positive effects upon economic and social activity. More work needs to be done to look at the potential benefits of this approach, and the kinds of activities and programmes that could have positive impacts.

Reconsidering educational models
Given the huge drop-off in well-being upon transition from primary to secondary school as well as the high negative responses in satisfaction to the learning experience, the way in which children are taught more generally may need rethinking to focus more on curiosity and personal development. Reconsidering educational models is not just likely to help increase children’s satisfaction with school and to increase motivation but is also important because it is likely that a curious and engaged approach to life is core to future employment skills and health.

Increasing opportunities for sport at school and in the community
The links between sport and well-being are clear from this and other research. The trend towards reduced time spent on sport in the curriculum, as well as reduced sports facilities in schools, needs to be reversed. Girls are much less likely to take part in sports and therefore there needs to be a specific focus on creating appropriate sporting opportunities for them.

Support for victims of crime
Given the possible link between being a victim of crime and low well-being, it is important to ensure that children who are victims of crime receive appropriate support.

Moving forward
The pilot has demonstrated how personal well-being indicators can be used in a variety of contexts. There are some limits to the approach, including the way that people adapt to their circumstances and the difficulty
of establishing causal direction, but these are not insurmountable issues. Since the study was both small and a pilot, it has shown limited but clearly thought-provoking outcomes which require further exploration.

To better understand how well-being changes and can be changed, we recommend that further work be done on well-being measurement testing multi-dimensional models of well-being:

- **On a larger scale.**
- **Over a longer period of time.**
- **Across all age groups.**
- **In more specific settings.**

There will be value also in building up comparative data on well-being across local areas – this could be usefully added to the local area profiles that the Audit Commission is presently piloting. Central government should consider a larger pilot of this work, perhaps nationally or across five regions each using the same methodology, over a period of years. This would help to show how people’s personal well-being shifts over time, and compares across place. More use of well-being indicators could also inform the Comprehensive Performance Assessment regime from 2005 onwards.²

More specific research should focus on key issues where well-being has a role to play in new policy-making approaches, for example in schools, workplaces, parenting and families, mental health, and so on. Specifically, we can consider the hypothesis that low life satisfaction is a good predictor of depression. Also, as a matter of priority, we should look into the relationship between personal well-being and public policy – are people with high well-being more economically productive, build more social capital and cost less to provide for in healthcare terms? In addition, building on this pilot study, it would be interesting to track the potential public benefits of young people displaying characteristics of high personal development. Are they the future social and financial entrepreneurs? What support do they need to fulfil their potential? All of these lines of enquiry can be, and need to be, tested.

People’s experience of their quality of life is not limited to the personal realm, though this pilot has predominantly focused on this aspect of well-being. Measurements need to be systematically developed that illuminate people’s experiences of, and feeling about, their local communities, businesses, the economy, the education system, crime and the justice system, the natural and built environment, local and national governance, national security and international issues such globalisation and environmental sustainability. These types of measures might in time develop into subjective indicators of economic, social and environmental well-being to complement the work being done on developing objective indicators of these realms such as nef’s recent publication of a new Measure of Domestic Progress.³

In our opinion, the role of government should be to create conditions for the ‘good life’ and we recommend the use of well-being indicators as a way of measuring the impacts of policy interventions. Ultimately, we should move towards capturing the well-being of the whole nation. Without this research, we will continue to operate in darkness about how people actually experience the quality of their lives and how that impacts key societal issues.

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² The Audit Commission is presently consulting on how CPA will be taken forward beyond 2005.
In the past few years, there has been a surge of interest in looking at people’s well-being rather than just their income or their employment status. Policy-makers have noticed the poor relationship between economic growth and happiness and wondered what would happen if policy was focused more on promoting people’s happiness or supporting the ‘good life’ rather than thinking it is ‘all about the economy, stupid’. At the same time, local authorities have been granted ‘well-being’ powers, as part of their ongoing challenge to create community strategies, engage the public and ‘join up’ or integrate public services. Whilst these have been used in various ways by some local authorities, there is little agreement on what they mean and confusion over how they should be used — but there is a growing recognition that they can create opportunities for a greater degree of local flexibility in design and delivery of services.

**nef** has long promoted alternative models of measurement that go beyond just looking at simple indicators of economic progress to looking at broader environmental and social impacts as well as people’s experiences of their lives. In 2001, we set up our Well-being Programme with a view to understanding the concept, trying to measure it and ultimately developing the implications for policy and practice.

These two areas of interest have come together in this pilot project carried out jointly by **nef** and Nottingham City Council (NCC). We aimed to explore whether survey measures of individuals’ well-being could be useful to Local Authorities as they explore creative ways of operationalising the power of well-being granted to them in the Local Government Act 2000. NCC had already successfully used the power in connection with inserting social clauses into their procurement contracts and was looking for other opportunities to innovate with the power of well-being.

Due to the relatively high number of young people resident in Nottingham, NCC and its partners were interested in the needs of young people in the city. Nottingham has several areas of deprivation, one of the lowest educational attainments of the country, as well as problems with high levels of youth crime. Whilst most of NCC’s policies are concerned with prevention and control, the Council was acutely aware that its attention was on a thin edge of a wedge and that the majority of young people were ‘off its radar screen’. NCC wanted to understand more about how it could enhance the well-being of all young people in Nottingham rather than just focusing on those most in need or causing the most trouble.

As this was a joint project, it evolved in an organic fashion. **nef** wanted to test the use of well-being measurement tools in a policy-relevant environment and NCC wanted to explore the needs of young people in the city. So the focus of the project became the ‘Well-being of Young People in Nottingham’. Similarly other lines of inquiry emerged out of the process of building relationships with several departments within NCC.

The project was a first in many ways:

- **It was the first time a local authority had conducted such a statistical inquiry into local well-being.**

- **The project was unusual in that it was ‘child-centred’ and sought the views of children directly rather than through their parents, schools or other adults’ perceptions of their experiences.**

- **It was the first time some of the academic scales used had been adapted for children.**

- **It was also one of only a few times that a well-being inquiry has been based on a two-dimensional model of well-being.**

- **It was the first well-being inquiry carried out by **nef**.**

So the project was a mixture of experimentation and innovation.

NCC was keen for one output to be a set of well-being indicators that could be used as a baseline for making future comparisons between groups of young people, in order to be able to provide evidence for targeting those groups. It was also very interested in gaining a more general understanding of what gave young people a sense of well-being. In addition NCC was hoping that the inquiry would shed some light on developing new creative policy interventions.

**nef**’s interest in this project was to develop tools and processes that support local authorities in operationalising their well-being powers. We also wanted to rigorously test the two-dimensional model of personal well-being. Further to these two main aims, we were seeking to deepen our understanding of the inter-relationship between different levels of well-being — personal, social, economic and environmental — and use this project as an example of how well-being can be explicitly considered as one of the ultimate aims of public policy formation.

The work was supported by grants from the Environmental Research Trust, the AIM Foundation and financial support from Nottingham City Council who also committed time and energy to the project.
The power and potential of well-being indicators

nef’s Well-being Programme was set up to develop a programme of work that would promote individual, social and environmental well-being as the ultimate goals of society. We wanted to understand the relationship between the conditions of people’s lives (often referred to as ‘quality of life’) and their actual experiences of the quality of living – what we call ‘personal well-being’.

Most measures of quality of life focus on the conditions of people’s lives, such as the quality of housing, their financial circumstances, employment rates, personal and political freedoms or the state of the environment. Gross domestic product (GDP) – a measure of national economic output – has been the primary indicator used as a proxy for national quality of life. It is now widely accepted that this is a very narrow view which can exclude what really matters.

New quality of life indicators are being developed which attempt to take a more holistic approach. For example, the UK Government in its annual report *Achieving a Better Quality of Life* now publishes an annual set of 15 headline national Sustainable Development Indicators that include three components:

- **Economic Activity.**
- **Social Progress.**
- **Environmental Protection.**

Internationally, the United Nation’s *Human Development Index* is well respected: It ranks nations according to their success at improving their citizens’ health, wealth and education. To do this it uses indicators of lifespan, GDP per person and educational enrolment and literacy rates.

*nef* has also recently published a new composite Measure of Domestic Progress (MDP)(see Figure 1). The key differences between MDP and GDP are that in the MDP:

- Spending to offset social and environmental costs (defensive expenditure) is taken out.
- Longer-term environmental damage and the depreciation of natural capital are accounted for.
- A number of economic adjustments associated with ensuring prudent investment and trade balances are made.
- Changes in the distribution of income are accounted for, reflecting the fact that an additional pound in the pocket means more to the poor than to the rich.
- A value for household labour is included.

MDP reflects the influence of policies designed to affect social progress, economic growth, environmental protection and prudent use of natural resources. In doing so, it allows us to present a systematic assessment of domestic progress towards sustainable development over a long period of time, and to compare this against GDP. Whilst GDP has increased by 80 per cent in the last 30 years, MDP fell sharply during the 1980s and has not yet regained its 1976 peak.

Whilst these developments are to be welcomed, ‘objective’ indicators of this kind do not assess the impact of conditions and policies on people’s actual experience of their lives – their sense of well-being.

In effect, policy has focused on inputs and outputs through quality of life indicators, but we wanted to look at the outcomes and impacts of policies on the felt experience of people’s lives (see Diagram 1).

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4 Available online at http://www.sustainable-development.gov.uk/
For example, for a particular project or policy that is seeking to improve young people’s well-being through enhancing their prospects of securing meaningful work:

- **The inputs** would be resources such as finance, human resources or the use of buildings.

- **The outputs** might be specific deliverables, such as training courses, websites or one-to-one career advice.

- **The desired outcomes** could be that young people who have used the service are more skilled, they have more choices available to them, and they are more successful at finding meaningful jobs.

- **The ultimate impact** is hopefully that they will experience a better quality of life as a result of engaging in meaningful employment and using their skills.

- **Positive feedback from impacts to outcomes** could arise from the fact that enhanced well-being is likely to lead to a further increase in personal resources and skills.

**nef’s Well-being Programme** is seeking to develop better ways of understanding, measuring and influencing these kinds of impacts in terms of people’s personal well-being, using the results to suggest how policies might be changed.
Human needs
The inspiration for nef’s Well-being Programme has its roots in ‘human needs’ theories. A specific influence has been the work of Manfred Max-Neef, the Chilean ‘barefoot’ economist, who proposed a ‘human scale’ approach to international development, based on the principle that “development is about people not objects”.6

Max-Neef, and indeed others before him, including most famously Abraham Maslow, proposed that as human beings we seek to fulfil our fundamental needs, and that whilst some needs can be physically satisfied, others are more developmental or growth orientated.

In his book Motivation and Personality, Maslow set out a hierarchy of needs (see Diagram 2). He argued that as a rule, we would seek to satisfy needs at the lower end of the pyramid before those higher up. Maslow’s framework has proven to be extremely influential, although the idea of the hierarchy has received a great deal of criticism and indeed later in life Maslow himself moved away from presenting his theory in this way. In contrast, Max-Neef proposed a more interconnected system of physical, social, developmental and potentially spiritual needs, where complementarities and trade-offs between different needs are common.7

Whilst expressions such as ‘meeting people’s needs’ have entered the language of political policy statements, particularly in regard to sustainable development, theories of human need have not often been used in a policy-formation context.8 This might be due to the somewhat abstract nature of human needs, with their fulfilment being a ‘mysterious black box’, into which go the circumstances and conditions of life mixed with personal choices and out of which come people’s life experiences — with everything feeding back and influencing each part (see Diagram 3). For this reason we have not chosen to measure need-satisfaction directly but instead to focus on assessing people’s experience of their lives — their personal well-being.

Life satisfaction
There is a specific field of psychological research that has focused more directly on people’s experiences, with academics developing survey tools to measure people’s satisfaction with their lives. A typical question in such a survey would be:

“If you consider your life as a whole how satisfied would you say you are?”

Respondents are offered a range of potential answers such as ‘very satisfied’ to ‘not at all satisfied’, or sometimes a scale from 0 to 10. Other surveys use several questions with which respondents score their level of agreement or disagreement:

“In most ways my life is close to ideal.”
“The conditions of my life are excellent.”
“I am satisfied with my life.”

Some surveys supplement these questions with more specific inquiries into different ‘domains’ of people’s lives, for example: health, finances, family, social life, job, community and living conditions.

The responses to these types of questions are very robust: They compare well to physical observations of pleasure — such as smiling and laughing, to electrical activity in parts of the brain, as well as other people’s assessment of how happy the respondent is. The questions have also been tested on bilingual people and within bilingual nations and translate well into other languages.

7 For more details see Appendix 6.
The power and potential of well-being indicators

The results from such large-scale surveys allow statisticians to compare different population groups and also to assess trends over time.

It is possible to make tentative international comparisons with this life satisfaction (or subjective well-being) data, though it is important to bear in mind that there are differences of opinions amongst academics about how statistically robust these comparisons are. A plot of GDP against average life satisfaction is still illuminating — Figure 2 is based on data for 65 nations (although there are very few African and Arabic countries included in these, and for some countries it is difficult to assess how representative data is).

Figure 2 shows roughly three groups of countries:

1. Low GDP – Low Life Satisfaction: These countries are typically from the former Soviet block.

2. Low GDP – High Life Satisfaction: These countries are typically from Latin America, though China, Nigeria and Guinea are amongst them.

3. High GDP – High Life Satisfaction: made up of ‘economically developed’ nations.

It is very telling that there are no High GDP-Low Life Satisfaction nations, hence wealthy nations are usually more content nations. There are debates as to the mechanism by which the wealth of a country raises people’s satisfaction with life. It has been suggested by several authors that a high GDP ensures that society provides safety nets through social policies to prevent misery, thus raising the overall average for the country.

It is also clear that content nations are not always wealthy nations. The divergence in life satisfaction between nations with low GDP suggests that cultural and social factors play a large role in determining subjective well-being. These may include health, education and judicial systems, democracy, equality and respect of human rights as well as prevalent personality groups (optimists are almost by definition happier than pessimists, so perhaps some nations are typified by ‘sunnier’ personalities).

To gain a rounded picture, international comparisons need to be supplemented with national data. For instance Figure 3 shows the levels of life satisfaction in the UK from 1973 to 2002. It is striking that the level of life satisfaction in the UK has been remarkably flat — averaging 6.9 on a scale of 0-10. So despite GDP per person increasing by over 80 per cent in real terms since the 1970s, people’s satisfaction with their lives has not really changed at all in 30 years.

These results and other research suggest that up to a point, increases in economic output push up life satisfaction in a nation. After a threshold has been reached, however, the relationship is extremely weak: increases in UK output have not increased life satisfaction in the UK in the last 30 years.  

Why this is the case is still a matter of academic debate. Some psychologists suggest that this is due to adaptation, and that people have a ‘setpoint of happiness’ which they return to after the effect of certain positive or negative life events, such as marriage or loss of a job, have worn off. Others suggest that people use upward and downward social comparisons as the main basis of assessing their own satisfaction with life. They use these theories to explain the relative stability of the life satisfaction figures, which if true would effectively mean there is no room for public policy to intervene. There is plenty of counter evidence to this theory, however. Professor Richard Easterlin, an economist who

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10 It is worth noting that no comparable data is available for further dimensions of well-being such as personal development.
is one of the pioneers in this field, as sceptical about the universality of both adaptation and social comparisons as he is of the dominant economic myth that ‘more is always better’. Using evidence from surveys conducted since the 1970s, he shows that people adapt almost entirely to their acquisitions of material goods but not to changes in their social relationships or health. He writes: “A better theory of happiness builds on the evidence that adaptation and social comparison affect utility less in the nonpecuniary [such as social relationships and health] than pecuniary [financial] domains. Because individuals fail to anticipate the extent to which adaptation and social comparison undermine expected utility in the pecuniary domain, they allocate an excessive amount of time to pecuniary goals, and shortchange nonpecuniary ends such as family life and health, reducing their happiness. There is a need to devise policies that will yield better-informed individual preferences, and thereby increase individual and societal well-being.”11

This view is backed up by the work of Tim Kasser, an American psychologist with a particular interest in the relationship between personal well-being and ecological sustainability, who has shown that people who prioritise material values are likely to report lower levels of satisfaction with their lives.12

Opportunities for policy-makers are rich, and this has not gone unnoticed by the British Government. In December 2002, the Prime Minister’s Strategy Unit produced an excellent overview of the academic literature and its implications for policy formation.13

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Strategy Unit, Cabinet Office – Life Satisfaction Paper 2002

The authors concluded that the relationship between government policy and life satisfaction is hugely complex. Many societies have stated goals of increasing happiness. But there continues to be controversy over whether states should primarily seek to maximise choices and opportunities rather than focusing on end objectives such as life satisfaction.

There are questions over when states should act paternalistically in the light of evidence about what makes people happy (for example to prevent addictive behaviour), and over how to balance life satisfaction with other goals such as individual liberty and environmental sustainability.

The research currently underway will not offer definitive answers. Instead it may be most useful in providing insights into areas of possible policy change where there is scope to reshape policies in programmes to better influence people’s satisfaction with their lives.

For example:
• Income is far less important than marital status, employment status and health.
• Education is only important in raising life satisfaction as far as it improves people’s economic and social status.
• The stronger relationship between income and life satisfaction in less developed countries bolsters the case for international development policies which target poverty.
• Referenda can improve people’s life satisfaction — partly through the ability to participate in the decision making process.

To illustrate their conclusions they took the example of how life satisfaction research sheds new light on unemployment policies.

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Unemployment

Unemployment significantly lowers levels of life satisfaction. It hits those directly affected particularly hard, but also impacts on the general population. The size of the effect is such that the ‘compensation’ required to keep life satisfaction constant after losing your job dwarfs the monetary loss felt by the unemployed. Employment plays an important role in people’s social lives and also confirms someone’s conformity with social norms — recall that levels of life satisfaction among the unemployed are higher in areas of high unemployment. It has also been found that those who are hurt less by unemployment were somewhat less likely to look for a new job and, over time, were more likely to remain unemployed. These findings have the following implications:

• The scale of the loss of life satisfaction is such that it lends support for active labour market policies, such as the New Deal, which seek to quickly reattach people to the labour market. Finding employment for the jobless should be given a higher priority than increasing the level of benefits received by the short term unemployed.
• This is particularly the case for the long term unemployed and those in unemployment black spots who may be less motivated to look for work as their life satisfaction is higher.
• The research unfortunately does not touch upon wider issues of worklessness — many of the long term unemployed in Europe may be on sickness rather than unemployment benefits.

Multi-dimensional models of well-being

As important as life satisfaction is, there is a growing number of academics who suggest that looking at life satisfaction in isolation may create a distorted view of people’s quality of life. Robert E Lane, Professor Emeritus of Political Science at Yale University in the US, proposes a political theory of well-being that includes a ‘Trinity of Good’ – subjective well-being (SWB normally measured by life satisfaction), human development and justice. He warns explicitly of the dangers of just pursuing a maximisation of SWB and therefore directly challenges a purely utilitarian focus to economics and policy which is solely based on maximising happiness:

- ‘The greatest happiness of the greatest number’ leaves open the exploitation of a minority by a majority where slight preferences of the majority outweigh the intense preferences of the minority.
- Utilitarianism especially shows neglect of a person’s autonomy and a lack of interest in their integrity – this is why he proposes human development as an additional ‘good’.
- He suggests that not all pleasures are equal and quotes John Stuart Mill “It is better to be a human satisfied than a pig dissatisfied; better to be Socrates dissatisfied than a fool satisfied. And if the fool, or the pig, are of different opinion, it is because they only know their own side of the question. The other party to the comparison (Socrates or someone who has experienced both ‘higher’ and ‘lower’ pleasures) knows both sides.”

Professor Joar Vittersø of the University of Tromsø also suggests devoting attention to well-being indicators other than a life-satisfaction component which is complemented with a developmental component – he relates the more ‘goal-orientated’ satisfaction component to the Hedonic tradition of philosophy and the more ‘process-orientated’ developmental aspect to the Eudaimonic philosophical tradition. He suggests that in evolutionary terms these aspects serve different purposes: goal-evaluation gives humans an immediate good-bad signal, whereas the process-orientated well-being encourages commitment to goals that do not reap immediate rewards — he sometimes refers to this as a process of ‘building meaning’.

Whilst this is new work, Professor Vittersø is not alone in his proposal that there is more to understanding people’s well-being than life satisfaction. Over many years Carol Ryff, Professor of Psychology at the University of Wisconsin-Madison, has rigorously developed psychometric survey scales that use a six-dimensional model of psychological well-being: self-acceptance, personal growth, autonomy, positive relationships, environmental mastery and purpose in life. Other studies have also combined questions about personal development with questions about life satisfaction and have also statistically shown that there are at least two components to people’s well-being, which have been summarised variously as:
- A satisfaction, happiness, comfortableness, or pleasurable dimension.
- A developmental, growth-orientated, meaningful or absorbing dimension.

Other support for further dimensions of well-being comes from the ‘positive psychology’ network, which has started to gain significant momentum in the US. Leading lights include Mihaly Csikszentmihalyi (known best for his theory of creativity and flow) Nobel Prize winner Daniel Kahneman and Martin Seligman. Seligman’s latest book Authentic Happiness is halfway between an academic overview and a self-help book that provides an excellent overview. He summarises his approach as follows:

“‘My central theme ... is that there are several routes to authentic happiness that are each very different. Positive emotion... divides into two very different things – pleasures and gratifications. Pleasures are momentary and defined by felt emotion. The pleasant life successfully pursues positive emotion about the present, past and future [for example savouring, contentment and optimism]. The gratifications are more abiding... they are characterised by absorption, engagement and flow ... this is my formulation of the good life. The meaningful life has one additional feature: using your strengths in service of something larger than you are. To live all three lives is to lead a full life.'”

Whilst the pleasant life is an important source of happiness, it can be argued that a more stable source of well-being comes from the ‘gratifications’ in the good life which involve some skill and challenge. These could range from climbing a mountain to doing our job well to playing bridge. The meaningful life is devoted to something larger than the self.

What is not entirely clear from Seligman’s work is whether he sees these as three separate dimensions to well-being, or whether they are descriptions of something that collapses back down to a single dimension of life satisfaction.

15 Professor Vittersø has been an advisor to nef for this project.
Health, happiness and well-being
The relationship between how healthy people are and their sense of well-being is not straightforward. Whilst good health is widely considered to be a key to living a happy life, statistically the relationship between objective (diagnosed) health and well-being is not as strong as might be expected. The relationship does still exist, however, and permanent adverse health changes do have a lasting and negative effect on people’s well-being. There is also strong evidence that happy people live longer and are healthier. In other words the causality works the other way around as well – well-being is also a key to good health. The evidence is emerging from both long-term studies of cohorts (peer groups) and targeted research into the health of older people.

Another member of the US positive psychology network, George Vaillant, has done extensive work in this area and published a book called Aging Well. His research suggests that being ‘positively engaged’ with meaningful ‘life tasks’, such as (though by no means exclusively) bringing up children, are key to happiness and longevity. Also, having a positive outlook seems to be very important for longevity, with research showing that optimists live on average 19 per cent longer than pessimists. Furthermore, there is evidence that happy people “seek out and absorb more health risk information”, which is clearly likely to enhance longevity and health. In addition it has been suggested that “unhappy people have a low threshold for pain or minor symptoms, and are ready to decide that they are ‘ill’.”

There is emerging evidence that whilst the life satisfaction component of well-being is strongly related to mental health and depression, it is the personal development dimension of well-being that seems to be linked more strongly to overall health, longevity, resilience, and ability to cope with adverse circumstances and ‘thrive’ in life. Carol Ryff’s work shows that older people who are strong on personal growth have a different biological profile to others and are therefore less likely to develop serious illnesses in later life – cardiovascular, diabetes and so on. Having a high level of life satisfaction shows no such link – life satisfaction seems more linked to combating depression. This all suggests that there are at least two distinct dimensions and that they operate in different ways in the body. Therefore it is important, particularly for policy-makers keen to promote health outcomes, to recognise the importance of this second dimension to well-being.

21. Seligman citing the research of Professor Lisa Aspinwall of Utah University, p40.
nef's approach to measuring well-being

In the light of all these influences we decided to assess people's well-being with at least two components, their life satisfaction and their personal development. We took the view that these different aspects of the good life were separate, and not capable of collapsing back down to a single measure of life satisfaction. We also were aware that there might be a third component associated with living 'meaningful' lives, but did not test this in the pilot.

As this is a new emerging field, different authors or disciplines use different language to refer to similar concepts – the inter-use of expressions such as 'subjective well-being', happiness and life satisfaction illustrates the point. Table 1 seeks to clarify the inter-connections between the terms and theories.

The two- or multi-dimensional approach to understanding people's well-being has many benefits over a one-dimensional life-satisfaction model. It allows for trade-offs between dimensions (for example, that you may score high on life satisfaction but low on personal development) and can also explain some statistical paradoxes that arise from exclusively adopting the life-satisfaction approach, for example 'the parenting paradox', where parents report in retrospect that they are very glad they had children, but parents living with children usually score lower on life satisfaction indicators than people who do not.24

Table 1: Well-being theories and associated terminology

<table>
<thead>
<tr>
<th>Source</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>nef's Well-being Programme</td>
<td></td>
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<tr>
<td>Joar Vittersø, University of Tromso</td>
<td>Life Satisfaction</td>
</tr>
<tr>
<td></td>
<td>Hedonic or Goal Orientated Well-being</td>
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<td></td>
<td>Personal Development</td>
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<td></td>
<td>Eudemonic or Process Orientated Well-being</td>
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<td>Robert E Lane, Loss of Happiness in Market Economies</td>
<td>Subjective Well-being (Life Satisfaction)</td>
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<td></td>
<td>Personal Development</td>
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<td>Autonomy</td>
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<td></td>
<td>Personal growth</td>
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<td></td>
<td>Purpose in Life</td>
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<tr>
<td>Carol Ryff, Psychological Well-being</td>
<td>Self Acceptance</td>
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<td></td>
<td>Positive Relations</td>
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<td>Environmental Mastery</td>
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<tr>
<td>Martin Seligman, Authentic Happiness</td>
<td>Pleasure – Positive Emotions</td>
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<td></td>
<td>&quot;The Pleasant Life&quot;</td>
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<td>Gratifications</td>
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<td></td>
<td>&quot;The Good Life&quot;</td>
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<td></td>
<td>Meaning &quot;The Meaningful Life&quot;</td>
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<tr>
<td>Manfred Max-Neef, Human Scale Development</td>
<td>Subsistence</td>
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<td></td>
<td>Protection</td>
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<td></td>
<td>Affection</td>
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<td>Creativity</td>
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<td>Identity</td>
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<td></td>
<td>Freedom</td>
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<td>Abrahm Maslow, Hierarchy of Needs</td>
<td>Physiological</td>
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<td></td>
<td>Safety</td>
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<td></td>
<td>Social and</td>
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<td>Belongingness</td>
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<td>Self Esteem</td>
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<td></td>
<td>Self Actualisation</td>
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</table>

The power and potential of well-being indicators

Local Government Act 2000

In the Local Government Act 2000 all local authorities in England and Wales were provided with a new power of ‘well-being’. This power entitles local authorities to do anything that might achieve any, or all, of the following:

- **The promotion or improvement of the economic well-being of their area.**

- **The promotion or improvement of the social well-being of their area.**

- **The promotion or improvement of the environmental well-being of their area.**

The well-being power has not, at least so far, been as widely used by Local Authorities as was anticipated. This is due in part to the introduction of several other developments in councils’ statutory duties, including the introduction of new structures, best value reviews and the rigour of comprehensive performance assessments (CPA). Adequate financing of local government is also a fundamental issue. Other factors, however, include organisational inertia, a lack of legal clarity and an absence of a clear understanding of how to identify social, economic and environmental well-being.

However some councils have used or are considering using the well-being power. While some projects will be driven by one of the three objectives, one of the challenges for authorities is to find a balance, and many initiatives will lead to several well-being outcomes.

Before this Act, all local authorities had to refer to specific pieces of legislation in order to provide services. Professor Sir Michael Lyons, director of the Institute of Local Government Studies (INLOGOV), says that “Councils now have the legal capacity to act in new ways to tackle those issues for which existing legislation is imperfectly designed” and “that like all innovations, it requires us to confront established ways of thinking”.25

The power has been granted so as to encourage local authorities to take a more active leadership role in communities. Hilary Kitchin, a principal associate at the INLOGOV and well-being power expert, says:

> “The power has three main purposes: First it has the purpose of reassuring the local authority that it has the broad powers that it needs to carry out many existing activities about which there may have been uncertainty due to the operation of the ultra vires rule.

> Secondly it is possible to use the power to carry out existing activities in new ways, enhancing service delivery and programmes of work by including well-being outcomes.

> Thirdly, it is a tool for innovation, allowing councils to undertake new activities.

> It is a remarkable power, and has the potential over time, to transform the role of local authorities, and the perceptions of their constituencies of local people and organisations.”26

The Act also creates a new duty for local authorities to prepare a strategy for promoting, or improving, well-being in the area, but councils do not have to wait until they have the strategy in place before using the well-being power.

Excerpts from Nottingham’s Community Strategy

The One City Partnership Nottingham is a local strategic partnership that brings together the public, private, community and voluntary sectors based in Nottingham. By working together, we can plan to use the resources at our disposal more effectively.

The One City Partnership believes that a Community Strategy should provide for the citizens of Nottingham an inclusive vision of the kind of city we aspire to be. It will be a strategy for improving the quality of life and sense of well-being we all wish to share and enjoy.

Over recent years a new model for improving the well-being of communities has emerged. It is now recognised that by focusing on a number of broad outcomes, agencies responsible for delivering services can collectively strive to improve the quality of life of our communities.

Rather than focussing on the specific services we are seeking to find ways in which service delivery can improve outcomes for people in a ‘cross cutting’ way. That is how a range of service activity can have a positive impact on improving citizen’s lives around key issues that concern them.

The use of the Power of Well Being should be used to support, where necessary, the outcomes identified within an area’s Community Strategy. The City Council will therefore use the Community Strategy to explore with partners how the Power of Well Being can be creatively utilised in order to further the objectives described in the Strategy. Discussions are also taking place with the City Council’s Area Committees to explore how they may be able to utilise the Well Being Power to further enhance their role in community leadership.

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25 We are grateful to Hilary Kitchin for drafting this section, which draws extensively on Kitchin, H (2003) Promoting Well-being: Making use of Councils’ New Freedom, Institute of Local Government Studies, School of Public Policy; University of Birmingham. Professor Lyons wrote the preface.

26 Promoting Well-being, ibid, p2.
Guidance for interpreting the well-being power suggests that as well as being a focus for Community Strategic Planning, councils should reassess their Best Value review programmes “to ensure [they are] cast in sufficiently strategic terms to support the delivery of improved well-being in the area”.27

Effectively the Act is the piece of legislation that seeks to create and encourage the much written about concept of ‘joined-up’ government, at the local level.

Research commissioned from the INLOGOV and the University of the West of England by the Office of the Deputy Prime Minister should draw out experience and good practice during 2004-2006. Early examples of use of the power which illustrate a range of outcomes include:

**Torbay**
Torbay has one of the lowest GDP levels in the south west, with pockets of serious deprivation and relatively high unemployment. Using the well-being power, the Council has established a partnership with the private sector encompassing tourism, marketing and development, economic regeneration and harbour development.

**Camden**
In Camden, the power is a useful adjunct to the anti-drugs strategy, allowing the Council to attach an injunction to close a crack house being run from leasehold property. Dead telephone boxes were being used for dealing, and Camden has convinced operators to take action by threatening to use the new power to remove the boxes.28

**Greenwich**
Greenwich is finding the new power more flexible and effective than the former economic development powers, which it replaces. Greenwich Council has used the new powers to set up a ‘recruitment agency’ scheme to promote local employment. This has been set up as a not-for-profit arms-length company, with the power to give financial assistance, enter into contracts, and provide staff, goods, services and accommodation. The agency will ensure better terms and conditions of employment, lead to permanent job opportunities, and work with local employers to identify staff shortages and training requirements. Surpluses will be diverted into priorities in employment, training, sports, culture and the arts within the community. Savings to the Council are projected at £200,000 per year.

Greenwich Council has also relied upon the well-being power for a Private Finance Initiative scheme on residential homes for the elderly, along with powers to provide assistance under existing legislation. The well-being power enables councils to take a ‘belt and braces’ approach to setting up complex long-term schemes that need to withstand the test of time, and which have a range of social benefits.29

**Wakefield**
Wakefield Council has to address urgent problems on a city estate suffering physical and social decline following the Colliery Closure Programme. The power of well-being is being used to underpin acquisition of the properties, as the basis for redeveloping the area.30

Perhaps the most important impact of the new power will be to generate and support a change in culture in local authorities. One result of the new power is that county councils can now become proactively involved in housing schemes, even though this would be outside their normal functions.

**Dorset**
In Dorset, where there is an urgent need for affordable housing, chief executive David Jenkins is reported as saying that the power of well-being has significantly altered the frame of mind on the Council. The Council judges itself as being “at the stage of being clear that something must be done”, about affordable housing. This has led them to examine how their intervention and collaboration can help, in the knowledge that they can rely upon the power of well-being.31

Other examples include:

- The addition of community benefit clauses in the procurement process. Local Authorities are under a duty to achieve continuous improvement in the performance of their functions (Best Value). Some have experimented with using community benefit clauses as a way of meshing together their duty to achieve Best Value with their need to deliver social inclusion and regeneration. For example Nottingham City Council gains commitments from some of its contractors (particularly in the construction field) to train and employ local people.32

- Using the power to create an extended school initiative, using school buildings to deliver other services such as health or social services.

- Energy efficiency programs that include health targets as well as reduction of energy costs.

- Preventative health measures.

As can be seen from the examples above, some councils have used the well-being power to connect services that traditionally have been kept separate, such as health and energy or employment and cultural needs. Nevertheless, much more work needs to be done to let councils understand and utilise the real ‘power of the power’. Part of the problem is a lack of understanding of what well-being is and the linkages between individuals’ quality of life and their economic, social and environmental circumstances.

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30 LGA December 2003
The power and potential of well-being indicators

nef’s framework for understanding the ‘power of well-being’

nef’s framework for understanding well-being proposes that local authorities need to consider the inter-relationship of economic, social and environmental well-being with people’s personal well-being (see Diagram 4). Indeed we propose that these realms are important precisely because of their effect on people’s personal well-being. By placing people’s personal well-being at the core of policy formation, councils can be more innovative and potentially more efficient and effective too.

By social well-being we are talking about what is often called social capital — the level of social activity, trust, resilience and so on. Environmental well-being is the quality of the environment in which people live. Many of the inter-relationships between the different parts of the diagram can be guessed at, and could be tested with further research. Existing research shows that economic, social and environmental contexts have an impact on our personal well-being, although to differing degrees.

There are clear trade-offs and complementarities between aspects of personal, social, economic, and environmental well-being. For example, economic, social and personal well-being can experience trade-offs on areas such as time use where competing demands include work, personal leisure and family. On the other hand, a healthy local economy will often have a vital effect on the social community as well, with good leisure facilities and social capital. These in turn can lead to a virtuous circle of effects with increased networking and greater economic opportunities.

Similarly there may be links between social and environmental well-being. A good environment may help people come together and create social capital. It is also possible that strong communities may work harder to protect their local environment, although this is untested. There are also clear links and trade-offs between economic and environmental well-being. Economic activity, growth and high levels of consumption can disrupt the environment, especially at the global level but it is also possible that a strengthening economy will lead to more concern and interest in the local environment.

There is further potential for developing subjective indicators regarding people’s personal feelings about the economic, social and environmental realms.

Most interesting from a psychological perspective is the impact of personal well-being on the other spheres. In other words, are those people with higher well-being likely to promote economic well-being (for example, through higher productivity, lower sickness, less costly healthcare and so on), social well-being (through pro-social behaviour) and environmental well-being (through caring for the environment). We decided to analyse the relationship between personal well-being and social well-being in this pilot. Our hypothesis was that someone with high personal well-being would be likely to engage in pro-social behaviour. The findings suggest that the relationship is more complex than we supposed.
The process of the pilot project

For more detail on the process of the project, please see Appendix 1. Appendix 2 gives a brief breakdown of the questionnaire design. Appendix 3 contains the academic sources for scales used.

We used questionnaires and a school setting to reach most of the children but for those over 15, we conducted a street survey since many young people are outside the school system after that age. The questionnaires used measured both life satisfaction and personal development. For life satisfaction a questionnaire on children’s life satisfaction was identified, but we could not identify an established children’s questionnaire for the personal development component. However, Todd B Kashdan, from the Department of Clinical Psychology at the University of Buffalo, the author of an adult’s scale for ‘curiosity’ and also an expert in child development, agreed to design a pilot scale.

Curiosity is a particularly appropriate manner of capturing children’s capacity for personal development. Kashdan’s scale is built from two subscales: the first is ‘absorption’; the second is ‘exploration’.

Absorption is another word for what Mihaly Csikszentmihalyi calls ‘flow’ and Martin Seligman calls ‘gratifications’. Csikszentmihalyi defines flow as when “a person’s skills are fully involved in overcoming a challenge that is just about manageable”. 33 Seligman similarly describes gratifications as activities that “engage us fully, we become immersed and absorbed in them… (they) last longer than pleasures, they involve a lot of thinking and interpretation”. 34

The tendency to become absorbed in activities is however not the same as being curious — for that young people must also be interested in learning and exploring. For this reason the curiosity measure balances the tendency to become absorbed with the capacity for exploration.

Curiosity can have both an internal and an external aspect to it — some children are more curious about the world outside them, others more about themselves. These two aspects are clearly linked but it is regrettable that the scale was not designed to illuminate the contrast between them. This might prove to be a fruitful line of research in the future.

In addition to these questions about children’s overall lives, we also used an existing questionnaire that assesses children’s satisfaction with five different aspects (or ‘domains’) of their lives: family life, friendships, living environment, 35 schools and themselves.

We also asked a set of 10 standard questions which together assessed children’s self-esteem. 36

We were keen to explore the inter-relationship between personal and social well-being (see Figure 4). To do this we decided to explore, what we called, ‘pro-social’ behaviour — behaviour that has a knock-on positive effect for other people’s personal well-being. 37 We were interested in whether people with high personal well-being would engage in pro-social behaviour.

Christopher Peterson, Professor of Psychology at the University of Michigan, gave us a set of questions that sought to identify how much children were using their ‘character strengths’ in their day-to-day lives. The questions explored children’s propensity to display characteristics of:

- Emotional strengths.
- Cognitive strengths.
- Strengths that protect against excess.
- Interpersonal strengths.
- Civic strengths.
- Spiritual strengths.

Whilst data was gathered on all these strengths, we have used only a subset for indicating pro-social behaviour, since we would suggest only ‘interpersonal’ and ‘civic’ strengths are directly related to potential knock-on effects on other people’s well-being. The questions were only appropriate for children aged 12 and above, so we also used some existing short scales for ‘generosity’ and taking ‘social initiative’ for all children.

At the request of Nottingham’s Crime and Disorder Reduction Partnership we included some questions about community safety.

For economic and environmental well-being we sought some information on the circumstances of the children’s lives, such as their postcode and the employment status of their parents. We also used a scale that assessed how strongly children held ‘materialistic’ values, which may be connected to increased material usage and hence future environmental issues.

To create some insight into which policies may support young people’s well-being, we asked a series of open-ended questions regarding children’s favourite activities — what they liked doing best each week, where they did it and who they were with whilst they were doing it. We used four different questionnaires adapted to the different age ranges (see Table 2 overleaf).

35 This domain includes questions about the respondent’s satisfaction with their own house, their neighbourhood and the wider area they live in.
36 Using the Rosenberg Self-Esteem scale.
37 In contrast to anti-social behaviour, which undermines social well-being with negative consequences for other people’s well-being.
The power and potential of well-being indicators

The questions were all in the form of statements, with which the respondents could indicate how strongly they agreed or disagreed with on a scale of one to five.

In summary, we created several well-being indicators which included:

- **Life satisfaction.**
- **Curiosity as an indicator for personal development.**
- **Children’s satisfaction with different domains of their lives:**
  - Family
  - Friends
  - Living environment
  - School
  - Self

We also captured three other important types of data:

- **Self esteem.**
- **Pro-social behaviour (for 12 and over).**
- **Favourite activities.**

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38 The terms ‘curiosity’ and ‘personal development’ will be used interchangeably from hereon.

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<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Age range</th>
<th>Sample size</th>
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<tbody>
<tr>
<td>Street survey</td>
<td>16-19-year-olds</td>
<td>400</td>
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<tr>
<td>Secondary school</td>
<td>12-15-year-olds</td>
<td>240</td>
</tr>
<tr>
<td>Primary school</td>
<td>9-11-year-olds</td>
<td>330</td>
</tr>
<tr>
<td>Junior primary school</td>
<td>7-8-year-olds</td>
<td>110</td>
</tr>
</tbody>
</table>

Table 2: Questionnaires used in the pilot

![Figure 4: Life satisfaction – all children](image-url)
The power and potential of well-being indicators

Life satisfaction and personal development

One of nef’s aims was to investigate the benefits (or otherwise) of using a two-dimensional model of personal well-being. We found that whilst the two indicators of life satisfaction and personal development were related, there were also distinct differences (see Appendix 4 for a detailed statistical analysis of their independent characteristics using a factor analysis).

We found that over a third of young people responded positively in regard to one component of well-being but negatively to the other.

Figures 4 and 5 show that, overall, most of the young people surveyed responded positively to the questions posed to them: 68 per cent of young people (aged 9–15) responded positively to the life satisfaction questions and 72 per cent to the curiosity questions. Medium levels of life satisfaction and curiosity are the norm, with 45 per cent registering a medium score for life satisfaction and 57 per cent for curiosity.

The nine per cent of young people who are scoring ‘very low’ in regard to life satisfaction can be considered at very high risk of depression. Medical surveys about depression tend to focus on symptoms such as fatigue, inability to sleep or concentrate whereas very low life satisfaction is almost by definition depression itself as it is an absence of feeling positive emotions about life. Indeed Professor Bob Cummins of Deakin University in Australia, and author of the world’s first national index of well-being, has gone as far as to suggest that life satisfaction is a better indicator of depression than depression scales.\(^{39}\)

The headline indicator for the personal development component of well-being – curiosity – has a similar shape of responses to the life satisfaction indicator; however there are fewer young people at the extremes of ‘high’ or ‘very low’.

Those children who score ‘very low’ or ‘low’ in terms of curiosity (personal development) are likely to be quite ‘closed’ and to avoid challenging situations. Future entrepreneurs and risk takers are most likely to be high scorers.

Table 3 shows a total of 52 per cent have both medium-to-high curiosity and medium-to-high life satisfaction – these are the active and happy youngsters. Whilst there is still potential to enhance their well-being further they are less of a concern from a policy perspective. The group to be most worried about perhaps are the 12 per cent of young people who score ‘low’ or ‘very low’ on both scales – these young people are likely to be lacking in energy, unhappy and somewhat stuck in a rut, as the personal development aspect of well-being is associated with the ability to cope with adverse situations and thrive with challenge.

Comparable data

Directly-comparable UK data is not available, as this sort of study has not been carried out in the UK before. This is especially true for the personal development indicator – curiosity – as it is entirely new. For the life satisfaction indicator, however, there is some data from the US where the children’s life satisfaction scale originates. A study of over 2,500 middle school students (aged 11-14) found that almost 10 per cent recorded their overall lives as either ‘terrible’ or ‘unhappy’ (points one and two on their seven-point scale).\(^{40}\)

Table 3: Children’s overall well-being by categories

<table>
<thead>
<tr>
<th>Percentage of Young People</th>
<th>Personal Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Low</td>
<td>Low</td>
</tr>
<tr>
<td>2%</td>
<td>26%</td>
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<tr>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>12%</td>
<td>20%</td>
</tr>
<tr>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>45%</td>
<td>16%</td>
</tr>
<tr>
<td>High</td>
<td>52%</td>
</tr>
</tbody>
</table>

Based on as yet unpublished PhD research by his student Vanessa Cook.
Professor Cummins Australian Quality of Life Centre’s web address is http://acqol.deakin.edu.au

Data shared with author based on a forthcoming paper Middle School Students’ Perceptions of Quality of Life, E. Scott Huebner, PhD, Robert F Valois, PhD, MPH, Raheem J. Paxton, MS, J. Wanzer Drane, Ph.D, University of South Carolina.

Statistics on behalf of the Department of Health, the Scottish Health Executive and the National Assembly for Wales.
A second comparison can be made with a report by the Office of National Statistics on the ‘Mental Health of Children and Adolescents’ which found that about 11 per cent of 11-15-year-olds had symptoms of a mental disorder with about six per cent of these being an ‘emotional disorder’ – either depression or anxiety – the rest having behavioural disorders.

In the US the data is scaled to include some students who would score a ‘low’ on our scales (in contrast to a ‘very low’). The UK emotional disorder data shows only six per cent as being depressed (though we have no way of judging how depression as measured by ‘very low’ life satisfaction directly compares to diagnosed depression). Taken together these both perhaps suggest that the nine per cent of children aged 9-15 who are scoring ‘very low’ in terms of life satisfaction is, if anything, a slightly higher figure than would be expected.

Well-being falls as children get older

Figure 6 vividly depicts a fall in average well-being as children get older, with both their life satisfaction and curiosity falling by five and 10 per cent respectively.

In addition, over time, the spread of scores seems to change. Both scales show a significant decrease in the proportion of young people scoring ‘high’, and increases in the number scoring ‘low’. Interestingly there is not a ‘free fall’ into the ‘very low’ category, suggesting that the risk of severe depression does not seem to increase with age.

The percentage of young people who are scoring low (or very low) on both indicators, however, significantly increases from nine per cent to 16 per cent for the 12–15-year-olds and those scoring positively falls significantly from 62 per cent to 41 per cent.

Is this just the trauma of adolescence? Not necessarily. Whilst the hormonal flush of the teenage years might lower life satisfaction, it is interesting that curiosity drops even more than life satisfaction. This suggests that something else is going on. It is particularly noticeable that the most significant drop in curiosity is around the age of 12, which is when a child will just have begun secondary school. Is there a link between changing schools and this drop in well-being? Further data below suggests that this is the case.

**Boys’ and girls’ overall well-being – boys remain more curious than girls.**

With regard to how satisfied overall they are with their lives, there appears to be little difference between boys and girls (see Figure 7). However, if we look at curiosity – personal development – (see Figure 8), then differences begin to appear, particularly for older children. Despite the fact that at a younger age curiosity levels are similar, far more girls suffer a loss of curiosity than boys, with 69 per cent of boys still responding positively to questions about their curiosity as compared to just 54 per cent of girls. This raises fundamental questions about how and where the shifts take place.

**The well-being domains**

We also asked the children some more detailed questions about their satisfaction with five different domains of their lives: their family, their friends, their school, their living environment and their self satisfaction.

In general people who have a high level of overall well-being also score highly in regard to the domains of their life. This effect works in both directions. In other words, a generally happy person will tend to see specific aspects of their lives more favourably. At the same time, satisfaction in a particular area of life is likely to raise well-being with life as a whole. It is also worth bearing in mind that people place varying degrees of importance on different domains: we can imagine that the circles representing the different domains are different sizes.

Diagram 5 illustrates the relationships.

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42 The term ‘significantly’ will be used in terms of statistical significance at 95 per cent confidence limits throughout.
Using correlation techniques, it is possible to calculate which domains are the most important predictors of overall well-being. This is important because children do not weight all the domains equally in terms of their impact on their well-being — this is not necessarily a conscious weighting as often what we imagine has the greatest impact on our well-being, does not. The classic example with adults is that people tend to overestimate the importance of earning more money at the expense of spending more time with family and friends.\(^{43}\)

For life satisfaction the order of importance of life domains is shown in Table 4 and that for curiosity in Table 5.

Overall, schools are the least important domain as regards children’s satisfaction with their lives, but the most important in regard to their curiosity and personal development. The other vital domain is family satisfaction, which perhaps unsurprisingly is easily the most important in regard to life satisfaction, but also a close third in relation to curiosity and personal development.

There are some differences in regard to age\(^{46}\) and gender, which are summarised in Tables 6 and 7.

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44 The figures do add up to 100 per cent as the domains are inter-related – altogether they can explain 54 per cent of life satisfaction variance and 33 per cent of curiosity (personal development) variance.
45 R-Square figures show the amount of variation that the domain indicator can explain just by itself.
46 Due to the large change in schools satisfaction between primary and secondary schools, the data is presented here by school type rather than strict age groups – these are almost identical, however, to the earlier groups of 9-11 and 12-15-year-olds.
The power and potential of well-being indicators

The interesting difference in regard to life satisfaction is that for older boys family satisfaction becomes much less important than for older girls, with quality of friendships becoming the most important for them.

In younger boys it is the family and self domains that are the most important for curiosity and personal development rather than school, which is the case for all other groups.

**Changes in domain satisfaction over time**

In four out of the five domains of children’s lives – family, schools, living environment and self – average scores fall, as children get older. The one exception is satisfaction with friendships, which remains quite stable. Figure 9 shows the downward trends, particularly that of school satisfaction which shows the most dramatic fall. Nearly all the change in school satisfaction happens when children switch from primary school to secondary. Family satisfaction shows the next highest fall, lagging a year behind and falling the most steeply as children enter their teenage years. Overall, living environment and school satisfaction score significantly lower than the other well-being domains. This is probably because children’s relationship to their schools and living environment are less ‘personal’ than their relationships with their friends, themselves and their families – allowing children to be more freely critical. They are also the two domains that are most readily addressed by public policy.

**Schools and well-being**

We found that schools are the most important domain in relation to a child’s personal development. We have also found that children appear to be far happier at primary school than they do at secondary. The key question is whether the fall in satisfaction with school is inevitable or whether it is the environment at secondary schools which is causing this drop?

Due to some data collection problems with the secondary school survey, there were five primary schools but only two secondary schools in the combined dataset. The sample size for secondary school children is large enough to make comparisons with the primary school children meaningful, though there should be some caution in not over-generalising from these results.

The differences between children’s experience of primary school and secondary school is clearly very marked. This is generally understood by practitioners and policy-makers as an issue of ‘transition’ between schools. Our data suggests that transition is not the complete story. Well-being in secondary school never

**Table 6: Relative importance of domains for life satisfaction by gender and school type**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Boys - Primary</th>
<th>Girls - Primary</th>
<th>Boys - Secondary</th>
<th>Girls- Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Family</td>
<td>41%</td>
<td>Family</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Friends</td>
<td>33%</td>
<td>Family</td>
<td>32%</td>
</tr>
<tr>
<td>2nd</td>
<td>Self</td>
<td>34%</td>
<td>Living Environment</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>Self</td>
<td>30%</td>
<td>Family</td>
<td>25%</td>
</tr>
<tr>
<td>3rd</td>
<td>Living Environment</td>
<td>21%</td>
<td>Self</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td>Family</td>
<td>25%</td>
<td>School</td>
<td>17%</td>
</tr>
<tr>
<td>4th</td>
<td>Friendship</td>
<td>17%</td>
<td>Living Environment</td>
<td>17%</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>16%</td>
<td>School</td>
<td>6%</td>
</tr>
<tr>
<td>5th</td>
<td>School</td>
<td>8%</td>
<td>Family</td>
<td>16%</td>
</tr>
</tbody>
</table>

**Table 7: Relative importance of domains for curiosity (personal development) by gender and school type**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Boys - Primary</th>
<th>Girls - Primary</th>
<th>Boys - Secondary</th>
<th>Girls- Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Family</td>
<td>29%</td>
<td>School</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Self</td>
<td>26%</td>
<td>Family</td>
<td>15%</td>
</tr>
<tr>
<td>2nd</td>
<td>Friendship</td>
<td>19%</td>
<td>Self</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Friendship</td>
<td>19%</td>
<td>School</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>School</td>
<td>11%</td>
<td>School</td>
<td>11%</td>
</tr>
</tbody>
</table>

n.s. – not statistically significant
The power and potential of well-being indicators

Average School Satisfaction Score

<table>
<thead>
<tr>
<th>Age</th>
<th>Junior Primary Ages 7 - 9</th>
<th>Senior Primary Ages 9 - 11</th>
<th>Secondary Ages 12 - 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>105</td>
<td>339</td>
<td>239</td>
</tr>
<tr>
<td>Girls</td>
<td>3.50</td>
<td>3.01</td>
<td>2.42</td>
</tr>
</tbody>
</table>

Table 9: Average school satisfaction by age

The junior survey used fewer, only positively worded, questions – so the scores cannot be directly compared to the other surveys.

Girls enjoy school more than boys

The differences between boys’ and girls’ achievements at school are well recognised, and the well-being data shows the difference in their experiences at school. Girls show higher satisfaction at all ages. Table 9 illustrates the differences within the surveys – all of which are statistically significant, though the secondary school differences are much less pronounced than the other surveys.

The data suggests the differences between genders in terms of enjoying school appear to begin early on in their school careers.

Difference between schools

The data can also be used to distinguish between schools. We present this data in an illustrative and tentative manner, as this was not the original purpose of the survey.

There were five schools that participated in the primary school survey with a range of academic achievements. One of the schools has not been included in these comparisons as the majority of their replies came from only one year group, which may have led to some distortions. To protect all the schools’ identity we will only refer to them as schools A-D, however we have rank-ordered them according to their ‘aggregate’ national league table results in three tests (maths, English and science) as published in the national league tables in December 2003 (see Table 10).

Secondary school children seem to become bored, stop learning and no longer enjoy the activities available at school. All of these problems are certain to undermine children’s curiosity and personal development, as getting involved in activities that they find interesting and challenging, and learning from such experiences, are all key factors in developing children’s potential.

The scale and abruptness of the change is extremely striking. Figure 10 indicates the change.

At primary schools 65 per cent of pupils are responding positively about school, whereas by the time children have moved to secondary school only 27 per cent are satisfied with school. Some of the responses to individual questions highlight the problems that children seem to find. Table 8 shows the three questions with the largest changes.

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The power and potential of well-being indicators

If we were to create a parallel ‘well-being league table’, it would look something like Table 11.

Schools B, C and D all perform very similarly and nothing can really be read into the differences in their well-being rankings.

School A, however, which is the highest achieving school in terms of the aggregate national results, scores significantly lower on all measures of well-being. This raises very interesting questions about whether there is any kind of relationship between academic performance and well-being at school A, and more generally. Indeed there could be many factors involved in such a relatively low score of well-being, for example:

- The teaching could be too test focused with not enough activities stimulating exploration.
- Extra curricula activities that are enjoyable but not focused on academic achievement may have been reduced.
- Sports participation might similarly have been curtailed (see later on the large impact of sport on well-being).
- The school may have a specific culture that is not supportive of pupils’ individual needs and experiences.

It may be associated with the school’s location, which is the most affluent of the four surveyed.

Some of the explanation of the data will be relatively complex. For example there are studies that suggest that there can be positive correlation between dislike of the subject and learning gain (for example, in maths).

We have not done any research on the schools themselves as that was outside the scope of the pilot. It is an area where further research would be helpful, as the relationships are potentially complex. For example, school A had the lowest achievement of the four schools in the Government’s new ‘value added’ measure which looks at how much pupils improve between key stages. This may be because its pupils were already doing relatively well academically, and therefore the school would have marginal diminishing returns in terms of how much pupils improve between key stages. This may be because its pupils were already doing relatively well academically, and therefore the school would have marginal diminishing returns in terms of how much pupils improve in this area. On the other hand it is not impossible that there could be some kind of link between schools with lower well-being and lower academic ‘value adding’.

We were unable to repeat the analysis with secondary schools due to the smaller sample sizes and the fact that there were only two (very different) schools to make comparisons between.

Obviously with samples from just four primary schools in one city, these results cannot be generalised but they certainly suggest that more detailed well-being research with larger sample sizes and a range of schools would be very worthwhile. It would be of real interest to find which schools promote and do not promote well-being, and to seek to replicate the qualities of successful schools.

The central importance of family

As shown earlier, how satisfied children are with their family situation is key to their overall well-being. It is the most important domain as regards life satisfaction and also one of the most influential, especially at younger ages, with regard to personal development. Family satisfaction, perhaps not surprisingly, falls as children become teenagers (see Figure 11). It seems that this is the cultural norm!

It is possible to look at this data by three different family types: lone-parent families, reconstituted families (the presence of a step-parent) and non-step two-parent families (see Figure 12).

47 The coding for these categories may not be watertight as children were asked to tick boxes regarding who lives at home: mother, father, step-mother and step-father and some children may refer to a step-parent as mother or indeed uncle.
There are significant differences between non-step two-parent families and the other two groups. This is backed up by the Office of National Statistics report into the ‘mental well-being’ of children, which reported that the prevalence of a child having a mental disorder was nearly twice as high for these family types. Nevertheless, we need to be cautious about what this result means. Almost by definition lone-parent and reconstituted families were mainly once two-parent families – where at least the adults were unhappy. Children from ‘broken’ families are significantly less satisfied with both their family lives and their overall lives but this may be at least partially due to the dysfunctionality of their original family rather than their unhappiness with their present family situation.

Therefore we would need to conduct more longitudinal studies to explore this relationship, but a child centred approach such as this may shed new light on the effects of family break-up on the children involved.

Regardless of the type of family they come from, children who are unhappy at home are much more likely to have lower overall well-being than children who come from a happy home environment. Risk factors can be calculated by comparing the actual percentage of children that fall into the group ‘low overall well-being’ for each category of family satisfaction, with the figure of 12 per cent that fall into this group overall.

The risks for each category of family satisfaction are shown in Table 12.

Children who have registered dis-satisfaction with their home lives are over three times as likely as an ‘average child’ to be in the low satisfaction-low personal development group. In contrast, children who are very happy at home are 10 times less likely than average to be in this group and over 30 times less likely than the low-family-satisfaction groups.

Since family life is a core determinant of life satisfaction and personal development, this would suggest that policies aimed to support this would be important. There is a tension, however, in looking at policy interventions in what is seen to be the private space of family life. The Government is recognising some limited interventions in this space such as through links with parents over truanting and engaging parents more in schools and schooling. Also, the benefit system overall is designed to reduce stress in families by raising children (and by implication the whole family) out of poverty.

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16 per cent (lone parent) and 15 per cent (reconstituted family) compared to eight per cent for non-step two-parent family. Meltzer, H and R Gatward (1999) The mental health of children and adolescents in Great Britain, ibid.
The power and potential of well-being indicators

There is also a growing interest in the question of 'life chances' through programmes like Sure Start. This life chances approach seems to be the most liberal approach to intervention in this area, as it need not interfere in the private sphere, and simultaneously will have an effect upon young people at a formative age.

Whether employment policies that encourage parents to go to work rather than personally looking after their children have an impact on children's immediate and/or long-term well-being would an interesting piece of research.

Favourite activities

One area of particular interest for NCC was how it engages with young people to provide recreational facilities for them. Therefore all children were asked an open question 'what is your favourite thing that you do in a typical week'. The idea was to ask them actually what they most enjoyed rather than provide a 'wish list'. The responses broadly fell into six categories:

- **Sports**
- **Playing**
- **Creative activities**
- **Computers**
- **Socialising**
- **Passive pastimes**

Boys and girls tend to have different favourite activities and the patterns change as children get older (see Tables 13 and 14). However Dr Tess Ridge, an expert on child-centred qualitative research from the University of Bath, has pointed out that responses to this type of question are framed by the situation a child finds themselves in. So if some children cannot go to an activity because of access issues such as cost or transport, the activity may appear less popular than it might have been if they had access to it.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Playing</td>
<td>39%</td>
<td>Sports 27%</td>
<td>Playing 24%</td>
</tr>
<tr>
<td>Sports</td>
<td>23%</td>
<td>Playing 23%</td>
<td>Socialising 20%</td>
</tr>
<tr>
<td>Socialising</td>
<td>18%</td>
<td>Socialising 18%</td>
<td>Sports 18%</td>
</tr>
<tr>
<td>Creative Activities</td>
<td>14%</td>
<td>Creative Activities 15%</td>
<td>Creative Activities 15%</td>
</tr>
<tr>
<td>Computers</td>
<td>4%</td>
<td>Computers 6%</td>
<td>Passive Pastimes 8%</td>
</tr>
<tr>
<td>Passive Pastimes</td>
<td>2%</td>
<td>Passive Pastimes 3%</td>
<td>Computers 5%</td>
</tr>
</tbody>
</table>

Table 13: Girls' favourite activities by age group

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports</td>
<td>38%</td>
<td>Sports 35%</td>
<td>Sports 48%</td>
</tr>
<tr>
<td>Playing</td>
<td>23%</td>
<td>Playing 21%</td>
<td>Computers 16%</td>
</tr>
<tr>
<td>Computers</td>
<td>17%</td>
<td>Computers 15%</td>
<td>Playing 12%</td>
</tr>
<tr>
<td>Creative Activities</td>
<td>10%</td>
<td>Socialising 12%</td>
<td>Passive Pastimes 7%</td>
</tr>
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<td>Socialising</td>
<td>8%</td>
<td>Passive Pastimes 8%</td>
<td>Creative Activities 5%</td>
</tr>
<tr>
<td>Passive Pastimes</td>
<td>2%</td>
<td>Creative Activities 4%</td>
<td>Socialising 2%</td>
</tr>
</tbody>
</table>

Table 14: Boys' favourite activities by age group

49 Sure Start is a government programme to achieve better outcomes for children, parents and communities by increasing childcare availability, improving health, education and emotional development of young people and supporting parents as parents and in the aspirations towards employment.

50 Psychologists such as Oliver James have argued that the first six years of our lives are crucial in relation to our future well-being.

Playing
The general term ‘playing’ was most often used by younger children with 7-9-year-old girls being significantly more likely than boys to put this as their favourite activity.

Creative activities
This classification included dance, drama, arts and craft, playing music, reading and a few other activities. This category is consistently more popular with girls than boys over different ages, and there is no particular change in levels as children get older.

Computers
Large numbers of children listed ‘playing on computer’, ‘computer games’ or ‘surfing the internet’ as their favourite. Boys prefer computers to girls, and rates fall in the oldest age bracket, perhaps due to access issues on leaving school or home.

Socialising
These were activities whose main purpose seemed to be to simply spend time with friends or family. Statements like ‘going out’, ‘hanging out’, ‘seeing friends’ or ‘being with family’ were categorised as socialising – though clearly playing sports or indeed computer games with a friend, have a social element to them. Girls were more likely to rate this as their favourite, though the rise as children move into the 16–19-year-old bracket is very marked. It might be that ‘playing’ becomes ‘socialising’ as children get older.

Passive pastimes
Activities such as watching TV, listening to music, relaxing and sleeping were categorised as passive. It is interesting that this was ranked very low across both genders and all ages considering how much TV children actually do watch.

Well-being implications
We found that if children listed sports as their favourite activity they were significantly more likely to have higher levels of both life satisfaction and curiosity than if they listed any other activity.

Figure 13 shows the life satisfaction and curiosity levels for all the categories, but as we are working with relatively small samples many comparisons between groups would not be statistically significant.

Other interesting results show that creative activities are more associated with enhanced curiosity than satisfaction, which is in line with what one might expect.

Socialising is associated with significantly lower well-being which at first sight is perhaps surprising as social relationships are known to be so important for well-being. However the question asks for children ‘what is your favourite thing you do most weeks?’ Listing your ‘favourite thing’ as socialising implies that you don’t enjoy other activities more. Perhaps the lower level of well-being is associated with a lack of other more fulfilling activities in their lives than with socialising itself. Citing passive pastimes as a favourite activity also may represent a similar absence of more engaging activities.

It is interesting to see the positive well-being profile of the much-maligned ‘computers’. Computer games and surfing the web appeal to children precisely because they get very absorbed in them with the associated well-being effects, particularly in regard to personal development. If they are playing games or surfing with their friends then they will also be sharing the experience with all the satisfying social benefits that entails.

We also asked the children who they did their favourite activity with. About 20 per cent of boys and 10 per cent of girls across the age groups responded that they were alone. Those that were alone had significantly lower scores on both overall well-being scales and also in regard to self-esteem. We can hypothesise that the activity being done alone does not cause lower well-being in of itself, but instead may represent for many of the children a sign that they are socially isolated. This would be the true cause of the lower well-being.
A third question was asked regarding where children did their favourite activities. Unfortunately the responses were not easy to categorise and some responded with an area of Nottingham rather than naming a type of facility or open space.

However if we set aside the responses that state an area, then about 40 per cent of sport appears to be played on informal open spaces rather than at home (10 per cent) or in public facilities (50 per cent). Social activities start to move outside the home when children become teenagers, with public spaces (40 per cent), facilities (20 per cent) and commercial areas (20 per cent) such as shops and pubs and clubs becoming more important. To really understand the significance of these shifts in open space use, more detailed research would be required.

This survey data was of real interest for NCC’s leisure services team, both in terms of what young people in Nottingham like to do, and also in terms of learning about the possible well-being benefits associated with different kinds of leisure activities.

**Poverty and well-being**

Whilst one would expect children from poorer families to have lower well-being, this has not been readily proved. Professor Jonathan Bradshaw of the University of York and author of the report *The Well-being of Children in the UK*52 tried to identify such a link from the youth section of the British Household Panel Survey but was unable to do so. However the Office of National Statistics’ report on children’s mental health certainly found evidence of a link between prevalence of mental disorders and poverty – children from families with no adult working were more than twice as likely to have a mental disorder (20 per cent compared to eight per cent).

The question that we used to identify poor families was ‘how many adults are employed in your household?’ (see Table 15). In retrospect this used overly complex language and was not well understood by many children. However due to the fact that in the primary schools, questions were read aloud and therefore perhaps clarified, we had better response rates to the question from primary school children than secondary schools.

The responses still do not compare well to the census data with just 13 per cent saying that no adults were employed in their household against an expected 31 per cent (for households with children aged 10-11 present), so the results should be read with some caution.

We found that although both the figures for levels of life satisfaction and curiosity are lower for children from households with employed adults, only the differences in ‘life satisfaction’ are statistically significant (see Table 16). Given the sample size, this statistical significance was unexpected and the data supports the hypothesis that poverty is associated with lower life satisfaction. Whether there is an additional effect on personal development would have to be further investigated, but this realm seems less affected, as it was also not significant in regard to different family types.

**Pro-social behaviour**

The challenge in exploring the relationship between well-being and pro-social behaviour was to find a scale appropriate for use with children (see Appendix 1). The scale was only used with secondary school children and with the street survey of 16–19-year-olds. The scale was based on responses to just six different questions concerning behaviour that demonstrates inter-personal skills and an awareness of ethical issues.

The relationship to curiosity (personal development) is much stronger than to life satisfaction.53 However even the relationship to curiosity is limited, so we need to consider that the goal of raising pro-social behaviour is partially

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52 Bradshaw J (ed) (2002) *The Well-being of Children in the UK*, Save the Children, London. The report uses objective indicators of well-being such as poverty rates, child health statistics and suicide rates, rather than child-centred surveys. The reference to the lack of link between happiness and poverty was made at a lecture Professor Bradshaw gave to the Policy Studies Institute in January 2004.

53 R-Squared is 13 per cent for relationship to curiosity as compared to only two per cent for life satisfaction.
The power and potential of well-being indicators

There are no significant differences between boys and girls with regard to pro-social behaviour. However, those that engage in sports (most often boys) score higher; perhaps the team nature of sports brings out some of the necessary inter-personal skills.

It is not clear whether the relationship between well-being and pro-social behaviour would be similar for adults. Is there a stronger link between our own well-being and pro-social behaviour as we grow up? This needs further investigation.

Further research to look at the links between this concept of pro-social behaviour and Martin Seligman’s concept of the meaningful life would be also worthwhile. If pro-social behaviour does tap into the meaningful life, the fact that it behaves independently of life satisfaction and curiosity suggests that it is a third separate limb that cannot be reduced easily down to what we have called life satisfaction and personal development (or to the ‘pleasant life’ and the ‘good life’ to use Seligman’s typology).

**Identifying groups of young people**

As life satisfaction, curiosity and pro-social behaviour display independent characteristics, we would expect to find that different young people display different mixes of the three elements. By performing a cluster analysis using these three (mostly independent) scales we can identify different groups of people.

Table 17 sets out the clusters, with the average scores for the key headline indicators categorised in the same way as earlier in the report, except that the ‘medium’ category (which is the largest) is split to differentiate between ‘medium-high’ and ‘medium’ in order to provide a more sophisticated analysis:

- **High** — scores of over four — strongly positive answers.
- **Medium** — scores of between three and four — mainly positive responses
  - **Medium-high** — average score of between 3.5 and four.
  - **Medium** — average score of between three and 3.5.
- **Low** — scores of between two and three — mainly negative responses.
- **Very Low** — scores of under two — strongly negative answers.

We use characters from Winnie the Pooh to typify the groups of young people that emerge.

Clusters 1 and 3 mark the extremes of the responses, and are to be expected due to all three indicators being partially correlated. These are the Eeyores and the Poohs. Eeyores are a rather high 13 per cent of young people in Nottingham; 16 per cent are Poohs.

Cluster 2 represents a group who are unhappy but are continuing to develop and are good citizens. These are the Rabbits (18 per cent).

Cluster 4 is a large group of happy and social individuals who have lost sight of any developmental challenges or goals for themselves — we could hypothesize that they are not very ambitious young people. These are the Piglets (30 per cent).

Cluster 5 is an interesting group and quite large — curious but not at all pro-social. These are the Tiggers (22 per cent). This group perhaps displays some characteristics of the ‘dark side of curiosity’ and supports the Joseph Rowntree Foundation’s report on self esteem, which suggests that high self esteem outside a moral framework could be a difficult combination leading to increased likelihood of holding prejudiced attitudes towards

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54 In a factor analysis, three components emerge, with the pro-social behaviour scales forming a separate factor component from the satisfaction and personal development components.

55 A cluster analysis is not a precise statistical test, so depending how you run the cluster analysis, different numbers of clusters can be looked at. Having studied several runs, we have selected a five-cluster solution as it is a balance between variation and not too much information.
The power and potential of well-being indicators

ethnic minorities, rejecting social influence and engaging in physically risky pursuits".56

The importance of self esteem
Probabilities of falling into different categories (of response to specific questions) can be calculated for those most at risk of depression, with overall low well-being or indeed high overall well-being.57 Table 18 shows increased probabilities – so if the probability equals 1 there is no extra likelihood of this category being associated with this group, above 1 more chance, below 1 less chance: (all these figures need to be treated as tentative as many are based on small samples in the specific cross-tabulations).

We do not have enough data to explore the relationship with unemployment and with poverty, although this would be of clear interest. However, the data confirms the well-known research findings that self esteem is by far the largest predictor of low or high well-being. This may be an indication that self esteem should be considered part of the actual construct of well-being, rather than a separate variable. How much one can raise well-being by first raising self esteem is not clear and warrants further investigation. Indeed how far is it amenable to policy? This is a difficult area. The experiment of the Californian Government in the 1980s to seek to raise self esteem through a variety of methods did not meet with noticeable success – with Nicholas Emler commenting in a deliberately sceptical manner in the Joseph Rowntree Foundation report on self-esteem “teachers and others working with young people became increasingly reluctant to voice meaningful relative judgements about those in their care. Announcing winners meant others were losers. Genuine criticism was far too risky. Consequently standards got dumbed down and every ego required a merit award for just turning up.”58 In other words creative challenges may have been forgone in order to enhance self-esteem, a classic example of a trade-off between the two dimensions of well-being – life satisfaction and personal development. Other interventions based on enhancing broader life skills may be more holistic and successful as well politically more acceptable.

Community safety, crime and well-being
Surveys on fear of crime are rarely extended to include young people’s views yet they constitute a group that suffers high levels of crime. Further, due to their reliance on the use of public spaces and transport they are possibly more affected by their fear of crime than many other age groups – the elderly are similarly affected. All of the figures on community safety can be found in Appendix 5. The main picture is that boys feel safer than girls across all the age ranges, and children feel safer as they get older. Many girls do not go out alone at night (14 per cent) and naturally these figures are higher for the younger age groups (41 per cent of girls and 28 per cent of boys aged 9–11) – we do not know whether this reflects their own feelings of lack of safety or their parents’.

Table 18 gives details of being a victim of crime (no details of the types of crime were asked).

We also looked at the fear of crime. Interestingly despite boys being more likely to be victims of crime, it is the girls who are more worried. Indeed for many it is possible to identify that whilst being a victim of crime does increase their fear of crime, many (particularly boys) still don’t worry about crime. For example, of 16-19-year-olds 46 per cent of boys who have been a victim of crime in the last year still do not worry about crime, whereas only 13 per cent of girls who have been victims are not worried. By cross referencing the community safety data to the well-being data, we can ask questions about the effects and/or the causes of being a victim of crime or having a high fear of crime. A longitudinal or targeted study would be needed to really study these effects; however there are some

<table>
<thead>
<tr>
<th>Increased probabilities of:</th>
<th>Very Low Life Satisfaction (Depressed?)</th>
<th>Low - Very Low Satisfaction &amp; Very Low Curiosity</th>
<th>Med-High Satisfaction &amp; Med - High Curiosity</th>
<th>High Satisfaction &amp; High Curiosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being very worried about crime</td>
<td>About 9%</td>
<td>Bottom 12%</td>
<td>Top 54%</td>
<td>Top 10%</td>
</tr>
<tr>
<td>Being a victim of crime</td>
<td>1.1</td>
<td>0.8</td>
<td>1.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Favourite activity is sport</td>
<td>1.4</td>
<td>1.6</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Alone for favourite activity</td>
<td>0.9</td>
<td>0.7</td>
<td>1.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Lone parent family</td>
<td>2.2</td>
<td>1.2</td>
<td>0.8</td>
<td>0.5</td>
</tr>
<tr>
<td>Reconstituted family</td>
<td>1.1</td>
<td>0.8</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>Having very low self esteem</td>
<td>1.9</td>
<td>1.8</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Very Low Curiosity</td>
<td>6.3</td>
<td>2.7</td>
<td>0.4</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Table 18: Probability of falling into different categories by groupings of young people. Source: Schools survey ages 9-15

57 The cluster groups (named after the Winnie the Pooh characters) cannot be used here due to a different shorter questionnaire being used for the street survey – see Appendix 2 for more details.
58 Self Esteem; p3, ibid.
interesting pointers from the data. Table 20 shows all the relationships between the major well-being indicators and whether a child has been a victim of crime. The figures are just for the age group 9–15, and we do not have to worry too much about independent effects from age as both age groups (9–11 and 12–15) have similar percentages of victims of crime.

The table shows that if a young person has been a victim of crime then on average their scores are lower for both the headline indicators of well-being and all the well-being domains. All of these results are statistically significant, which suggests a very strong relationship. Causation can run in both directions here. Young people who are unhappy at home or school may spend more time outside of these institutions and thus might have a greater chance of being victims of crime.59 Those with lower self satisfaction and self esteem may be illustrations of the idea that the unassertive are picked out as easy targets.

Whatever the causes and effects, being a victim of crime makes young people worry more about crime and it is also associated with lower overall well-being. In contrast, being very worried about crime does not have such strong relationships to either overall well-being or the domains. It is interesting to note, however, that those who are most worried about crime have significantly lower self esteem than average. Altogether this suggests that the primary focus should be on dealing with victims of crime, and that the fear of crime is not necessarily a disabler of well-being for younger people. This relationship may be very different, for example, in older people.

Living in Nottingham
We asked for children’s postcodes, to compare different areas of Nottingham, particularly in regard to how satisfied they were with their ‘living environments’. The postcode data was not exceptionally reliable, indicating that if such a survey was to be repeated there might need to be a separate section of the questionnaire completed by adults for collecting demographic data.

NCC divides the city into nine committee areas, each made up of two or three wards and sample sizes within each committee area were quite small. Due to the location of schools, however, we had reasonable sample sizes in three areas for the school surveys, and for two of these

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59 We are not under the illusion that no crime happens in schools, but we hypothesise that more crime will take place outside of this kind of regulated institution.
The power and potential of well-being indicators

are also good sample sizes in the 16-19 year-old street survey. The samples in each area have very similar ethnic mixes but the areas themselves are also quite different in many ways, so they make for an interesting comparison.

There is a problem, however, with the school survey in that the age profile for the two areas is very different, with Committee Area 9 mainly having primary school children, and Committee Area 1 more secondary school children. As we showed earlier, all the well-being scales fall with age so some care has to be taken — to get around this, ‘adjusted’ well-being scores have been calculated, where a score of above 100 would mean higher than expected well-being (see Table 21).

From this data, we can see that children aged 9–15 and living in Area 9 are scoring significantly higher in terms of both the adjusted well-being indicators than those in Area 1. This is backed up partially by the street survey of 16-19-year-olds whose curiosity (personal development) is significantly higher than their counterparts living in Area 1 – the slightly higher figures for their life satisfaction were not statistically significant.

The following are quotes from NCC’s area profiles, which go some way to explain perhaps why there are these differences.

Area 1: Located to the north and north west of the city, includes large areas of outer social housing estates built in the 50s, 60s and 70s and the old town of Bulwell. There are estates of extreme disadvantage and estates that, while relatively less obviously poor, could easily slip into decline. A sense of isolation on the furthest flung estates, for example Bulwell Hall. While Bulwell is now effectively a suburb of Nottingham, it maintains its own identity, has a good range of local services including a shopping centre and market, Job Centre, housing office, FE College annexe. Bulwell also has a mix of older terraced housing, modern owner occupied housing, local authority estates and some substantial industrial areas. The rest of the Area is mainly residential – council built estates and some owner occupied. Large areas of green space, especially in Bestwood/Top Valley, and most houses have gardens. Housing on the older estates is mainly structurally sound, some newer estates have design problems commonly associated with their period (eg cut throughs, no individual gardens). Some of the economic decline in Area 1 is connected to pit closures during the 1980s.

Area 9: The area is dominated by Clifton Estate, a large council estate built in the late 1950s and mainly housing a skilled working class community, but also includes the older and more affluent Clifton and Wilford villages (conservation areas) and some newer private developments (eg Silverdale).

The River Trent cuts the area off from the rest of the City - it has confidence and pride in its own identity, has grown as a stable community, many people on Clifton Estate have bought their homes. Employment levels are high and the area has good access to the M1, East Midlands Airport and other development sites. The quality of local facilities in Clifton is very important, given its distance from the rest of the City, the local shopping area is a key focal point.

The ability to look at well-being by area and to link it back to other indicators is a fascinating possibility and of real interest to policy-makers. Because this pilot was conducted through schools, the results are limited. A different approach with a focus on area-based well-being would provide a very interesting insight into the geographical distribution of well-being.

Table 21: Average overall (adjusted) well-being by committee area of Nottingham

<table>
<thead>
<tr>
<th></th>
<th>Life Satisfaction</th>
<th></th>
<th>Curiosity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adjusted</td>
<td>Actual</td>
<td>Adjusted</td>
<td>Actual</td>
</tr>
<tr>
<td>Age group</td>
<td>9 - 15</td>
<td>16-19</td>
<td>9 - 15</td>
<td>16-19</td>
</tr>
<tr>
<td>Area 1</td>
<td>95*</td>
<td>3.89</td>
<td>95*</td>
<td>2.31*</td>
</tr>
<tr>
<td>Area 9</td>
<td>106*</td>
<td>4.10</td>
<td>104*</td>
<td>2.97*</td>
</tr>
</tbody>
</table>

* Statistically significant

For each child their life satisfaction score was divided by the mean for their age group then multiplied by 100. A small adjustment was made to allow for the fact that the means for those that gave their postcodes were slightly higher than for those who did not – these adjusted figures should be treated as indicative only.
Stuck in a rut?
When in consultation with Nottingham City Council, a hidden assumption emerged that some council officers thought that young people who were born and bred in Nottingham were more likely to get ‘stuck in a rut’ and be unhappy in life. A simple question asking ‘have your parents always lived in or around Nottingham?’ was inserted into the questionnaire to test this hypothesis.

In fact the reverse seems to be the case and those whose parents are from Nottingham are in fact more satisfied with their lives and this is a statistically significant result. The higher life satisfaction scores are probably associated with better social networks, such as extended families, cousins to play with and perhaps also more of a sense of belonging. This is suggested by the fact that family satisfaction is also close to being significantly higher. The data does suggest that in certain local areas of Nottingham, such as the large post-war estates in Area 1, it is possible that young people born in Nottingham are less curious. This might fit the hypothesis of being ‘stuck in a rut’.

Ethnicity and well-being
The sample sizes within different ethnic groups were not sufficient to conduct any very sensitive analysis with regard to the relationship between overall well-being and ethnicity. There were no statistically significant differences. Although the ‘Black’ group did score lower than other groups, due to the small sample within this group there is not enough statistical power to be certain. Over-sampling within minority groups would be required to get a fuller picture. This is something that Nottingham has expressed an interest in looking at in the future.

Materialism and well-being
Previous research has suggested that having materialistic values has a negative effect on people’s well-being, but we could not establish such a link with this survey. It was interesting to note however, that statements such as ‘When I grow up, I want to have a really nice house filled with all kinds of cool stuff’ and ‘It is important to make a lot of money when I grow up’ were highly endorsed by children. The most materialistic group were younger boys, perhaps suggesting that there is an element of fantasy about their responses, which as they mature become more realistic. Regardless of the mechanism responsible for the fall over the age range 9-15, children still have strong materialistic values when they leave the school system. As has been discussed elsewhere in this report the desire for, and acquisition of, material goods does not tend to lead to enhanced well-being. So the dominant (and false) myth that ‘more is better’ is continuing into the next generation.
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Policy implications
There is a general discussion about how far the state should be intervening to promote well-being. Libertarians would argue that the state should leave people alone to pursue their own conception of the good: who knows what makes us happy and well better than ourselves? As a presumption, this is perhaps a good one, though there is worrying evidence that we are not always the best judges of what will bring us enhanced well-being. The state’s primary aim should be to promote those conditions that allow us to pursue well-being. Asking “what would this existing policy area look like if one of its primary aims were to promote well-being?” is a useful exercise.

Well-being indicators can help this process through providing more information about how policy and institutions impact well-being. For example, the findings of this pilot show that secondary schools seem to be linked to a fall in well-being. This raises fundamental questions about the nature of public services being provided, their aims, effects and how they are delivered. The section that follows unpacks some of the policy areas that this pilot sheds light on. It is unrealistic to think that this small pilot would provide major policy insights. Nevertheless, the findings that emerge point to the potential of the well-being approach to give new information alongside existing impact measurement and analytical evaluation frameworks. The pilot itself also points to ways in which well-being indicators could be used and integrated into policy-making in different ways.

Education for well-being
The worryingly high number of children at risk of depression as a result of low well-being suggests that a part of the education curriculum could be focused on ‘living the good life’. We also need to think about what components the curriculum requires to provide young people with the ability to live flourishing lives – to have well-being over the course of their lives. Such a curriculum may include ‘skills for life’ such as positive attitude, dealing with stress, self-confidence, emotional literacy and self-esteem. It might also include values, and a space for reflection. Such a curriculum links not only to mental health issues but also with motivation at school. Promoting well-being may create more motivated, curious and entrepreneurial citizens and this could have positive effects upon economic and social activity. More work needs to be done to look at the potential benefits of this approach and the kind of activities and programmes that could have positive impacts.

Reconsidering educational models
Given the huge drop-off in well-being on transition from primary to secondary school as well as the high negative responses in satisfaction to the learning experience, then the way in which children are taught more generally may need rethinking to focus more on curiosity and personal development. This is already taking place in a number of schools through a variety of initiatives such as the Networked Learning Communities Programme which focuses upon pupil consultation. Reconsidering educational models is not just likely to help increase children’s satisfaction with school and to increase motivation but is also important because it is likely that a curious and engaged approach to life is core to future employment skills and health outcomes.

Increasing opportunities for sport at school and in the community
The links of sport and well-being are clear from this and other research. The trend towards reduced time spent on sport in the curriculum as well as reduced sports facilities in schools needs to be reversed. Girls are much less likely to take part in sports and therefore there needs to be a specific focus on creating appropriate sporting opportunities for girls.

Support for victims of crime
Given the possible link between being a victim of crime, and low well-being, it seems important to ensure that children who are victims of crime receive appropriate support.

More work to be done
A number of interesting further research leads and discussion areas emerge from the work. These include:

Poverty
The results from our work in this area cannot be held out as robust both due to the methodology to locate poor households (using the proxy of unemployed households) and the low sample sizes. The suggestion from our findings is that on average children in poor households suffer from lower well-being. Nevertheless, more work needs to be done to see what the overlap is between the bottom 10 per cent in terms of well-being and the bottom 10 per cent in terms of poverty. In other words, does targeting the poorest deal with those with the lowest well-being? Professor Richard Layard has argued that targeting those with the lowest well-being is better achieved by dealing with mental health issues. This seems persuasive.

Gender
We have seen that girls lose more curiosity than boys at secondary school. We need further investigation into what is causing this. Are there schools which do not suffer from this and what do they do differently?

Self esteem
It is clear that self esteem is the biggest predictor of both high and low well-being. We need to do more work to see if self esteem is in fact part of the well-being construct. If it is not, we need to review the lessons from psychology and sociology to see if there is anything that can be done to specifically raise self esteem. Emler considers policies concerning reductions in teenage pregnancies in these terms when he writes: “Low self-esteem appears to be a risk factor but improving knowledge and skills required to use contraception effectively may nonetheless be a more cost-effective way of reducing the risk.”

61 At the Fabian Society Conference The Way we Live Now 7 February 2004.
Schools – fostering curiosity or academic achievers

A number of very interesting results emerge from the pilot in relation to well-being and schools. There is an extraordinary drop in well-being between primary and secondary school. We need to look at what is causing this. The result in relation to school well-being and academic performance is also extremely thought provoking. Both raise a fundamental question: what are education and school for? Should they not be considering how to promote well-being? A further question is how schools compare in relation to promoting well-being. We are not suggesting a ranking (although a happiness league table is a powerful concept purely as an antidote to thinking about how standard league tables are compiled). We are suggesting an investigation into which schools promote well-being and how, and reviewing if there are lessons for other schools. It would be particularly interesting to explore the well-being in schools which are experimenting with the teaching of ‘life skills’.

Schools may also have a tension between delivering academic results and enhancing children’s well-being. Whilst academic results are sometimes claimed to be ‘well-becoming’ indicators, as higher academic achievements are associated with positive outcomes in adulthood, this has to be balanced against children’s present well-being. Curiosity, used in this project as an indicator of personal development, might also be a better indicator of future positive outcomes than academic achievements — as this realm is increasingly shown to have major health benefits within groups of adults.

Encouraging pro-social behaviour

The indicators for pro-social behaviour were exploratory. It appears that pro-social behaviour, whilst partially related to personal development, is mainly independent of personal well-being. This suggests that if government has a goal of improving pro-social behaviour, this may well require separate interventions from those to enhance personal well-being. Such a goal is of real interest right now. Pro-social behaviour is a possible route to curbing anti-social behaviour at the roots rather than through deterrents. One of the highest-leverage ways of doing this may be through schools. The work done on encouraging ‘emotional literacy’ in schools and thereby children’s interpersonal skills should be considered here. Further work also needs to be done to see if the relationship between well-being and pro-social behaviour changes as people get older.

Multi-dimensional concept of well-being

One of the main things that need to be done is further work on understanding and measuring the second dimension to well-being. Another is looking at how far the concept of pro-social behaviour is tapping into the meaningful life.

The policy-maker’s perspective

Nick Lee is the service manager for Partnership Development in the Performance and Strategy Group at Nottingham City Council and has led both the drafting of NCC’s Community Strategy and this work on developing well-being indicators. He provided the following perspective on how the pilot has been perceived by policy-makers in Nottingham:

“The ‘Power of Well-being’ is more than just a legalistic mechanism, it has the potential to stimulate the debate around ‘what is the value of public services’ — not by incrementally improving service provision as the ‘Best Value’ process does, but by focusing on the concept of the good life, active citizenship, community and civic renewal and engagement processes. However, drawing together policy makers from different services has been difficult in the past as people have been concerned about their own performance ratings and targets. By creating indicators that give us evidence regarding outcomes for all young people, this pilot has naturally supported the change of culture that all councils are seeking; demonstrating how cross-cutting policy development can facilitate positive outcomes. In particular, evidence is very important for drawing policy makers together. Much strategic planning often focuses on specific policy areas in isolation, such as environmental or economic impacts, whereas this more holistic approach has provided evidence of the whole picture.

The well-being indicators have enhanced our ability to demonstrate community leadership for all young people in Nottingham rather than just those young people that we have a statutory responsibility for. In the past young people have tended to be pathologised or made saints out of — this project has provided a more balanced view.

This process has supported what the council should be doing in regard to community leadership rather just service provision. The indicators have shed light on what outcomes young people feel are important to them. This process could be repeated with other groups or by different local neighbourhoods. In the future this kind of approach has the potential to provide a ‘full’ set of baseline well-being indicators for Nottingham. This could enable us to provide more and better community leadership rather than just asking ‘do you want more X?’”

The limits and challenges of the well-being approach

There are several challenges to the well-being approach which need to be taken into account. One of the fundamental issues and questions around well-being is the issue of adaptation. Subjective quality of life is very important, as it is the felt experience. On the other hand, there are many psychologists who suggest that people’s life satisfaction adapts to their circumstances and expectations constantly returning to a baseline level. If this is the case it raises the issue that well-being measurement may not tell us very much. Whilst this
is an important argument, it is not universally accepted by academics and there are also other reasons why we should continue to measure and explore well-being.

First, there is disagreement amongst academics regarding what it is that we adapt to and what we do not adapt to. We agree, however, with the conclusions of, amongst others, Professor Richard Easterlin who has gathered evidence that we do adapt to our material circumstances and higher income but do not adapt in the same way to our social relationships and our health. Further research needs to be done on what it is that we adapt to, and to think about what the implications of this are for government.

Secondly, the existing work on adaptation has focused entirely on life satisfaction: far more work needs to be done on the personal development dimension to well-being. Is this subject to the same kinds of adaptation effects? Therefore we need to establish baseline data and track over time to see what kind of adaptation effects occur to both dimensions of well-being.

Thirdly, nef’s hypothesis is that human needs underlie well-being. Therefore, we would suggest that it is possible that the way to raise well-being more effectively (as opposed to in a way that is subject to adaptation effects) is through meeting human needs holistically. It can be argued that we currently seek to satisfy our needs inefficiently in both material and temporal terms. This is partly what lies behind Professor Manfred Max-Neef’s analysis. For example, consumption may seek to meet the need for meaning or identity, but might result in our working such long hours to earn the money to pay for the goods that we end up not being able to have time for ourselves or our social relationships. So other needs such as affection and idleness are not addressed. There is also the real risk that seeking to satisfy non-material needs, such as identity, through material goods not only has unnecessary environmental impacts but also are examples of what Max-Neef calls ‘pseudo-satisfiers’. We need to do more work on linking policy with a needs-based framework.

Finally, it would be worthwhile to explore measuring expectations and aspirations as well as well-being. This may allow us to understand better how adaptation occurs and to factor it in.

There are a number of other issues with the well-being approach that relate to policy:

- How much affect can policy actually have on well-being? Research has shown that genetic and personality features account for a large part of life satisfaction. There are two responses to this. First is that we need to understand better how far policy can intervene into the second dimension of well-being – personal development. Secondly, even if the ability for policy to make a difference to well-being is limited (for example, within a 20-50 per cent band) what other approach is there?

- Although studies need to be carried out at the local level, it is unclear how much policy insight which can be acted upon at the local level the results will give. For example most education policy is set nationally. This implies that these studies ought primarily to be funded by national bodies and national government. This is not to say that the process itself is not important for local government – it can bring people together, join up government and make government reflect upon what it is really there for. Ultimately, however, the well-being approach is not yet a fine-tuning policy instrument – rather it is there to provide a truer picture of what is going on.

- Caution is a difficult thing to follow in some of this work. There can be patterns of reverse causation (for example, are married people happier, or are happy people more likely to be married?). Even more problematic is that we do not have the tools to try and track the well-being effects of particular policy interventions. There are so many factors that intervene on our well-being that tracking the impacts of specific policies may be very difficult.

- The well-being indicators approach may be a useful way of researching collective action problems. Collective action problems occur when what is rational for the individual is collectively irrational. For example, it may make sense for me to drive my children to school. But if everybody does this, then the roads are clogged up and nobody benefits from the outcome. Research that assesses people’s feeling about collective issues, subjective social well-being, and links this to their personal well-being, may shed new light on this area. It may be, however, that these collective action problems are so complex as to be beyond being picked up by indicators.

- Finally, it is difficult to generalise policy conclusions from the findings of well-being indicators. We found that sporty people are more likely to have high well-being. But policy needs to be personalised. Putting more money into sport purely on the basis of this result may not be a fair outcome – it could be seen as a ‘tax’ on those people who gain their well-being in other ways. Identifying different groups of people may overcome this problem to a degree; however well-being indicators will need to be used very carefully in relation to fine-tuning policy decisions. Regardless, they do give a better picture of what is really going on, as well as give ‘big’ policy insights.

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66 See Appendix 6 for more details on different types of need-satisfaction.

It is also important not to confuse a focus upon well-being with a belief that this means a utilitarian commitment to ‘maximising happiness’. Well-being is an important good in society, but not the only one and not everything else can be reduced to well-being. Agency (the ability to choose and even to make bad choices), social justice and environmental sustainability are all crucial factors which must be part of the broader political framework within which well-being fits.
Conclusion

nef and NCC worked together to use the local government power of well-being to join up government departments in an innovative way, by developing a set of well-being indicators and using these to measure the well-being of young people.

We found a number of things emerged from this. At the theoretical level we found that well-being has more than a single dimension. Alongside satisfaction, there is an independent aspect to well-being which is to do with curiosity and personal development. This second dimension of well-being is important from the perspective of policy-makers as it seems linked to resilience, the ability to respond to challenges and health outcomes such as longevity. We also found that pro-social behaviour was relatively independent of both dimensions of well-being.

The well-being measurement pilot has given interesting and new information on young people in Nottingham. Due to the limitations of the survey process and the size of the pilot these results must be seen as largely indicative, but they are clearly of real interest. Some of the most striking findings are around the fall in young people’s well-being, the link between schools and well-being, the relationship between poverty and well-being, and the link between young people’s favourite activities and their well-being. Flushing from this new information on Nottingham are potential policy implications around sports, victims of crime, schools and education policy. There are also interesting further research leads in many areas, including around poverty, self esteem and pro-social behaviour. Once more, these are largely indicative, but show the power and potential of well-being indicators.

The pilot process shows that this kind of well-being approach can be extremely useful in a number of ways. It can be a creative way of using the power of well-being granted to local government. The process also makes policy-makers refocus on the ultimate objectives of government. Well-being indicators can help to inform policy, and help us understand the impacts of policy, thus providing opportunities for genuine leadership. They could also be used to test hypotheses.

Where now for well-being indicators?
This pilot has shown that well-being indicators could be extremely valuable in many contexts. We encourage further experimentation with this kind of work. Well-being measurement could be particularly valuable when linked to a local authority’s community strategy. The Comprehensive Performance Assessment regime for 2005 and beyond is presently being consulted on. Early indications suggest that there may be an aspect of this which will link to a local authority’s community strategy. We would argue it would be fruitful for the CPA to include an element of well-being measurement in this community strategy component. Well-being measures would also feed usefully into the local area profiles that the Audit Commission is presently piloting.

To take the work forward in a more coherent fashion, we also recommend that central government puts together a larger pilot, perhaps across five different kinds of regions each using the same methodology, over a period of years. This will allow us to build comparative data, and to better understand how people’s well-being shifts over time. Such a pilot should also measure people’s expectations, so that we can better see how these relate and shift in relation to well-being.

More specific research should be focused on key issues where well-being has a role to play in new policy-making approaches, in for example, schools, workplaces, parenting and families, mental health, and so on. For example, we can consider the hypothesis that low life satisfaction is a good predictor of depression.

We should look into the specific relationship between personal well-being and public policy – are people with high well-being more economically productive, build more social capital, cost less to provide for in healthcare terms? Specifically building on this pilot study, it would be interesting to track the potential public benefits of young people displaying characteristics of high personal development. Are they the future social and financial entrepreneurs? What support do they need to fulfil their potential? All of these lines of enquiry can be, and need to be, tested.

People’s experience of their quality of life is not limited to the personal realm, though this pilot has predominantly focused on this aspect of well-being. Measurements need to be systematically developed that illuminate people’s experiences of, and feelings about, their local communities, businesses and the economy, the education system, crime and the justice system, the natural and built environment, local and national governance, national security and international issues such as environmental sustainability and globalisation. These types of measures might in time develop into being subjective indicators of economic, social and environment well-being to complement the work being done on developing objective indicators of these realms such as the nef’s recent publication of a new Measure of Domestic Progress.

In our opinion the role of government should be to create the conditions for the ‘good life’ and we recommend the use of personal well-being indicators as a way of measuring the impacts of policy interventions. Ultimately, we should move towards capturing the well-being of the nation. Without this research, we will continue to operate in darkness about how people actually experience the quality of their lives and how that impacts on key societal issues.

68 This approach seeks to build up profiles of local areas on the basis of existing measures, surveys, indicators etc for the use of stakeholders such as the public, Local Strategic Partnerships and regulatory bodies.

Appendices
Appendix 1 — Project methodology

Diagram 6: Flow diagram on project process

- nef
  - Define outline inquiry strategy.
  - Design inquiry and contact strategy. Identify NCC needs.
  - Identify/develop survey instruments. Design and test questionnaires.
  - Data analysis. Data interpretation.
  - Workshop to present and discuss findings. Feedback from NCC.
  - Write report.
  - External dissemination.

- NCC
  - Build inter-departmental co-operation. Commit finance.
  - Conduct school surveys. Organise street surveys.
  - NCC’s internal dissemination.
In summary, the process of the work and development of the methodology is set out in Diagram 6 showing the different involvements of nef and Nottingham City Council.

**Preparation**

**Building inter-departmental co-operation**

In the preparation phase NCC and nef worked very closely together in both building the inter-departmental co-operation and creating an outline inquiry strategy.

Officers from the following departments attended meetings or were interviewed:

- Chief Executive’s Policy Unit
- Education Department
- The Children’s Fund
- The Preventative Strategy Team
- Youth Services
- Sports and Leisure Department
- The Crime and Disorder Reduction Partnership
- Youth Offending Team
- Social Services Department
- One City Partnership Nottingham

**Defining contact strategy**

The contact strategy was to use a school setting to reach most of the children. This was both strategic – it was a good way to capture a cross section of young people – and pragmatic from the perspective of budget constraints. For the over-15-year-olds a street survey was conducted as many young people leave the school system after GCSEs.

**Four surveys**

Due to the different contact strategy for young people aged 16-19 and also because a test questionnaire proved too long for younger children, four different questionnaires were designed.

1. **Street survey interviews** — time limited to 12 minutes.
2. **Secondary school questionnaire**.
3. **Senior primary school questionnaire**.
4. **Trial junior primary school questionnaire**.

The three school surveys were all self-administered paper-based questionnaires — though for primary school children, each question was also read aloud.

A core design for all four questionnaires was adopted, so that much of the data could be interpreted across the age groups.

**Conducting the surveys**

All the surveys took place in Nottingham during July 2003.

**Street survey**

It was decided to contract out the conduction of the street survey for 400 young people aged 16-19.

**Secondary school survey**

The intention was to survey one class per year-group at five schools geographically spread around the city. For a variety of operational reasons, however, good quality data was collected from only two of the five schools, creating a working sample size of about 240 children aged 12-15.

**Senior primary school survey**

Five primary schools were surveyed, with one class per year group being targeted and about 330 children aged 9-11 completed questionnaires.

**Junior primary school survey**

In the trial survey for the younger age groups (7-8), three schools were surveyed with 110 children contributing good quality data.

For all three paper-based school surveys the data input was contracted out to the same company doing the street survey interviews.

**Questionnaires design**

Young people’s well-being was assessed using the two-dimensional model discussed earlier in this report — life satisfaction and personal development.

For the life satisfaction component, an existing established children’s survey instrument, consisting of a set of 47 questions, was identified. This assessed children’s life satisfaction (their satisfaction with their whole lives), together with five different domains of their lives:

- Their family life.
- Their friendships.
- Their living environment.
- Their schools.
- Themselves.

These scales can be considered as a more detailed inquiry into distinct elements of the children’s lives. It should be noted that the scales do not use a two-dimensional model of well-being in their design; however they are adequate for our purposes here.

For the personal development component, we were unable to identify an established children’s survey instrument. However Todd Kashdan, the American co-author of an adult scale for ‘curiosity’ also an expert in child development, agreed to design a pilot children’s version consisting of 32 questions.

Curiosity is a particularly appropriate manner of capturing children’s capacity for personal development. Kashdan’s scale is built from two sub-scales: ‘absorption’ and ‘exploration’.

Absorption is another word for what Mihaly Csikszentmihalyi calls ‘flow’ and Martin Seligman calls ‘gratifications’. Csikszentmihalyi defines flow as when “a person’s skills are fully involved in overcoming a challenge that is just about manageable”. Seligman similarly describes gratifications as activities that “engage us fully, we become immersed and absorbed in them… [they] last longer than pleasures, they involve a lot of thinking and interpretation.”

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70 This domain includes questions about the respondent’s satisfaction with their own house, their neighbourhood and the wider area they live in.

71 In direct consequence of this innate bias the variance in domain satisfaction could explain 54 per cent of variation in children’s life satisfaction but only 33 per cent of curiosity (personal development) variance.


The tendency to become absorbed in activities is, however, not the same as being curious — for that young people must also be interested in learning and exploring. For this reason the curiosity measure balances the tendency to become absorbed with the capacity for exploration.

Curiosity can have both an internal and an external aspect to it — some children are more curious about the world outside them, others more about themselves. These two aspects are clearly linked but it is regrettable that the scale was not designed to allow a contrast between. This might prove to be a fruitful line of research in the future.

To supplement the two-dimensional personal well-being scales, the related concept of self-esteem was also assessed by the widely-used 10-question survey instrument — the Rosenberg Self Esteem Scale.

We were keen to shed light on the inter-relationship between personal and social well-being. To do this we decided to explore what we have called ‘pro-social’ behaviour — behaviour that has a knock-on positive effect for other people’s personal well-being. Effectively our proposition is that social well-being could be considered as the conditions and influences that actively support people’s personal well-being — so it is not the sum of everyone’s personal well-being, but instead (presently theoretical and not operationalised here) the balance between positive and negative (external) influences on people’s personal well-being.

No scale for pro-social behaviour existed though interestingly there were several very detailed ones for ‘anti-social’ behaviour. The US positive psychology network, however, is engaged in research that is seeking to identify universal character strengths. We made contact with Christopher Peterson, the project leader, and he offered us a set of questions that assesses how much children were using their ‘character strengths’ in their day-to-day lives. The questions explored children’s propensity to display:

- Emotional strengths.
- Cognitive strengths.
- Strengths that protect against excess.
- Interpersonal strengths.
- Civic strengths.
- Spiritual strengths.

Whilst data was gathered on all these strengths, we decided only to use a sub-set of them for indicating pro-social behaviour, as we suggest that only the ‘interpersonal’ and ‘civic’ strengths are directly related to potential knock-on effects on other people’s well-being. The questions were only appropriate for children aged 12 and above, so to supplement this we also used some existing short scales for ‘generosity’ and taking ‘social initiative’ for all school children.

At the request of the Crime and Disorder Reduction Partnership we included some questions on community safety. The police have a standard set of questions regarding how safe people feel when out on their own in daylight, at night time and also at home alone at night. These questions are not normally asked of young people despite the fact that they are often victims of crime.

For economic and environmental well-being we sought some information on the circumstances of the children’s lives, such as the employment status of their parents and their postcode, to identify their neighbourhood.

To create some insight into which policies may support young people’s well-being, we asked a series of open-ended questions regarding children’s favourite activities — what they liked doing best each week, where they did it and who they were with whilst they were doing it.

In addition demographic information about age, gender, ethnicity, geographical mobility and family structure were also asked.

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74 In contrast to anti-social behaviour, which undermines social well-being with negative consequences for other people’s well-being.
the collectors, the length of the questionnaire, and an end-of-term feeling. The other two schools, however, had good completion rates and the resulting dataset had 362 responses spread across age group 12–15.

- Five primary schools were involved in the survey. Only one class was surveyed at one school, and at another predominantly Asian school, all pupils were surveyed (instead of one class per year as requested). The result of this was that the primary school survey had more Asians than one would expect. For some of the analyses, such as the comparison between schools, these biases were accounted for.

With regard to the quality of the survey instruments, two of the survey instruments were being used for the first time — curiosity (personal development) and pro-social behaviour. This was due to the fact that a multi-dimensional approach to well-being is an emerging line of academic inquiry, and also because the project focused on young people. Whilst both of these scales need further statistical work, they performed well. Their factor structure was consistent — meaning that the responses suggested that the set of questions that the scales are calculated from, are consistently measuring one concept. If such an inquiry were to be repeated, however, then refinements would be made to these scales.

**Method of analysis**

Scales were created by calculating a respondent’s average score for a set of related questions. For example, in relation to a child’s ‘life satisfaction’ children were asked to:

- Circle 1 for ‘strongly disagree’ with the sentence.
- Circle 2 for ‘moderately disagree’.
- Circle 3 for ‘neither agree nor disagree’.
- Circle 4 for ‘moderately agree’.
- Circle 5 for ‘strongly agree’.

Responses to questions three and four (see Table 23) were reverse-scored to allow for their negative wording and then the average was calculated. This score, which could have a maximum value of five and a minimum of one, is treated as that child’s ‘life satisfaction’ score.

To ease interpretation we have created four categories of individual’s scores.

- **High** — scores of over four — strongly positive answers.
- **Medium** — scores of between three and four — mainly positive responses.
- **Low** — scores of between two and three — mainly negative responses.
- **Very Low** — scores of less than two — strongly negative answers.
If, for any scale, the average score across the whole dataset (or a subsection), is lower than three, this would mean that children are on average responding negatively to the set of questions that the scale is created from.

Responses to ‘open’ questions concerning their favourite activities were coded into groups to allow comparisons to be made. Demographic information was also collected and coded.

Using frequency cross-tabulations, correlations, regressions and factor analysis, we explored the statistical relationships between scales and different groups of young people – where appropriate the statistical significance of relationships was tested. Using cluster analysis, we identified groups of young people with similar well-being profiles.

Linking the surveys
As outlined earlier, four separate surveys were carried out. The secondary school and the senior primary school surveys were the most easily combined, as they contained the same core questions and were both paper-based surveys. For most of the analysis we refer to this combined dataset as our source. Table 24 gives an indication of the make up of this dataset.

For primary schools, there were about 125 respondents for each of the three year groups, whereas for secondary schools there were about 60 responses for each of the four year groups.

As pro-social behaviour was collected only for secondary school children and those interviewed with the street survey, a second combined dataset was also created (see Table 25). For this dataset care has to be taken when comparing scale scores due to the difference in survey techniques and indeed the actual questions. To overcome this problem scores were standardised in each dataset and then compared – standardisation involves setting the mean (average) to zero, and the standard deviation (a measure of spread) to one. The downside of carrying out this re-basing of the scales, due to the fact that we have set the means to be the same for both surveys, is that we cannot identify changes in the average scores for children as they get older. This would not have been possible anyway, however, and the gain is that we can now identify relationships between different scales using a larger dataset. For these reasons we use only this combined dataset when looking at the relationship between pro-social behaviour and other scales or factors.
Appendix 2 – Questionnaire design

We adopted a core design for all four questionnaires, so that as much data as possible could be interpreted across the age groups.

Section 1: Life satisfaction component of well-being.
- Satisfaction with their overall life.
- Satisfaction with five specific domains (family, friends, school, living environment and self).

Section 2: Personal development aspect of well-being.
- A curiosity scale that included sub-scales of ‘exploration’ and ‘absorption’.

Section 3: Activities
- Open questions regarding their favourite activities:
  - What they were?
  - Who they did them with?
  - Where they did them?

Section 4: Social well-being.
- Pro-social behaviour: inter-personal and civic strengths
- ‘Fear of crime’ and safety – negative impact.

Environmental well-being.
- Materialism – potential future negative effect.

Self esteem

Section 5: Demographics plus some questions designed to create some differentiation about
- Family structure.
- Geographical mobility.
- Poverty.

Differences between the surveys
There are also important differences between the surveys. The street survey had to be conducted within 12 minutes, so brief versions of many scales were used.
- For the life and domain satisfaction – one item was used for each domain. So the question became “I would describe my satisfaction with my overall life as…”.

- For the developmental aspect of well-being, the already existing seven-item adult version of the curiosity scale was used.

- We did not use self esteem scales.

The secondary and senior primary school surveys were the same except that no pro-social behaviour questions were asked of primary school children as, in the test phase of the project, some of them found these questions too tricky to understand.

For the junior primary school survey we just used a shortened version of the life and domain satisfaction questions. We selected only positively worded questions so as not to cause confusion and marked the responses with sad and happy faces: (see image above)

75 Eigenvalues are over 1 (the standard cut off point), with a potential 3rd component’s eigenvalue = 0.80
Appendix 3 – Academic sources for scales used

Overall design advice
Professor Joar Vittersø, Department of Psychology, Tromsø University, Norway.

Professor Vittersø has expertly steered us through the very wide literature on this field and provided much needed advice on many occasions. He is a leading figure in the International Society of Quality of Life Studies, with a particular research interest in the developmental (process-orientated) component of well-being. A new well-being questionnaire designed jointly by Professor Vittersø and Nic Marks is available on-line – follow the links from ‘well-being section’ of the nef website: www.neweconomics.org

The following academics provided scales:

Life satisfaction scales
Scott Huebner, Professor of School Psychology Program, Department of Psychology, University of South Carolina, USA.

Professor Huebner has developed the most established and tested life and domain satisfaction scales for children. His scales use a reading age of eight as their benchmark. Over 40 questions were posed that children could agree or disagree with on a five-point scale. Examples include:

- I have what I want in life.
- There are lots of fun things to do where I live.
- My friends will help me if I need it.
- I wish I didn’t have to go to school
- Members of my family talk nicely to one another.
- There are lots of things I can do well.

Personal development - curiosity scales:
Todd Kashdan, University of Buffalo, Department of Psychology, USA.

No curiosity index existed for children – so this scale is a first but it is based on Todd Kashdan’s existing and well-tested curiosity scale for adults; 32 questions were asked and in time he will seek to reduce this to approximately 10.

Examples include:

- I love the feeling of learning something new.
- When I am doing something, I get so involved that I lose track of time.
- I will go out of my way to look for challenges.

Pro-social behaviour indicators:
Christopher Peterson, University of Michigan, “Virtues in Action” Character Strength Programme.

Christopher Peterson is a leading figure in the Positive Psychology Network in the States. He leads the ‘Character Strengths’ programme. He provided us with a 24-item scale of ‘virtues in action’ – covering emotional, cognitive, spiritual, interpersonal and civic strengths. We used the interpersonal and civic strengths questions as our indicator of ‘pro-social’ behaviour – as they directly concerned behaviour that affected others.

Examples include:

- How often do you take a risk to establish or improve a relationship?
- How often do you tell the truth even when it hurts you to do so.

Materialism and generosity scales:
Tim Kasser, Knox College, US

Tim Kasser is renowned for his work on sustainable development and well-being, in particular the affect of materialistic values on well-being.

Examples include:

- I enjoy sharing my things with other people.
- When I grow up, I want to have a really nice house filled with all kinds of cool stuff.

Community safety data
The community safety questions that we used were the standard ones that the police use to gauge fear of crime, for example:

- How safe do you feel walking alone in your local area after dark?
- Have you been a victim of crime in the last 12 months?

Self esteem
In addition to the self-satisfaction scale of Scott Huebner, we also repeated the classic Rosenberg 10-item Self Esteem Scale. We wanted to use the best-known methodology for such an important aspect of personality.

Other questions
We designed other supplementary questions, such the open questions around favourite activities:

- Think of your normal week, what is your favourite thing that you do most weeks?

Appendix 3 – Academic sources for scales used
Appendix 4 – Supporting evidence for a two-dimensional model of personal well-being

A core part of nef’s well-being model is the two-dimensional aspect of personal well-being. To perform a test of whether respondents do indeed answer ‘satisfaction’ questions independently from ‘developmental’ questions, it is possible to carry out a factor analysis. A factor analysis reduces many pieces of data to fewer components that identify an underlying structure to responses.

The factor analysis shown in Table 26 clearly identifies two components, which together explain over 60 per cent of the variation in all eight variables (it would take six components to explain 90 per cent). The first component strongly approximates to our ‘satisfaction dimension’, and the second to our ‘personal development dimension’. It is interesting and relevant that ‘school satisfaction’ is the one domain that is more in the developmental dimension than the satisfaction one.

The two components, that a factor analysis of the data creates, could be used directly as our two dimensions of well-being; however they are slightly less easy to interpret than using ‘life satisfaction’ and ‘curiosity’ (curiosity = absorption + exploration). Figure 14 illustrates the ‘goodness of fit’ of these two indicators with the statistically calculated components.

As these indicators fit the dimensions well – we have elected to use them as our ‘headline indicators’ of personal well-being.

### Table 26 - Factor analysis of core well-being scales. Source: Combined schools survey

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction</td>
<td>.811</td>
<td></td>
</tr>
<tr>
<td>Living environment satisfaction</td>
<td>.724</td>
<td></td>
</tr>
<tr>
<td>Friendship satisfaction</td>
<td>.684</td>
<td></td>
</tr>
<tr>
<td>Self satisfaction</td>
<td>.534</td>
<td>.462</td>
</tr>
<tr>
<td>Family satisfaction</td>
<td>.694</td>
<td>.373</td>
</tr>
<tr>
<td>School satisfaction</td>
<td>.383</td>
<td>.557</td>
</tr>
<tr>
<td>Absorption</td>
<td></td>
<td>.871</td>
</tr>
<tr>
<td>Exploration</td>
<td></td>
<td>.891</td>
</tr>
</tbody>
</table>

Figure 14: Goodness of fit between factor analysis and well-being components
### Table 27: Community safety figures by age group and gender

#### How worried are you about being a victim of crime?

<table>
<thead>
<tr>
<th>Age group</th>
<th>9 - 11</th>
<th>12 - 15</th>
<th>16 - 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Boys</td>
<td>20</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Girls</td>
<td>29</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>No</td>
<td>80</td>
<td>79</td>
<td>84</td>
</tr>
</tbody>
</table>

#### How safe do you feel walking alone in your local area during daylight?

<table>
<thead>
<tr>
<th>Age group</th>
<th>9 - 11</th>
<th>12 - 15</th>
<th>16 - 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Boys</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Girls</td>
<td>12</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Fairly unsafe</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Neither</td>
<td>12</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Fairly safe</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Very safe</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Do not go out alone</td>
<td>17</td>
<td>12</td>
<td>22</td>
</tr>
</tbody>
</table>

#### How safe do you feel walking alone in your local area after dark?

<table>
<thead>
<tr>
<th>Age group</th>
<th>9 - 11</th>
<th>12 - 15</th>
<th>16 - 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Boys</td>
<td>22</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>Girls</td>
<td>16</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>22</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>Fairly unsafe</td>
<td>10</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Neither</td>
<td>13</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Fairly safe</td>
<td>9</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Very safe</td>
<td>12</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Do not go out alone</td>
<td>34</td>
<td>28</td>
<td>41</td>
</tr>
</tbody>
</table>

#### How safe do you feel when you are alone in your own home at night?

<table>
<thead>
<tr>
<th>Age group</th>
<th>9 - 11</th>
<th>12 - 15</th>
<th>16 - 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Boys</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Girls</td>
<td>12</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Fairly unsafe</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Neither</td>
<td>12</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Fairly safe</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Very safe</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Do not go out alone</td>
<td>17</td>
<td>12</td>
<td>22</td>
</tr>
</tbody>
</table>

#### How safe do you feel when you are alone in your local area during daylight?

<table>
<thead>
<tr>
<th>Age group</th>
<th>9 - 11</th>
<th>12 - 15</th>
<th>16 - 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Boys</td>
<td>25</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>Girls</td>
<td>33</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>25</td>
<td>19</td>
<td>33</td>
</tr>
<tr>
<td>Fairly unsafe</td>
<td>11</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Neither</td>
<td>12</td>
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<td>12</td>
</tr>
<tr>
<td>Fairly safe</td>
<td>9</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Very safe</td>
<td>12</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>Do not go out alone</td>
<td>34</td>
<td>28</td>
<td>41</td>
</tr>
</tbody>
</table>

#### In the past year have you been a victim of crime?

<table>
<thead>
<tr>
<th>Age group</th>
<th>9 - 11</th>
<th>12 - 15</th>
<th>16 - 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Boys</td>
<td>20</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Girls</td>
<td>29</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Yes</td>
<td>20</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>No</td>
<td>80</td>
<td>79</td>
<td>84</td>
</tr>
</tbody>
</table>

#### How safe do you feel when you are alone in your own home during daylight?

<table>
<thead>
<tr>
<th>Age group</th>
<th>9 - 11</th>
<th>12 - 15</th>
<th>16 - 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Boys</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Girls</td>
<td>12</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>13</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Fairly unsafe</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Neither</td>
<td>12</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Fairly safe</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Very safe</td>
<td>14</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Do not go out alone</td>
<td>17</td>
<td>12</td>
<td>22</td>
</tr>
</tbody>
</table>
The power and potential of well-being indicators

Chilean ecological economist Manfred Max-Neef organised the Human Scale Development project, which set out to try and explain the Latin American crises without resorting to any economic terms. The product of the project was the proposal of a theory of fundamental human needs. Max-Neef’s proposal was that ‘needs’ should be understood as finite and universal, whereas ‘satisfiers’ are infinite and culturally determined. Needs were categorized by two ‘dimensions’: ‘existential’ and ‘axiological’. A matrix presentation was devised so that the interaction between these two dimensions was filled by the myriad of culturally determined ‘satisfiers’ (see Diagram 7).

They explicitly proposed that “needs must be understood as a system; that is all human needs are interrelated and interactive”. A satisfier may contribute simultaneously to the satisfaction of different needs, or conversely a need may require the interaction of several satisfiers to be met. Indeed the relationships (between satisfiers and needs) are not fixed, in that they may vary according to time, place and circumstance.

As an addition to this categorization of needs, Max-Neef also considered different types of satisfiers. These are:

1. **Destroyers** — satisfiers that over time annihilate the possibility of their satisfaction, for example the ‘arms race’ and the need for ‘protection’. They also impair the satisfaction of other needs, so ‘subsistence’ ‘affection’ and ‘freedom’ are also affected.

2. **Pseudo-satisfiers** — these are elements that give a false sensation of satisfying a need.

3. **Inhibiting satisfiers** — these satisfy a particular need; however, at the same time, impair the satisfaction of other needs.

4. **Singular satisfiers** — satisfy one need whilst being neutral to all others.

5. **Synergetic satisfiers** — satisfy many needs simultaneously.

Max-Neef’s work has mainly been operationalised through workshops where participants brainstorm both obstacles and satisfiers for each of the ‘cells’ of the needs matrix. They then create strategies for overcoming or removing systemic obstacles and replacing them with synergetic satisfiers. This type of workshop has been widely held throughout Latin America and at one stage the paper based manual for organising the workshop was reputed to be the most photocopied manuscript in the region!

However Max-Neef’s work has not often been investigated from a quantitative angle and this remains a research area of great potential. Identifying potential policies that are collective synergetic satisfiers is effectively the same as enhancing the community’s social well-being. A research project could seek to test this by measuring the impact on people’s personal well-being.
Local Works: Local people must be put back at the heart of their local economies. Policies that favour the large and remote are threatening the vibrancy and diversity of our communities, bringing Ghost Town Britain. Giving real power to local people can reinvigorate our local rural and urban economies.

**nef** is leading this campaign characterised by a highly diverse membership that seeks to combat the spectre of ‘Ghost Town Britain’. It promotes the importance of local sustainability and self-determination. For example, Local Works was a big part of the campaign to defend community pharmacies. Taking as a starting point the fact that local communities should be more in charge of their own economies, education, healthcare, consumer and leisure needs, Local Works is campaigning for a legal framework that can make this happen.

The needs of communities must be at the heart of environmental, social and political justice. At a time of growing disenchament with political processes, individuals and communities can and should have a real impact on how money is spent in their communities and what they invest in. Having a tangible impact on the delivery of services is a vital tool for political, social, environmental and economic reinvigoration in all of our communities.

Local Works recognises that there is no single blueprint, but that communities should draw up and implement their own plans to achieve these goals.
Researched by Nic Marks
Written by Nic Marks, Hetan Shah and Andrea Westall