The Little Book of WELLBEING:

A guide to wellbeing in urban environments

Christopher T. Boyko, Claire Coulton, Aissa Sabbagh Gomez, Rachel Cooper and the Liveable Cities Team

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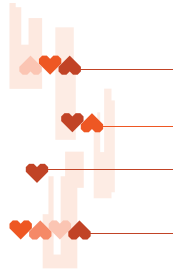
Acknowledgements

Contents

What this little book tells you

This little book tells you about research that we did as part of the Liveable Cities project, looking at wellbeing in neighbourhoods. We begin by describing wellbeing and how different people have tried measuring the concept. A research study is presented next, showing how two factors – urban density and deprivation – can affect the wellbeing of neighbourhood residents and the walkability of those areas. We end by offering some lessons for urban decision-makers, such as local authority town planners, urban designers and developers, about how to improve wellbeing in neighbourhoods and provide some resources for readers interested in learning more.

Through our work, we reveal that:

- Wellbeing is a multi-dimensional concept with lots of layers

- Plenty of people, cities, countries and international bodies are currently measuring wellbeing, all of whom have slightly different ways of thinking about it and using the information

- Neighbourhoods are important hubs for enhancing wellbeing, but they can also be places where people experience illbeing because of a number of factors

- Living in low-density, low-deprivation neighbourhoods is good for your wellbeing whereas living in high-density, low deprivation neighbourhoods is good for walkability

- Living in low-density, high-deprivation neighbourhoods is bad for your wellbeing and bad for walkability

- People making decisions about the design and maintenance of neighbourhoods need to think more carefully about what they're currently doing to improve wellbeing and who they are (and are not) involving in decision-making

- There are 10 lessons that urban decision-makers can learn when trying to design and maintain cities with wellbeing in mind

- There are a multitude of resources about wellbeing that can be useful if you want to find out more information on the topic
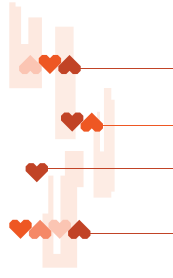
Introduction

When we think about wellbeing, many of us may consider things like happiness, satisfaction, physical health and quality of life. We may also think about things that could affect our wellbeing, like money, family, friendship, where we live, what we own and what we'd like to own. We might consider ourselves happy, say, in our home life, but not in our working life (or vice versa), and this can impact our sense of wellbeing. And we might not only consider our own wellbeing, but the wellbeing of our family, the wider community or our town, city or country.

As you might have gathered from the brief paragraph above, wellbeing and what it means in different contexts, can be quite complex. This complexity is reflected in the large number of descriptions available. For example, the World Health Organisation's early report on wellbeing in 1947 began the discussion by arguing that 'health is not the mere absence of diseases, but a state of wellbeing'. The new economics foundation built on this in 2009 by saying that wellbeing can be thought of as 'the ultimate goal of human endeavour', while Hetan Shah and Nic Marks suggested that, 'wellbeing is more than just happiness. As well as feeling satisfied and happy, wellbeing means developing as a person, being fulfilled and making a contribution to society'. And Doh Shin and D Johnson suggest that wellbeing is 'a global assessment of a person's quality of life according to his own chosen criteria'.

From this, we can see that wellbeing is more than just good health, and it is more than just happiness. In the next section, we will look briefly at two theories behind wellbeing and the people who study them, and what people have done to measure it.

What is wellbeing?

Hedonia v. Eudaimonia

In considering the roots of wellbeing, we can go back as far as the Ancient Greeks, who began discussing what it means to live well thousands of years ago. These debates come from two different positions: one is centred on *Hedonia* and the pursuit of pleasure, while the other, *Eudaimonia*, is centred on leading a good life by being virtuous and performing worthwhile tasks.

Hedonism (or hedonia) can be traced back to two philosophers, Aristippus and Epicurus, both of whom equated wellbeing with the pursuit of pleasure. However, they diverge over what the nature of pleasure is. Aristippus believed that wellbeing was achieved by maximising enjoyment and by controlling and adapting one's environment to do so. For example, we might adapt our environment by improving the decor in our home as a way to enhance our wellbeing and maximise our pleasure in that environment.

Epicurus's strand of hedonism is different in that it promotes a form of pleasure attained through intellectual enlightenment of one's surroundings and through the absence of pain. Epicurus considered what it was to live well. This isn't an all-out pursuit of pleasure for pleasure's sake, as we might understand the term hedonism today, but it is the pursuit of pleasure without extravagance, in finding pleasure and happiness in what is enough, and not wanting more than this. An example here might be that you are very hungry and this causes you (hunger) pain. Eating a meal would end the pain and bring you pleasure. However, should you eat too much, you would feel unwell, and this would also cause you to feel pain. So as you can see, it is as much about living life on an even keel, and of finding a balance between what is too much and what is too little.

So hedonia relates to maximising the experience of pleasure and/or happiness in one's life, whilst minimising the experience of pain, discomfort and unhappiness. This approach to wellbeing has been studied extensively by positive psychologists.[1] One such scholar is Prof. Ed Diener, who wrote in 2012:

> *Although there are some cultural differences in what might be considered 'good' or desirable behaviour, there is certainly some consensus too. Everywhere in the world, people want to be happy, to get along with other people, to have their needs met, to develop and grow, and to have respect. People want to love and to be loved. It is these universals that we want to study as positive psychologists.*

A second important theory that underpins research in wellbeing began with Greek philosopher, Aristotle. This theory, *Eudaimonia*, takes a different approach to understanding wellbeing in that its emphasis is on living a good and virtuous life. This sort of life would include acts of justice, kindness and honesty as well as personal growth and social development. So here, wellbeing is attained through the performance of worthwhile undertakings and by leading a virtuous life. This approach differs to the hedonistic theory of wellbeing as it makes a distinction between wellbeing and happiness. For example, there are many causes of pleasure, but not all of them will add to your overall wellbeing. So, in this case, drinking alcohol or taking drugs may make you happy initially, but is it likely to contribute to your overall wellness?

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[1] Positive psychology is the scientific study of the strengths that enable people and communities to thrive. Put another way, it is the study of what makes life worth living, of flourishing and of happiness.

An integrated approach to wellbeing?

Recent research on wellbeing in neuroscience and clinical psychology suggests that wellbeing is a multi-dimensional concept that involves aspects of both Hedonia and Eudaimonia. One term that is being used now to describe the multi-dimensional nature of wellbeing is *flourishing*. According to Ed Diener, Felicia Huppert, Corey Keyes and others, flourishing refers to high levels of wellbeing. Adding more detail to that description, Martin Seligman suggests that flourishing consists of five building blocks:

- Positive emotion: feeling good, an aspect of happiness and life satisfaction

- Engagement: being completely absorbed in activities or flow

- Relationships: authentic connections to others

- Meaning: purposeful existence

- Accomplishment: sense of accomplishment and success

In order to flourish, Martin Seligman believes that people should strive to maximise all five of these building blocks throughout their lives.

Defining wellbeing

As you might expect from what you've read so far, there are a lot of different ways to approach wellbeing and there isn't universal consensus on how best to define it. Here are just four of the many definitions that we found and liked:

Wellbeing definition	Source
A dynamic state that is enhanced when people can fulfil their personal and social goals and achieve a sense of purpose in society.	Foresight report on mental capital and wellbeing
A positive physical, social and mental state that occurs when several basic needs are met and one perceives a sense of purpose, including being able to achieve important goals to take part in society.	Department of Food, Environment and Rural Affairs (DEFRA)

Wellbeing definition	Source
A dynamic process in which a person's external circumstances interact with their psychological resources to satisfy – to a greater or less extent – their psychological needs and to give rise to positive feelings of happiness and satisfaction.	new economics foundation (nef)
The balance point between an individual's psychological, social and physical resource pool and the psychological, social and/or physical challenges faced.	Rachel Dodge and colleagues

Each of these definitions of wellbeing has something we thought was interesting: The Foresight definition emphasises the social side of wellbeing, the DEFRA definition acknowledges the physical side of wellbeing; the nef definition is broad and focuses on a balance of physical and mental resources; and the last definition thinks about wellbeing through the notion of equilibrium. And all of them speak of wellbeing as a dynamic process, rather than as an end product. That is, we don't just 'have' wellbeing; we need to work at it.

If these definitions are a bit too academic or policy-sounding, we really like this rather simple definition of wellbeing, which also comes from nef: *Doing well – feeling good, doing good – feeling well.* By this, we mean enjoying a certain standard of living or welfare ("doing well"), being satisfied with ourselves and our lives ("feeling good"), helping others to live a good life ("doing good") and being physically and mentally healthy ("feeling well"). So, wellbeing is as much about how we feel at a *personal* level—happy, satisfied, good quality of life, healthy—as it is about ensuring that the *people and places around us* are doing well.[2]

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[2]   As an aside, when someone isn't doing well, they may be experiencing *illbeing*, rather than poor wellbeing. Bruce Heady, Elsie Holstrom and Alexander Wearing say that illbeing refers to a state of worry, negative affect and bodily complaints that happen when someone has a low sense of personal competence, a lack of control over their life and poor socio-economic circumstances. So illbeing is not quite the opposite of wellbeing.

How is wellbeing measured?

We have already seen that those who follow a philosophy of hedonism focus on the pursuit of pleasure and happiness. Perhaps one of the earliest people to measure pleasure was Jeremy Bentham in the late 18th century. His method is called the Felicific Calculus and it was used to determine the moral status of any act by asking seven questions around the intensity of the pleasure, how long it will last, who will be affected by it etc. As the experience of pleasure (or pain) is often associated with a person's enjoyment, happiness, wellbeing or suffering, more recent research has adopted the term 'affect' to define moods and emotions, and to describe people's evaluations of their own life events.

Even more recently, some researchers have been using a technique called 'The Experience Sampling Method' (ESM). The ESM procedure consists of people's making self-reports about their moods and daily experiences throughout the day in a normal week. The purpose of this method is to answer questions such as: 'How do people spend their time?' 'What do they usually feel like when engaged in various activities?' 'How do men and women, adolescents and adults, disturbed and normal samples differ in their daily psychological states?'

Both of the above methods of measuring wellbeing – or facets of wellbeing – look at what's known as *subjective wellbeing* (SWB). Here, people, themselves, are considered to be in the best position to determine how well they are and what makes them happy. Ed Diener and colleagues created a list of concepts that are often identified with the study of SWB, and you can see these concepts in the following table:

PLEASANT AFFECT (positive affect)	UNPLEASANT AFFECT (negative affect)	LIFE SATISFACTION	DOMAIN SATISFACTIONS
Joy Elation Contentment Affection Happiness Ecstasy	Guilt & Shame Sadness Anxiety & worry Stress Depression Envy	Desire to change life Satisfaction with current life Satisfaction with past Satisfaction with future Significant others' views on one's life	Work Family Leisure / Health Finances Self One's group

And Daniel Kahneman, a Nobel Prize-winning psychologist known for his research on behavioural psychology, believes that subjective wellbeing is comprised of two things: your *experiencing self* and your *remembering self*. The experiencing-self lives in the moment, adapts easily and can identify present emotions, comfort levels etc. However, only a few of these experiences are passed on to the remembering-self to keep and evaluate; the rest is lost.
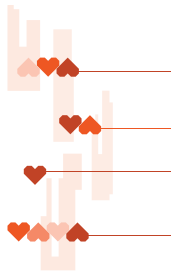
Of course, not all research focuses on subjective wellbeing. Studies in the eudaimonic tradition often emphasise more *objective measures* by looking at pre-determined, external considerations, such as how connected you are with others around you. Perhaps this is due to the nature of eudaimonia itself, as it urges an *objective*, external reflection of basic values and ideals of your life experience. One type of objective measurement looks at *psychological wellbeing*, which is assessed through things like positive relationships, level of autonomy, mastery of the environment, your purpose in life and personal growth. Another measurement type is Mihaly Csikszentmihalyi's notion of *flow*, which is the ultimate expression and optimal experience of personal achievement. When someone is in flow, they are in an active state that is entirely within their control and often as the result of a structured set of activities. A sportsperson who is 'in the zone' playing a match or a musician who is in a trance-like state playing an instrument are good examples.

Traditionally, large comparative surveys[3] of wellbeing have used *indicators*, which are generally focussed on objective data, such as income, marital status, education and health, collected from the Census or other administrative records. However, objective indicators on their own are often not sufficient for the holistic assessment of wellbeing, the development of policy, the creation of design guidelines etc. Subjective measures based on people's self-reports and experiences that capture key dimensions like happiness and life satisfaction are also critical. Studies that use both can convey not only the nature of wellbeing but the process leading to wellbeing, too. Or as Veronika Huta and Richard Ryan put it in 2010: "A life rich in both hedonic and eudaimonic pursuits is associated with the greatest degree of wellbeing".

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[3] For example, the UNICEF (2007) comparative study of child wellbeing in developed countries included children living in homes below the poverty line, children in homes where there was no employed adult and children in homes where there were few education resources. These three different categories acted as indicators of low wellbeing within the domain of 'material wellbeing'.

For the Liveable Cities investigation on how urban deprivation and density influence the wellbeing and walkability of residents from different neighbourhoods, which you'll read about next, it was decided to use an integrated approach. In our case, some of the objective data came from the Census, some of subjective data came from our wellbeing questionnaire and our walkability data had both subjective and objective data. Overall, using this integrated approach allowed us to gain a more comprehensive understanding of the physical, social, emotional and phenomenological aspects of each neighbourhood.

Study:

How do urban deprivation and density influence the wellbeing and walkability of residents from different neighbourhoods?

A lot of research will tell you that high deprivation areas aren't generally good for people's health and wellbeing. Neighbourhoods with vandalism, litter, poor opportunities for jobs and education, and few chances to meaningfully interact with your neighbours all have been shown to decrease residents' quality of life. These places aren't usually very walkable either, especially if they have no or poor-quality pavements, parks and other public spaces look dirty and unkempt, and residents feel unsafe walking around during the day and night.

There is also some evidence to suggest that living in high density places aren't that great for you either. In many cases, residents report having more stress, fatigue, depression and anxiety compared with people living in lower density areas. However, high density isn't all bad: living in close proximity to other people you know may increase your daily social interactions and overall co-operative behaviour. There is also a greater chance that you'll have easy access to services, like grocery stores and cafés, in your local area. In this sense, high density areas can be more walkable (and cycle-able) because of the connections to other places, the close physical distances to important and relevant things etc.

While it's known that both deprivation and density play a role in people's wellbeing, there haven't been many studies in the UK that look at how *both* these issues, combined, affect wellbeing. There also hasn't been a lot of research that shows how deprivation and density impact the walkability of neighbourhoods. We decided to look into this as part of the Liveable Cities project, and this is what we did:

We began by choosing three UK cities where we wanted to conduct our research. We wanted places that were very different in nature, and which represented the diversity of urban areas found in the country:

- Birmingham: a large, multicultural city in the Midlands (over 1 million inhabitants);

- Lancaster and Morecambe: a connected market town and seaside town in the North West (about 140,000 inhabitants), and;

- Southampton: a port city in the South (about 237,000 inhabitants).

From here, we selected 12 neighbourhoods – four in each city – that varied depending on their levels of deprivation and density. To help us decide which neighbourhoods we wanted for our study, we used data from the UK Office of National Statistics. Specifically, we looked at the Index of Multiple Deprivation and population density.[4] We ranked all four neighbourhoods in each city – from low to high deprivation and from low to high density – and then picked the ones that had a combination of the lowest and highest deprivation and density, like this:

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[4] The **Index of Multiple Deprivation** is used to understand how deprived a person is, compared with other people, and involves a number of important dimensions, including income; employment; education, skills and training; poor health and disability; presence of crime; barriers to houses and services, and; problems with the area where people live. **Population density** refers to the number of people per given area.

- A low density and low deprivation neighbourhood

- A low density and high deprivation neighbourhood

- A high density and low deprivation neighbourhood

- A high density and high deprivation neighbourhood[5]

We focused on these more 'extreme' neighbourhoods because these are the ones that are most often discussed in research and which have the biggest differences between them in terms of the design of the urban environment. To that end, and to help minimise the amount of times that we have write potentially confusing sentences like, 'The low density, low deprivation neighbourhood was more walkable than the high density, low deprivation neighbourhood…', we decided to give evocative names to these 'extreme' neighbourhoods. The names represent actual places in the world, either from the past or today, that have the kinds of deprivation and density characteristics we are looking at. As a point of clarification, we did not do research in these places; we are just using the names to help make our research easier to understand:

Neighbourhood type	Neighbourhood name
Low density and low deprivation neighbourhood	Beverly Hills, California
Low density and high deprivation neighbourhood	Inner city suburbs of Detroit, Michigan
High density and low deprivation neighbourhood	Bayswater, London
High density and high deprivation neighbourhood	Victorian slums

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[5] Given the nature of the data, it was not always possible to choose neighbourhoods with *both* the lowest and highest density and deprivation. So we compromised and selected neighbourhoods that best fit the criteria (e.g., a neighbourhood with the highest density but the second-highest deprivation score).

Once we had our neighbourhoods, we sent wellbeing questionnaires to residents of those places. The purpose of the 23-item questionnaire was to get a better sense of people's wellbeing and what they thought about their neighbourhood, safety, daily life and travel.[6] For the specific wellbeing questions, we used the same ones that the Office of National Statistics is currently using to measure wellbeing across the UK. In total, we had 279 completed questionnaires: 58 in Birmingham, 104 in Lancaster and 117 in Southampton.

When all of the questionnaires were completed, we then did an 'audit' of each of the 12 neighbourhoods to see how walkable these places were for residents. For the audit, we used the app-based version of the Irvine-Minnesota Inventory, called State of Place, which has about 280 questions divided into 10 different categories:

- Form
- Density
- Proximity
- Connectivity
- Parks and public spaces

- Pedestrian amenities
- Personal safety
- Traffic safety
- Aesthetics
- Recreational facilities.

As we couldn't audit all the roads in every neighbourhood – this would have taken ages – we selected a proportion that would give us an indication of the walkability of the areas. We audited 2.6km in each neighbourhood, which amounts to about 10% of all roads in each area. We divided up the roads into A roads, B roads, minor roads and local roads,[7] and made sure that the proportions of each road were the same, or as similar, for each neighbourhood in each city. In total, we walked over 31km!

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[6] We started with just under 3,000 wellbeing indicators, collected from different sources around the globe, and whittled the list of relevant indicators to 23 before turning them into questions for our questionnaire.

[7] A roads are public roads that connect areas of regional importance; B roads are public roads that connect areas of local importance; Minor roads are public roads that connect to A or B roads and may be unclassified; Local streets are public roads that provide access to land and/or houses, and generally not intended for through traffic.
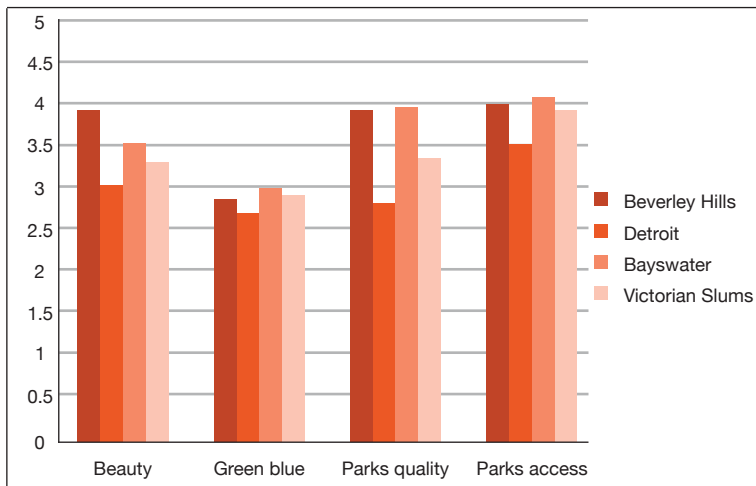
In helping us decide which roads to audit, we first tried to choose ones where residents lived who filled in our wellbeing questionnaire (we asked for their postcodes). We then drew a 300m buffer around their homes – a method used by some researchers to refer to the most likely area that people would use around where they lived – and selected roads within the buffer zone. So that all the roads were not clustered next to each other, we made sure to pick ones that were spread out a bit.

So what were the **results** of our research? Well, we found a few things about wellbeing that agreed with what was said in the academic literature and a couple of things that were new:
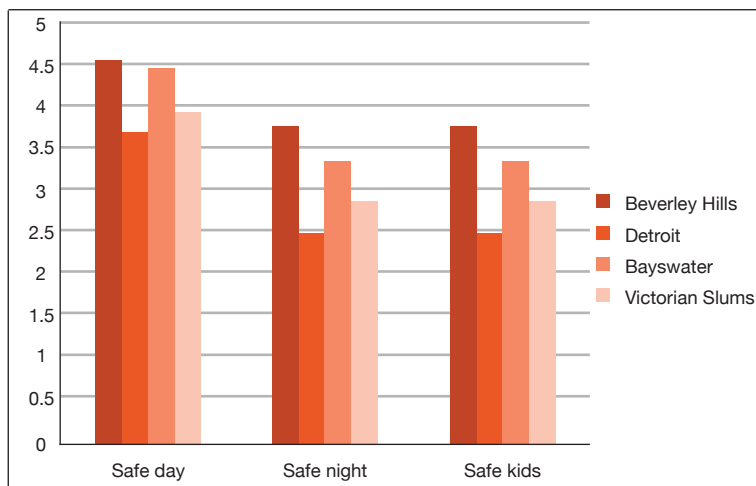
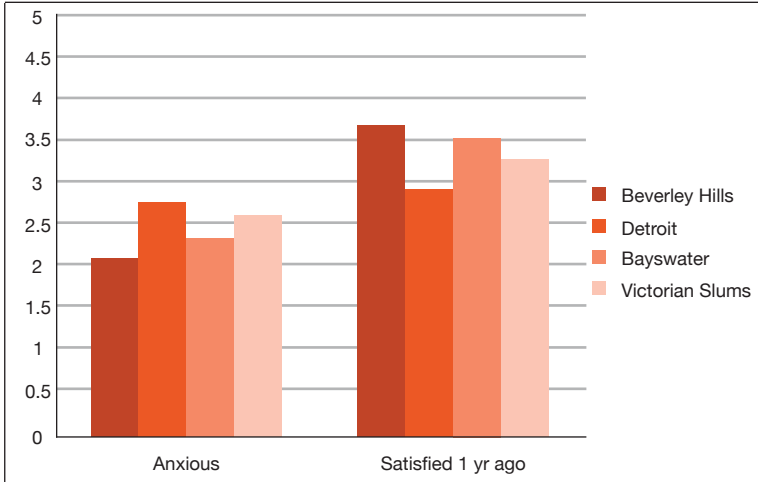| Wellbeing findings	In the literature or new
Residents of 'Beverly Hills' and 'Bayswater' had the best wellbeing, respectively	In the literature
Residents of 'Victorian slums' had better wellbeing compared with residents of 'inner city suburbs in Detroit'	New
Residents of 'Beverly Hills' were the most satisfied with the beauty of their neighbourhood, felt they had the best access to parks and play areas, felt safest when walking around their neighbourhood during the day and night, felt that their children were safest when playing outside, were least anxious and had the most pride in their city	In the literature
Residents of 'Bayswater' felt that they lived closest to green and blue spaces and had more face-to-face conversations with friends and family	In the literature & new
Residents of 'Beverly Hills' and 'Bayswater' felt the most satisfied with their lives a year ago	New
Deprivation seemed to have a bigger effect on a person's wellbeing compared with density	In the literature

Here is this information in graph form:

Wellbeing Findings: Your Local Neighbourhood

Wellbeing Findings: Safety
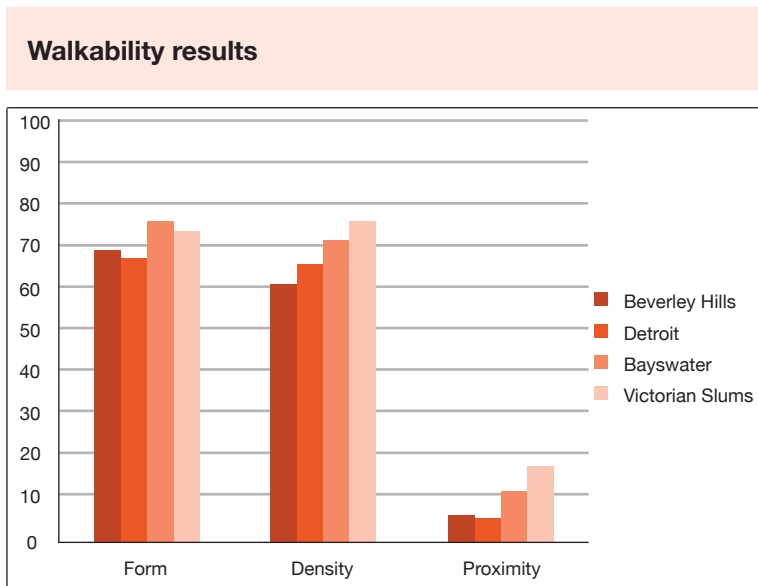
Wellbeing Findings: Your health & wellbeing

Legend:
- Beverley Hills
- Detroit
- Bayswater
- Victorian Slums

Categories: Anxious, Satisfied 1 yr ago

Wellbeing Findings: Your environment & daily life

Legend:
- Beverley Hills
- Detroit
- Bayswater
- Victorian Slums

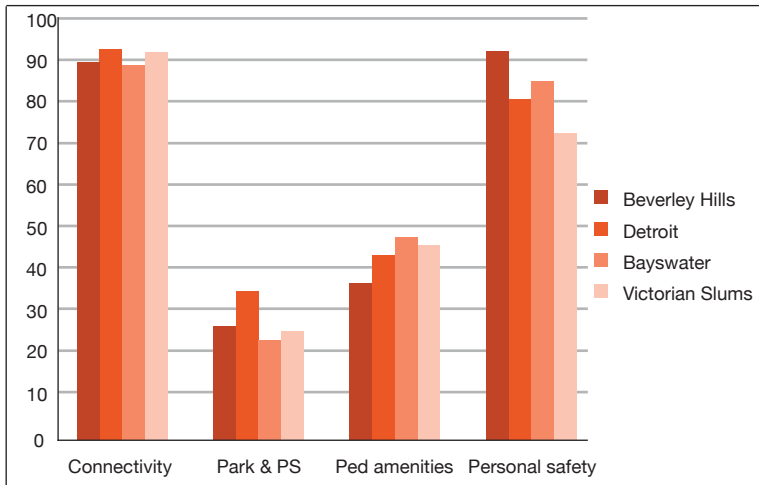Categories: Pride in city, Face-to-face

When it came to walkability, we also found out a couple of interesting things:

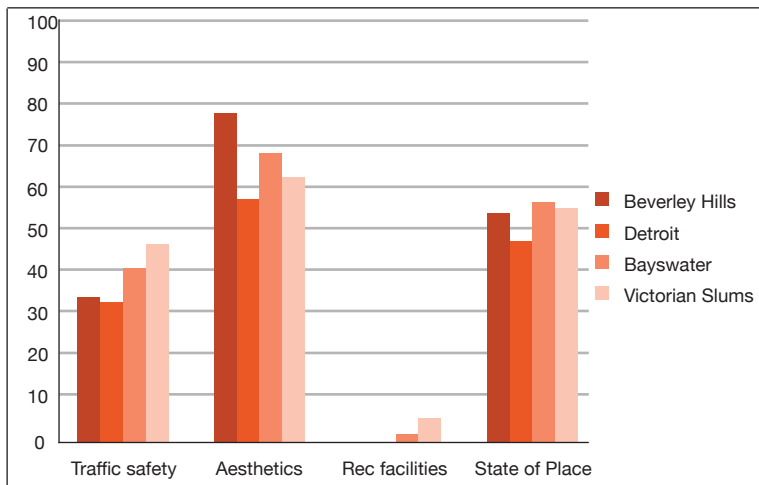| Walkability findings	In the literature or new
'Bayswater' and 'Victorian slums' were the most walkable	In the literature & new
'Inner city suburbs in Detroit' were the least walkable	In the literature
'Beverly Hills' looked the nicest and felt safest	In the literature
'Inner city suburbs in Detroit' had the most parks and public spaces and the best connectivity to other places	New
'Bayswater' had the best urban form and pedestrian amenities	In the literature
'Victorian slums' had the highest densities, the best proximity to a mix of uses, felt safest from a traffic perspective and had the most recreational facilities	In the literature & new
Density seemed to have a slightly bigger impact on the walkability of a neighbourhood compared with deprivation	In the literature

Again, here is this same information in graph form:

Walkability results

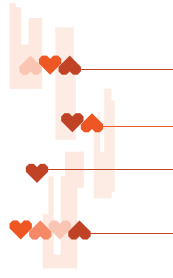## Walkability results

Walkability results

Looking at the two sets of results together, we noticed three definite patterns:

- Residents who lived in 'Beverly Hills' clearly had the best wellbeing- they liked the physical surroundings where they lived and felt the least anxious and most satisfied with their lives. However, their neighbourhoods were the third most walkable.

- Residents living in 'Bayswater' had the best, combined wellbeing and walkability scores; that is, their wellbeing was very good – particularly in terms of having lots of face-to-face conversations and being satisfied with their lives a year ago – and the neighbourhoods where they lived were the most walkable – they had great pedestrian amenities and good access to green and blue spaces.

- The 'inner city suburbs of Detroit' fared the worst for both wellbeing and walkability- the redeeming qualities of these neighbourhoods were their connections to other places and the amount of parks and public spaces.

So what does this mean for cities that want to improve the wellbeing and walkability of their neighbourhoods? First, neighbourhoods that are low in density and high in deprivation, like the inner city suburbs of Detroit, aren't working. And putting more green space into these areas without consideration for where the green spaces are located, who might use them and what they might be used for isn't going to help. Second, despite being both high in deprivation and density, the 'Victorian slum' neighbourhoods did okay in terms of wellbeing and walkability, suggesting that these areas might have some built environments characteristics that architects, urban designers, town planners and developers should look at. Finally, if the poorer-performing areas are ever going to improve, urban decision-makers need to work alongside residents, local businesses and other to co-design and co-manage the spaces that matter most to people, improving their 'place-making' potential.

Lessons for urban decision-makers

Knowing what we know about wellbeing in urban environments, are there any lessons that urban decision-makers, such as local authority planners, developers, urban designers and transport engineers, can learn and carry forward in their work? We believe there are, and have 10 tips to ensure that cities are created with wellbeing in mind.

1. Promote physical activity and a healthy diet

Design streets and neighbourhoods with traffic calming measures and provide interconnected street layouts that are not too long, so they can provide a buffer zone between pedestrians, cyclists and traffic to encourage walking and cycling. Even better, learn from successful 'shared space' schemes, like in Poynton, Cheshire. Ensure good links to nearby facilities and amenities, especially food stores and health centres; encourage local gardening, growing and eating local produce, and sharing.

2. Design the neighbourhood for children

Provide space that is safe for children to play in, and ensure we can see children from inside homes with windows facing the street. Offer parks and open spaces, including play areas, especially those comprising natural elements, such as trees, water and

rocks, that stimulate creativity. Provide dedicated spaces in neighbourhoods for teenagers to hang out.

3. Enable independence in older age

In neighbourhoods, provide a hierarchy of streets from busier, main streets to quieter, residential ones. Ensure footways are wide and smooth, and yet signal danger. Provide adequate toilet facilities and seating near pavements at regular intervals with interesting things to look at.

4. Reduce Stress

Design homes with good sound insulation and optimise natural daylight. On the street, optimise the amount of greenery. Provide quiet, natural spaces that offer opportunities for rest and retreat. In buildings and in city spaces, provide clear signage and way-finding cues.

5. Promote positive mood/emotions

Design homes where people can feel private and include interesting features where possible. Incorporate human-scale details, such as flower boxes and balconies. Optimise greenery and views of it, and provide space for conviviality and leisure.

6. Facilitate good relationships

Design neighbourhoods that have shared and community spaces; enable social networking, both digitally and physically. Provide opportunities for "chatting over the fence".

7. Help make people feel safe from crime

Design in good natural surveillance of public spaces. Provide adequate street lighting (that does not prevent birds and bats from finding food). Design places and spaces that are easy to maintain.

8. Reduce the sense of crowding

Design public spaces that enable people to move through with ease. Incorporate landmarks and way-finding cues into buildings and neighbourhoods, such as trees,

mailboxes, clocks and towers. Design a sense of space either horizontally or vertically.
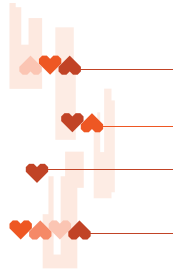
9. Make moving about easy

Design public transport systems that are flexible, cheap, green, user-friendly and easy to understand, access and use. Encourage walking and cycling through good design (see 1. above).

10. In short, design cities that are 'easy on the eye', green, clean, accessible, affordable, friendly and courteous

Doing so will create the conditions for citizens to enhance their wellbeing, now and in the future.

Summary

This little book has shown that wellbeing has a long history and that different facets of wellbeing have been emphasised at different times. We saw that, to define wellbeing is not exactly straightforward, and when we explored it in more detail, we found that there are a lot of different ways of looking at it. The same could be said for how to measure wellbeing: there is more than one way to evaluate the wellbeing of a person, a group of people or a place, and that a more integrated approach hmay be better.

This little book has also shown through research from the Liveable Cities project that the urban environment can play a big role in a person's wellbeing. Two aspects of the urban environment that we looked at were neighbourhood deprivation and density. From our research, we found that neighbourhoods that were high in deprivation and low in density – similar to some inner city Detroit suburbs – were the worst places for both wellbeing and walkability. The other neighbourhoods – Beverly Hills, Victorian slums and Bayswater – did better, and we suggested that urban decision-makers could do more to improve the livelihoods of people living in areas of high deprivation and low density, and more to improve the design and development of these places. We then ended the book by providing some general lessons for urban decision-makers as they embark on their journey towards creating and maintaining places with wellbeing in mind.

This little book provides an easy-to-understand introduction to wellbeing in urban environments. Hopefully we will have given you some food for thought. We also hope that this book will inspire you to think a bit more about how your wellbeing can be improved by making some small – or large – changes to where you live and how you interact with your environment. By working with others, such as architects, urban designers, town planners, engineers, transport people, sociologists and healthcare professionals, we can begin to change things for the better, now and in the future.

Resources

This is a small section containing websites and further readings on wellbeing and urban environments that we liked. As with any of these digital resources, they grow and change rapidly, so if the links don't work, you should still be able to find the content on another website or different webpage.

Publications and websites

JODY AKED, NIC MARKS, CORRINA CORDON AND SAM THOMPSON (2008). *Five ways to wellbeing*. London: Centre for Well-being, new economics foundation.

LYNDAL BOND, ADE KEARNS, PHIL MASON, CAROL TANNAHILL, MATT EAGAN AND ELISE WHITELY (2012). Exploring the relationships between housing, neighbourhoods and mental wellbeing for residents of deprived areas. *BMC public health*, 12, 48.

CHRISTOPHER T. BOYKO, RACHEL COOPER AND CARY COOPER (2015). Measures to assess well-being in low-carbon-dioxide cities. *Urban Design and Planning*, 168, 185-195.

JOHAN COLDING AND STEPHAN BARTHEL (2013). The potential of 'urban green commons' in the resilience building of cities. *Ecological Economics,* 86, 156-166.

MIHALY CSIKSZENTMIHALYI (2002). *Flow: The classic work on how to achieve happiness*. London: Rider Books.

NICOLA DEMPSEY, HARRY SMITH AND MEL BURTON (2014). *Place-keeping: Open space management in practice*. New York: Routledge.

ED DIENER (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55 (1), 34-43.

RACHEL DODGE, ANNETTE P. DALY, JAN HUYTON AND LALAGE D. SANDERS (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2, 222–235.

GARY W. EVANS (2003). The built environment and mental health. *Journal of Urban Health*, 80, 536-555.

BRUCE HEADY, ELSIE HOLSTROM AND ALEXANDER WEARING (1985). Models of well-being and ill-being. *Social Indicators Research*, 17, 211-234.

VERONIKA HUTA AND RICHARD M. RYAN (2010). Pursuing pleasure or virtue: The differential and overlapping well-being benefits of hedonic and eudaimonic motives. *Journal of Happiness Studies*, 11, 735-762.

DANIEL KAHNEMAN, ED DIENER AND NORBERT SCHWARZ (2003). *Well-being: The foundations of hedonic psychology*. New York: Russell Sage Foundation.

DANIEL KAHNEMAN AND JASON RIIS (2005). Living, and thinking about it: Two perspectives on life. *In* FELICIA A. HUPPERT, NICK BAYLIS AND BARRY KEVERNE (Eds.), *The science of well-Being* (pp. 285–301). Oxford: Oxford University Press.

NEW ECONOMICS FOUNDATION (2011). *Five ways to wellbeing: New applications, new ways of thinking*. London: new economics foundation.
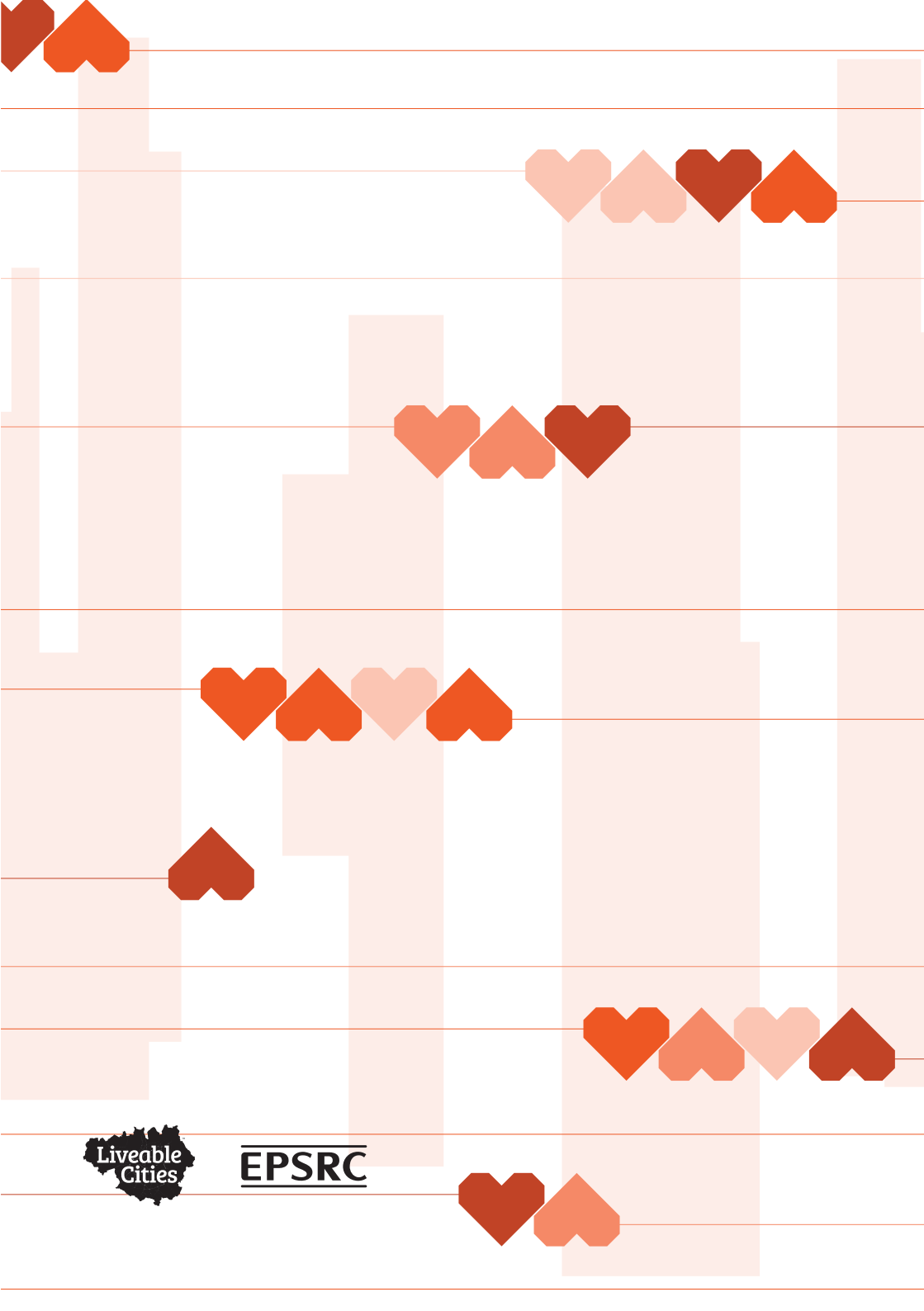
OFFICE OF NATIONAL STATISTICS *well-being page*: https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing

MARTIN E. P. SELIGMAN (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York: Free Press.

Shared space scheme in Poynton: https://www.sustrans.org.uk/our-services/what-we-do/route-design-and-construction/shared-space-busy-intersection-poynton

State of Place walkability audit: https://www.stateofplace.co

EMILY TALEN (1999). Sense of community and neighborhood form: An assessment of the social doctrine of New Urbanism. *Urban Studies*, 36, 1361–1379.

SARAH C. WHITE (April, 2008). But what is wellbeing? A framework for analysis in social and development policy and practice. *Paper presented at Regeneration and wellbeing: Research into practice*, Bradford, UK.