2

Reflections on the Introduction of Official Measures of Subjective Well-Being in the United Kingdom

Moving from Measurement to Use

Paul V. Allin

Abstract

From 2011 onward, the United Kingdom's national statistics office has included four subjective well-being questions in its continuous Annual Population Survey. The specific motivation for this was so that summary statistics about subjective well-being would inform a new, broader assessment of national well-being, along with a selection of other, largely objective measures. There was also a perceived policy need for subjective well-being data, and the questions have also been added to other official surveys. This chapter reviews how and why the four questions were chosen. In particular, I focus on the "practical utility" of the subjective well-being statistics because this concept is at the heart of the case for having official statistics on this or any other topic. I report some progress in policy take-up of well-being statistics, though little media coverage, and a lack of evidence about whether people are thinking differently about their goals and their well-being based on well-being measures. I suggest that more should be done to encourage decisions and actions to be taken, informed by these measures. The work undertaken by the UK's national statistics office is essentially supply-side, helping to develop and maintain a robust, national data infrastructure. This is necessary but not sufficient. Official statisticians must engage more with politics, policy, businesses, academia, and public opinion, thereby helping to stimulate demand for all of their outputs, including well-being measures. I also pose a question: Are

Paul V. Allin, *Reflections on the Introduction of Official Measures of Subjective Well-Being in the United Kingdom*
In: *Measuring Well-Being*. Edited by: Matthew T. Lee, Laura D. Kubzansky, and Tyler J. VanderWeele, Oxford University Press (2021). © Oxford University Press. DOI: 10.1093/oso/9780197512531.003.0003

developments of national well-being measures something to be left to each nation to consider, or are there benefits in encouraging international cooperation and exchange of good practice, which is generally valued in the fundamental principles for official statistics?

From 2011, the UK's national statistics office has added four subjective well-being questions to its continuous household survey covering the UK, the Annual Population Survey (APS). The purpose of the APS is to provide information on important social and socioeconomic variables at local levels: in addition to well-being, topics covered include employment and unemployment, housing, ethnicity, religion, health, and education. The survey is a structured random sample covering the whole of the UK household population using either face-to-face or telephone interviews for data collection. Young people under the age of 16 are excluded. The survey also does not cover adults living in communal establishments, such as nursing and care homes, homeless hostels, or prisons. The target sample is of the order of 350,000 adults each year and, with an overall response rate of currently around 45%, the Office for National Statistics (ONS) has achieved sample sizes of more than 150,000 adults each year. Survey estimates are weighted before publication so that they are representative of the UK adult population.

The decision to collect and publish official subjective well-being data in the United Kingdom came at the confluence of two increasing streams of interest in such data. One of these is the "Beyond GDP" agenda (e.g., Fioramonti, 2013) seeking to widen the definition of progress beyond just the economic performance of a country as measured by its gross domestic product (GDP), a prominent official statistic. The report by the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz, Sen, & Fitoussi, 2010) had made a number of recommendations, including that "Statistical offices should incorporate questions to capture people's life-evaluations, hedonic experiences and priorities in their own survey" (p. 18). Although strictly a report commissioned by the then President of France, the recommendations were clearly aimed at a global audience, not least through the support of the Organisation for Economic Cooperation and Development (OECD). The ONS saw all the Commission's recommendations as adding substantially to evidence of the need for wider measures of national well-being, including subjective well-being.

The second motivating factor was cognizance of a desire for a "better politics" (Dorling, 2016), in which people's well-being is seen as the goal of government and of public policy. While Clark (2018, p. 245) has more recently noted a "remarkable rise in the interest shown by economists in subjective variables in general and in particular measures of subjective well-being," I suggest that his assessment that this change in economics has taken place over the past 40 years should be read as referring to academic research rather than to public policy. Nevertheless, by the time of a change of government in the United Kingdom in 2010, the appetite for well-being in public policy had reached the highest levels of government. The ONS gained government funding for a Measuring National Well-Being Program.

The ONS Program had two interlinked strands. The first strand was to add questions on subjective well-being to household surveys. The second strand was to consult widely about what matters to the British public before developing a set of indicators to publish as an assessment of national well-being that would be broader than GDP (Allin & Hand, 2014, chapter 7). ONS continues to publish both summary statistics about the subjective well-being data (which it now describes as personal well-being) and a full set of more than 40 national well-being indicators. The first four indicators in the national well-being set each relate to one of the four questions. Around two in five of the other indicators draw on other subjective data, and the others are objective indicators. The ONS four subjective well-being questions have been added to other UK official surveys, and all these data are being analyzed, for example to understand how subjective well-being varies between areas and how different factors might influence well-being.

In this chapter, I review how and why the four questions were chosen. I place the questions in their context as official statistics: these are statistics envisioned as "an indispensable element in the information system of a democratic society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation," according to the United Nations fundamental principles for official statistics. In particular, we focus on the "practical utility" of the subjective well-being statistics because this is at the heart of the case for having official statistics on any topic (UN, 2014).

The Office for National Statistics Four Subjective Well-Being Questions

Since April 2011, the UK's ONS has been asking the following four subjective well-being questions as part of its continuous APS (ONS, 2018a):

Overall, how satisfied are you with your life nowadays?
Overall, to what extent do you feel the things you do in your life are worthwhile?
Overall, how happy did you feel yesterday?
Overall, how anxious did you feel yesterday?
(All on a 0–10 scale, where 0 is "not at all" and 10 is "completely")

These are all broad-brush questions about well-being. The questions are subjective, in the sense that they capture what the respondent reports as their perception of their well-being when asked about it. They are not objective measures, such as height or weight, which could be independently verified and which are mainly the kind of questions asked in official surveys. However, subjective questions have a long history of beneficial use in social and medical research, with a theoretical underpinning. There is also the point that apparently objective questions may have an element of subjectivity in how the respondent interprets what information is meant to be supplied.

The four questions are drawn from different approaches to well-being (see Allin & Hand, 2014, chapter 4, for an overview of subjective well-being measures). The first of the ONS questions is a summary, evaluative measure, in effect inviting the respondent to step back and reflect on how their life is going overall and their satisfaction with their life. This and variants of it have been widely used over many years (Pavot & Diener, 1993). One version is the *Cantril ladder*, on which respondents are shown a picture of a ladder with 10 rungs, numbered from 0 (worst possible life) to 10 (best possible life) and invited to say on which rung they feel they are standing. This is used in the Gallup World Poll, from which data on life satisfaction country by country are presented in the series of World Happiness Reports (Helliwell, Layard, & Sachs, 2019).

The second of the ONS questions is from the eudemonic tradition, sometimes referred to as the psychological, functioning, or flourishing approach to well-being. It draws on self-determination theory and taps into such things as the respondent's sense of meaning and purpose in life, connections with family and friends, a sense of control, and whether they feel part of something bigger than themselves. Although all of this is to be captured in a single question, we should acknowledge the complex nature of flourishing and that there is not a standard definition of it. Two authoritative summaries are "a combination of feeling good and functioning effectively, and the experience that life is going well" (Huppert & So, 2013) and "a state in which all aspects of a person's life are good" (VanderWeele, 2017).

The third and fourth of the ONS questions are a pair in which the respondent is asked about their experience of the previous day, specifically how happy and also how anxious they were then. These two questions are focusing on the respondent's positive and negative emotional experiences (or affect) over a short, recent timeframe to measure personal well-being on a day-to-day basis. Kahneman and Ris (2005) discuss how life experience/affect differs from life evaluation.

Question testing was undertaken, including by mode and to check that there would be no impact on response rates for the APS (see ONS, 2018b, for more details). All four questions appear to solicit thoughtful and consistent responses, although there is always scope for more cognitive research into how respondents come up with their replies.

As we will see later, the potential policy and academic research users of the new ONS data on subjective well-being tended to have rather general requirements. The four questions were judged to be the best way of meeting the requirements of potential users. The precise questions were chosen by the ONS with academic support and stakeholder review. There has been some ongoing engagement with potential policy users and with internal and external organizations inside and outside of government who support and encourage policy development informed by evidence, including an independent What Works Centre for Wellbeing.

The ONS decided to opt for subjective well-being questions already proved through use elsewhere, primarily to reduce the time taken to confirm questions to be added to its existing survey. There were other benefits to this (e.g., so that policy-makers and academic researchers would be able to compare the new ONS data with existing academic results). ONS also chose to use questions for which there was already an archive of results to help set the data collected by ONS in context, if possible. The data collection strategy was selected to meet what appeared to be the prevailing needs of potential policy and academic users, which was for a broad assessment of subjective well-being that could be analyzed by many dimensions and for local areas. This was provided by asking a few questions of many people in a survey in which many other variables were also collected. There were emerging policy requirements for more in-depth assessments of subjective well-being, but it was envisaged that these should be met in other surveys, where the ONS four questions could be used as the starting point for a more detailed set of questions.

Before embarking on this work to initiate subjective well-being questions in its survey, the ONS investigated if it could leverage experience from other countries that were already tracking subjective well-being. It found interest but no experience of asking subjective well-being questions in surveys conducted by other European national statistical offices prior to 2010. The French national statistical office (INSEE) was preparing to include such questions in two, one-off surveys on time-use and quality of life, and planning was under way to include well-being questions in the survey of income and living conditions conducted in each European Union country in a harmonized way (known as EU Survey on Income and Living Conditions [EU-SILC]), which resulted in a well-being module in the EU-SILC of 2013. The module included a life satisfaction question that was almost the same as the ONS version (with "these days" rather than "nowadays") and the same "worthwhile" question. The module also asked about satisfaction with eight aspects of life, such as commuting time, and included five self-rated questions about affects and emotions over the 4 weeks prior to interview (Eurostat, 2013, pp. 384–385).

In terms of official surveys in countries outside the European Union, the exemplar was Canada, where there is a track record of research on well-being using the personal well-being data collected in Statistics Canada's General Social Survey (GSS) annually since 1985, although this did not appear to have strong traction with policy-makers. There was some political interest in well-being measurement across Europe, particularly stimulated by French support of the Commission on the Measurement of Economic Performance and Social Progress and its commitment to take debate on the Commission's findings to international gatherings and meetings. What stands out about the United Kingdom is that the Prime Minister spoke at the launch of the ONS measurement program and, on several other occasions, in support of the measures and confirming that government had a role in improving well-being (see later discussion).

The Vision for Official Statistics

According to United Nations' fundamental principles for national *official statistics* (known as *federal statistics* in the United States), "Official statistics provide an indispensable element in the information system of a democratic society, serving the government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information" (UN, 2014, p. 1).

In practice, official statistics are driven by the needs of government, and much of the data is derived from administrative sources. Government also provides resources for surveys and censuses that are a significant source for official statistics. It funds data processing, dissemination, and development of new sources, such as the growing use of data science and the big data generated by operational and transactional systems.

The UN principles are designed to ensure that official statistics are also an essential public asset. The established position is that statistics such as these "enable journalists, citizens and politicians to discuss society as a whole, not on the basis of anecdote, sentiment or prejudice, but in ways that can be validated" (Davies, 2017, para. 6). But as Davies (2017, para. 6) also points out, this position is not held by everyone, and "attitudes towards quantitative expertise have become increasingly divided. From one perspective, grounding politics in statistics is elitist, undemocratic and oblivious to people's emotional investments in their community and nation."

The challenge for official statisticians in the contemporary information space is to recognize that they are competing with other providers of statistics who may be using official data, research outputs from academia and think tanks, commentators, and a plethora of opinions on social media who may be promoting alternative facts. Official statisticians therefore need to provide trustworthy and trusted statistics. They need to operate in ways that build confidence in the people and organizations that produce official statistics and data. They need to use data and methods that produce quality-assured and trusted statistics. These efforts are enhanced by recognizing and meeting society's needs for information (UK Statistics Authority, 2018).

The Case for UK Official Statistics on Personal Well-Being

The United Kingdom has a statutory regulator of official statistics, called the Office for Statistics Regulation, which assessed the ONS's statistics about subjective well-being against its code of practice in 2014, concluding that these statistics do meet the code and so merit National Statistics status. The code sets out 14 principles, grouped under the three pillars of trustworthiness, quality, and value. Trustworthiness, for example, includes looking to find professional capability and independent decision-making and leadership within the organization producing the statistics under scrutiny, while value is about finding evidence that the statistics support society's needs for information (UK Statistics Authority, 2018, pp. 14–15). The Authority noted that the ONS had reported that the statistics "are used in the policy making process by Government and for the monitoring, evaluation and measurement of policy. In addition, ONS identified that the statistics are used for international comparison purposes and to provide evidence which enables a broader understanding of the nation's progress and inform decision making by individuals and groups" (UK Statistics Authority, 2014, p. 5).

This is a rather general description of the need for official statistics on subjective well-being, and there were no specific details of the policy uses. Elsewhere in the Authority's report there is recognition that the case was made on the convergence of two requirements, which are those we noted in the Introduction as the twin stimuli for the ONS measurement program. They are still only described in broad terms. One of these was an emerging focus on individual well-being as an objective of public policy and that government should seek to improve well-being (also called social welfare or social value) through its policy priorities and implementation—and be held to account by demonstrating that well-being had improved. For example, this might lead politicians and policy officials to consider how to increase the personal agency of individuals—their sense of having more control in their life—if this can be shown to increase well-being. Similarly, it is about providing services that meet the population's needs in well-being terms.

The second requirement was the "Beyond GDP" agenda, especially the report by the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz et al., 2010). This was a clarion call for wider measures of societal progress. The Commission recommended including indicators of quality of life, the state of the environment, and the sustainability of development, as well as improvements and enhancements to existing measures of economic performance. It was a significant staging post in the increasing realization that there is more to national well-being than economic growth. A proper understanding of well-being and progress can only be gleaned from a range of statistics—including the subjective assessment of personal well-being—beyond the more economically oriented measures traditionally defined in national economic accounts. It is these wider metrics that should inform not only national government policy but also the decisions made by civil society, business, and the public.

There is much to commend in the system of national accounts. They are based on internationally agreed concepts, definitions, and measures, of which GDP is but one headline measure. However, the critique of GDP set out by the Commission and elsewhere (e.g., Fioramonti, 2017) has three main strands. First, there are some weaknesses in how well GDP performs in what it is meant to do (i.e., measure all the economic activity in the country over a given period). Second, there is a demand for what GDP is not: the requirement here is for a measure, or measures, of national well-being, broadly defined, from which a better assessment of progress can be made than by using GDP alone. This wider measure of well-being provides particularly important information needed to assess the long-term sustainability of current economic growth. Third, the dominance of GDP statistics is seen by some as supporting the hegemony of GDP growth, defining or even driving how we live our lives to the exclusion and possible detriment of other things. Hence, critics of GDP argue that more subjective measures might broaden and improve the national discussion of how to define what it means to be doing well.

In a speech at the launch of the ONS Measuring National Well-Being Program, the Prime Minister said that, from April 2011 "we will start measuring our progress as a country not just by how our economy is growing, but by how our lives are improving; not just by our standard of living, but by our quality of life (Cameron, 2010, para. 1). However, it was a measurement program that was being launched, not any specific policy action. The Prime Minister stated his belief that "government has the power to help improve wellbeing" and that, in time, measuring well-being "will lead to government policy that is more focused not just on the bottom line, but on all those things that make life worthwhile" (Cameron, 2010, paras. 9 and 13). But one cannot but help seeing this as another example of what Bryson (2015, p. 428) observed, that Britain is "outstanding at counting what it has, but not so good at holding on to it."

Official Statistics as Tools for Social Change

If we are to move from measurement to action, and if the vision of official statistics having practical utility is to be realized, then we should consider how official statistics can be used in effecting social change. We have a reasonable understanding of the public policy process. Policymakers in UK central government follow a policy cycle known as ROAMEF, an acronym taken from its stages: determining the Rationale for policy; Objectives; Appraisal of options; Monitoring of implementation; Evaluation; and Feedback. Well-being data could be used in a number of these stages, for example to set the context in the rationale phase and in evaluating the impact of the policy as implemented (Allin, 2014, p. 448).

A recent working paper from the OECD, drawing on emerging use of well-being indicators in policy, suggests a number of benefits. For example, such indicators provide "a more complete and coherent picture—and in particular drawing attention to outcomes that matter to people's living conditions and quality of life, but that are often not currently considered in routine policy analysis" as well as supporting "the strategic alignment of outcomes across government" and tackling the silos within government agencies can operate (Exton & Shinwell, 2018, p. 17).

The OECD working paper also suggests that incorporating well-being statistics into policy might need behavior change among policy-makers, which could be brought about through both soft and firm processes (Exton & Shinwell, 2018, p. 19). *Firm processes* are akin to changing (and enforcing) the rules, for example on how policy options are defined and compared, and putting in place a well-being framework for government spending. *Soft measures* include raising awareness of well-being evidence among policy professionals, especially through training, and increasing access to well-being evidence.

Policy products such as legislation and regulation are not the only factors that influence behavior in society, even when policy implementation extends to the use of insights from behavioral economics to nudge people to do things differently. Human behavior may also respond to market incentives, as well as being rooted in ethical and cultural values and attitudes. (One useful source on the latter set of influences is the World Values Survey [www.worldvaluessurvey.org/wvs.jsp], which is not part of official statistics but which includes long-term data on well-being for more than 50 countries, along with many other variables.) All of these drivers of behavior change interact in ways we do not fully understand. There would seem to be multiple opportunities to draw on official statistics in building an evidence base for decision-making, action, and evaluation, except that we do not have a clear map of the whole process from which we can identify points and nodes where official statistics might be most useful.

This lack of understanding is apparent from the many descriptions of the use of specific sets of official statistics, which invariably contain only a list of rather generic categories of user or usage (an example of this was given at the beginning of the previous section). It is not easy to ascertain how public goods, free at the point of delivery, are used. Nevertheless, there must be scope to build a better picture of users and potential users of official statistics. Techniques of marketing and customer engagement widely used in the commercial sector could be adapted for application to official statistics (e.g., Statistics User Forum, 2019, annex 1, paras. 12–17).

The official statistics on well-being that are the focus here were introduced in response to a call for a potentially huge social change, nothing less than to reposition economic growth (especially year-on-year increase in GDP) as a means to an end, not as the end in itself. The big picture of "Beyond GDP," which reaches out to related concerns about our impact on the environment and on climate change, also needs to allow for the assessment of the sustainability of development. Stiglitz et al. (2010, pp. 19–21) recommended a well-identified dashboard of indicators, interpretable as variations in stocks, plus indicators of proximity to dangerous levels of environmental damage.

The rationale for the new measures was the belief that "We will not change our behaviour unless we change the ways we measure our economic performance" (Stiglitz et al., 2010, p. vii). This, it turns out, is only half of the picture. New measures are necessary but they are not sufficient. Governments, businesses, households, and individuals need to take action informed, either directly or indirectly, by the wider measures. One of the ways this is being tackled in the United Kingdom is through a What Works Centre for Wellbeing (https://whatworkswellbeing.org/), an organization that aims to put high-quality evidence on well-being into the hands of decision-makers in government, communities, businesses, and other organizations. This is one of a number of centers for evidence-informed policy and practice in the United Kingdom, elsewhere in the European Union, and in the United States and Australia.

One of the drivers for these kinds of centers is that the producers of evidence are often working in supply-side mode. That is, they concentrate on the pursuit of knowledge and data, rather on its usefulness and its applicability. The ONS Measuring National Well-being Program started with public consultation and with interaction with policy makers. However, there is a danger that delivery of statistical and data outputs will be just that, without further engagement with users and potential users. There is a measurement strategy and an adequately resourced delivery mechanism for the new measures as official statistics. The technical quality of the statistics, and their fitness for use in rather broad terms, has been confirmed, albeit within established procedures rather than by the full range of potential users

Methods and opportunities for effective communication and use of the new statistics and official statistics in general still need further development. A good starting point will be better communication and engagement with actual and potential stakeholders and improving awareness and quantitative skills of policy-makers, the media, and the public. Users of UK official statistics have been pressing for this for decades. In response to recommendations from a Parliamentary Committee looking at official statistics (PACAC, 2019), the recent announcement that the ONS and the UK Government Statistical Service "will develop a stakeholder engagement strategy and implementation plan" (Athow, 2019, para. 9) is to be welcomed.

Conclusion

The ONS program to measure well-being, launched in November 2010, continues to generate masses of data. These data are corralled in two sets: a set of anonymized microdata collected in response to the four subjective well-being questions in the APS; and a set of indicators of national well-being, which includes a number of subjective and objective measures drawn from other statistical sources, as well as measures derived from the subjective well-being data. There are regular outputs of summary statistics based on these data, including a dashboard (e.g., ONS, 2019a) and a series of statistical releases on subjective and economic well-being (e.g., ONS 2019b). The ONS subjective well-being data are also analyzed by external researchers (e.g., Bangham, 2019). Further secondary analysis of the ONS data is being encouraged by the UK economic and social research funding body, in cooperation with the What Works Centre for Wellbeing.

Some progress in policy take-up is being made. This chapter is not primarily a review of well-being in policy, a topic covered more fully elsewhere (e.g., Allin, 2014). A helpful and reassuring snapshot comes from the OECD working paper mentioned earlier (Exton & Shinwell, 2018) reporting relevant work in 19 countries, including the United Kingdom. The paper contains case studies of 15 countries with extensive well-being measurement frameworks and 10 countries with specific mechanisms for embedding well-being metrics in central government policy. The working paper is a reminder that well-being measurement and policy is being driven forward by the devolved governments within the United Kingdom, not just at the UK government level that is the focus of this chapter. There is also a strong exemplar in the form of the implementation of a well-being framework into policy in New Zealand, where "The Living Standards Framework is 'intended to help Treasury consistently provide Ministers robust, theoretically-grounded and evidence-based advice that aims to improve the lives of all New Zealanders'" (Exton & Shinwell, 2018, p. 38). The journey reported includes the initial development of a framework within the Treasury in cooperation with the New Zealand national statistics offices and other ministries, followed by a stage of "identifying ways in which the Framework could be used as a practical tool for day-to-day use by Treasury staff in making policy evaluations and decisions." In a phrase that echoes the need for practical utility of official statistics, New Zealand officials learned that "The importance of prioritising practical usefulness was also emphasised by staff from the Australian Treasury, based on their own experience of developing a broader well-being framework" (Exton & Shinwell, 2018, p. 40). A number of uses of the framework have been logged, and more are under way.

In this chapter I have also not explored how well-being is being taken up under other broad policy initiatives, most notably the universal commitment to the UN's goals for sustainable development by 2030. These include the development of more than 240 indicators (e.g., see the UK's current state of play at https://sdgdata.gov.uk/). Only four of these indicators are subjective assessments, and they are about, for example, satisfaction with public services, rather than subjective well-being questions covered in this chapter. The UN's goals also include a general—but unexplained—commitment "to developing broader measures of progress to complement gross domestic product (GDP)" (UN, 2015, para. 48). There are clearly opportunities here for the further development of well-being measures and, especially, further ways in which measures could and should be used.

Apart from around the time of the launch of the ONS program, there has been little media coverage in the United Kingdom of well-being statistics. It is still GDP that features in media headlines, rather than the wider measures. One indication of the continuing prevalence of GDP is that, at the time of writing, the ONS lists 463 upcoming releases of statistics, of which 23 are GDP statistics and only 1 is about well-being (www.ons.gov.uk/releasecalendar). There is a lack of evidence that more people are thinking differently about their goals and their well-being based on well-being measures. Anecdotally, it is television programs such as the BBC TV *Blue Planet* series that appear to be most effective in increasing awareness of harm to the environment and the natural world from human economic activity. Research into how information is used in decision-making rarely looks specifically at the role of official statistics. I have yet to find any research about how people and businesses use official statistics on well-being (as opposed to views and aspirations from outside about how they might use well-being statistics), a gap that we suggest urgently needs filling.

It would be tempting to conclude that it is still early days and that wider usage will emerge from what is a huge and growing set of data on personal well-being. For example, the role of evidence translators, such as the What Works Centre for Wellbeing, is to provide more material that is relevant to policy, commercial, and public audiences. Even this is not without challenges as evidence may be of varying quality and a definitive view, say, of the association between income, financial satisfaction, and life satisfaction, may not yet have been reached.

However, I suggest that is too complacent a view to wait for change to occur based on a perfect set of well-being data. The aim should be for well-being evidence that is good enough and accessible enough to help inform decisions and choices and draw attention to the benefits of looking more broadly than just at GDP growth. Part of this is about transitioning to considering tradeoffs, say, between current economic activity and environmental impact, and between current and future well-being, rather than simply judging success as an increase in the value of one statistic.

I suggest that more should be done to encourage decisions and actions to be taken informed by well-being measures. The work undertaken by the UK's national statistics office is essentially supply-side, helping to develop and maintain a robust, national data infrastructure. This is necessary but not sufficient. In building the infrastructure, official statisticians must engage more with politics, policy, businesses, academia, and public opinion, thereby helping to stimulate demand for personal well-being measures.

The decision for national statistics offices to collect and publish subjective measures of personal well-being as well as objective measures has been widely accepted across the European Union and in some other countries. The ONS's four subjective well-being questions are also now found in a range of UK social surveys (ONS, 2018c). The questions are at the heart of the OECD guidelines on measuring subjective well-being (2013): the core question, on life satisfaction, is the same apart from a minor change in wording; the "worthwhile" question is the same; the "yesterday" affect questions are slightly different, though still rated on a 0–10 scale.

Other countries appear to be embracing the OECD guidelines. Durand and Smith (2013, table 7.1) listed, as part of the 2013 World Happiness Report, how official national statistics on subjective well-being were, or would shortly be, available in nine countries, mostly on a regular basis. The OECD life satisfaction question appeared in 10 of the 13 surveys in these countries, with the "affect" and "worthwhile" questions in around half of the surveys. In addition, the EU-SILC ad hoc module on well-being, including all the OECD questions, was being carried out in each of the 28 EU Member States and in four other European countries. More recently, a further five countries in the Asia-Pacific region reported their developments at a 2015 workshop (OECD, 2015), and there will be other examples. However, at least until the 2019 edition of the World Happiness Report (Helliwell et al., 2019), the latest available at the time of writing, global analyses of subjective well-being have remained based on the nonofficial Gallup World Poll because Gallup carries out fieldwork around the world.

Equally important is that subjective well-being is now included in a fuller assessment of how the United Kingdom as a country is doing, beyond GDP, as recommended by Stiglitz et al. (2010). A similar exercise for the United Kingdom and other countries is undertaken by the OECD, along with other data. The OECD phrases the question as "how's life?" and answers this with evidence from 50 indicators (e.g., OECD, 2017).

However, clearly, the story is not finished. At this point, three reflections might be made. The first is about the proliferation of official and nonofficial measures of well-being. Allin and Hand (2014, pp. 252–268) identified more than 130 indicator projects relating to the well-being of various nations or communities around the world, and this was almost certainly not an exhaustive list. Since then, further indicators have appeared (though no doubt others have been discontinued). One recent UK example from the commercial sector is the Sainsbury's Living Well Index (www.about.sainsburys.co.uk/about-us/live-well-for-less/living-well-index). This seeks to address what the company calls "unanswered questions," such as what does it mean to live well, and how are we really living as a nation? These are good questions. However, with this index and with all the other indicator projects, it is difficult to ascertain who is using them and how they are being used. It is probably safe to assume that they are being underutilized and that there is potentially more use to be made, whether to stimulate discussion on the state of well-being across the population or to design research and policy to increase well-being.

Moreover, the example of the Sainsbury's Index prompts the observation that there appears to be already a number of other well-being measures that could be used to answer these questions. It is perhaps understandable that a desire to make a change is invariably manifest through the production of a new measure. This demonstrates commitment and can help raise awareness. There may also be a preference for using a measure that is specific to the area or community in question. However, the producers of new indices and well-being studies may wish at least to consider whether to incorporate existing and tested measures for well-being, as proposed in the recommendations chapter of this volume (Chapter 14, in this volume). It turns out that the online Living Well Quiz associated with the Sainsbury's Index was compiled using a survey that included the ONS's four subjective well-being questions.

Generally, it is seen to be helpful to have a market in ideas and information, but perhaps an overconcentration on the supply-side in this market raises the possibility of confusing rather than clarifying the situation. We have come a long way from the simple idea that there are facts about the world in which we live and on which we can all agree. The UN's fundamental principles for official statistics, referred to in earlier sections, recognize that official statistics are one element in a national information system, although they also characterize official statistics as an *indispensable* element. I referred earlier to the two contrary views of official statistics reported by Davies (2017). In this chapter I have attempted to make the case for official statistics as a public good, available to all. But this is not a given, and it may be too simplistic to say that the trustworthiness, quality, and societal value of official statistics will win through. All these aspects have to be justified by the actions and activities of official statisticians. These pillars are all interconnected, and there are, for example, aspects of quality, such as timeliness, where there are nuanced differences between official statistics and those from other sources. Also, there is a premium on maintaining at least some statistics and indicators over time and maintaining their comparability over time. While this may be a desired feature of official statistics, there are also examples of long runs of nonofficial sources.

A second reflection concerns the balance between international comparability and meeting national needs. To take the United Kingdom's relationship with the OECD as an example, the UK measures of personal well-being are closely reflected in the OECD international guidelines. Formulating the UK questions helped with compilation of international guidance for national statistics offices should they wish to begin measuring subjective well-being in this way. This prompts a question: Are developments of subjective and wider national well-being measures something to be left to each nation to consider, or are there benefits in encouraging international cooperation and exchange of good practice, which is generally valued in the fundamental principles for official statistics?

Currently, there are two versions of the wider set of national well-being measures for the United Kingdom: the ONS dashboard and the OECD How's Life? Index. Each meets different needs. National well-being measures should include the things that matter to people in the country. However, international comparisons or aggregate measures for regions of the world need to be produced on a harmonized basis, as is done in the Gallup World Poll. Both needs are recognized in the UN fundamental principles, but they have to be addressed by each producer and in ways that do not lead to confusion or to gaming over the choice of which source to use. It is not clear that this issue has been fully considered.

The third reflection is to seek to move the focus from the supply-side. It seems clear that well-being can be measured, and it is being measured in many of its dimensions. There is depth, breadth, and longevity in many well-being datasets. But that still leaves the challenge of using these better data for better lives. Here there is more to do to stimulate the demand-side of this information market. Behavior change does not naturally follow from a change in the ways in which economic performance is measured. It is turning out to be more difficult than that, or at least to be subject to a considerable lag. There is progress in policy take-up of well-being evidence, not only in raising awareness of well-being measures and evidence, but also of implementing well-being in policy, but this appears slow. Well-being measures could be used in so many more helpful ways, as a number of reports have urged. O'Donnell, Deaton, Durand, Halpern, and Layard (2014, p. 14) set out "how governments and individuals can take account of wellbeing and use it for everyday decisions," for example, but note that they say "can" not "do."

More needs to be done to change the culture among politicians, policymakers, and business and civic leaders. Decisions should be based on wider well-being metrics and not just on the bottom line of economic profitability. All of us, as consumers, investors, voters, and members of civil society, should play our part. We should recognize and act in light of the picture of the world that appears from well-being measures that go way beyond GDP, even though the picture is more complex than just looking at the value of overall economic activity as measured by GDP. Well-being measures are necessary but not sufficient to improve our understanding of well-being. We then have to move on from trying to understand well-being to do more about trying to improve it.

About the Author

Paul V. Allin is Visiting Professor in statistics at the Department of Mathematics, Imperial College London, and coauthor of *The Wellbeing of Nations: Meaning, Motive and Measurement* (Wiley). He also chairs the UK Statistics User Forum and the Advisory Panel of the What Works Centre for Wellbeing, following a career as a professional statistician, researcher, and policy analyst in various UK government departments and agencies, latterly as the first director of the Measuring National Wellbeing Programme. His current research interests are the measurement of national well-being and progress and the use of these measures in politics, policy, business, and everyday life.

Author Note

The author gratefully acknowledges advice and information kindly provided by colleagues in the What Works Centre for Wellbeing and former colleagues in the ONS. Thanks also to Jonathan Michie, for insights into behavior change, to John Helliwell for a reminder about Statistics Canada's General Social Survey, to the Carnegie UK Trust for the opportunity to raise some of these issues in a blog, and to all participants in the Workshop on Happiness, Well-Being, and Measurement at Harvard University in April 2018, for interest in and helpful responses to my presentation. Thanks, too, for the encouragement and helpful suggestions provided by the editors of this book and the reviewers of the draft of this chapter. This work was supported in part by a grant from the John Templeton Foundation and by the Lee Kum Sheung Center for Health and Happiness. The views expressed in this chapter represent the perspective of the author and do not reflect the opinions or endorsement of any organization. I have no known conflict of interest to disclose.
Correspondence concerning this chapter should be directed to Paul Allin, Department of Mathematics, Imperial College London, South Kensington Campus, London SW7 2AZ, United Kingdom (p.allin@imperial.ac.uk).

References

Allin, P. (2014). Measuring wellbeing in modern societies. In P. Y. Chen & C. L. Cooper (Eds.), *Work and wellbeing: Wellbeing: A complete reference guide, volume III*. (pp. 409–463). Chichester, UK: John Wiley and Sons.

Allin, P., & Hand, D. J. (2014). *The wellbeing of nations: Meaning, motive and measurement*. Chichester, UK: John Wiley and Sons.

Athow, J. (2019). Governance of official statistics: Appendix 4: Office for National Statistics and Government Statistical Service response. https://publications.parliament.uk/pa/cm201719/cmselect/cmpubadm/2656/265605.htm

Bangham, G. (2019). *Happy now? Lessons for economic policy makers from a focus on subjective well-being.* London: Resolution Foundation. https://www.resolutionfoundation.org/publications/happy-now-lessons-for-economic-policy-makers-from-a-focus-on-subjective-well-being/

Bryson, B. (2015). *The road to Little Dribbling: More notes from a small island*. London: Transworld.

Cameron, D. (2010). PM speech on wellbeing. www.gov.uk/government/ speeches/pm-speech-on-wellbeing

Clark, A. E. (2018). Four decades of the economics of happiness: Where next? *Review of Income and Wealth, 64*, 245–269.

Davies, W. (2017). *How statistics lost their power—and why we should fear what comes next*. www.theguardian.com/politics/2017/jan/19/crisis-of-statistics-big-data-democracy

Dorling, D. (2016). *A better politics: How government can make us happier*. London: London Publishing.

Durand, M., & Smith, C. (2013). The OECD approach to measuring subjective well-being. In J. F. Helliwell, R. Layard, & J. D. Sachs (Eds.). *World happiness report 2013*. (pp. 112–137). New York: Sustainable Development Solutions Network. https://worldhappiness.report/ed/2013/

Eurostat. (2013). EU-SILC description of target variables: Cross-sectional and longitudinal 2013 operation (version May 2013). https://circabc.europa.eu/sd/a/d7e88330-3502-44fa-96ea-eab5579b4d1e/SILC065%20operation%202013%20VERSION%20MAY%202013.pdf

Exton, C., & Shinwell, M. (2018). *Policy use of well-being metrics: Describing countries' experiences*. Paris: OECD Statistics Working Papers 2018/07. https://doi.org/10.1787/d98eb8ed-en

Fioramonti, L. (2013). *Gross domestic problem: The politics behind the world's most powerful number*. London: Zed.

Fioramonti, L. (2017). *The world after GDP*. Cambridge: Polity Press.

Helliwell, J. F., Layard, R., & Sachs, J. D. (Eds.). (2019). *World happiness report 2019.* New York: Sustainable Development Solutions Network. https://worldhappiness.report/ed/2019/

Huppert, F. A., & So, T. T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research, 110*, 837–861.

Kahneman, D., & Ris, J. (2005). Living and thinking about it: Two perspectives on life. In F. A. Hubbert, N. Baylis, & B. Keverne (Eds.), *The science of well-being* (pp. 285–304). Oxford: Oxford University Press.

O'Donnell G., Deaton A., Durand M., Halpern D., & Layard R. (2014). *Wellbeing and policy*. London: Legatum Institute.

OECD. (2013). Guidelines on measuring subjective well-being. www.oecd.org/statistics/oecd-guidelines-on-measuring-subjective-well-being-9789264191655-en.htm

OECD. (2015). Asia-Pacific workshop on subjective well-being: Measurement and policy use. http://www.oecd.org/statistics/Workshop%20on% 20Subjective%20Well-Being%20November%202015%20agenda.pdf

OECD. (2017). How's life? 2017: Measuring well-being. www.oecd.org/statistics/how-s-life-23089679.htm
ONS. (2018a). Personal well-being user guidance. www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/personalwellbeingsurveyuserguide
ONS. (2018b). Personal well-being frequently asked questions. www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/personalwellbeingfrequentlyaskedquestions
ONS. (2018c). Surveys using our four personal well-being questions. www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/surveysusingthe4officefornationalstatisticspersonalwellbeingquestions
ONS. (2019a). Measures of national well-being dashboard. www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/measuresofnationalwellbeingdashboard/2018-04-25
ONS. (2019b). Personal and economic well-being in the UK: April 2019. www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/bulletins/personalandeconomicwellbeingintheuk/april2019
Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment, 5*, 164–172.
PACAC. (2019). Public Administration and Constitutional Affairs Committee: Governance of statistics inquiry. http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/public-administration-and-constitutional-affairs-committee/governance-of-statistics/written/96403.html
Statistics User Forum. (2019). Written evidence from the Statistics User Forum (GOS 24). https://ec.europa.eu/eurostat/web/ess/forum
Stiglitz, J. E., Sen, A., & Fitoussi, J-P. (2010). *Mismeasuring our lives: Why GDP doesn't add up*. New York: New Press.
UK Statistics Authority. (2014). Statistics on personal well-being. www.statisticsauthority.gov.uk/publication/statistics-on-personal-well-being/
UK Statistics Authority. (2018). Code of practice for statistics. www.statisticsauthority.gov.uk/code-of-practice/
UN. (2014). Fundamental principles of official statistics (A/RES/68/261 from 29 January). https://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx
UN. (2015). Transforming our world: The 2030 Agenda for Sustainable Development, 2015. https://sustainabledevelopment.un.org/post2015/transformingourworld
VanderWeele, T. J. (2017). On the promotion of human flourishing. *Proceedings of the National Academy of the United States, 114*, 8148–8156.