

SUBJECTIVE WELL-BEING MEASUREMENT: CURRENT PRACTICE AND NEW FRONTIERS

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Subjective well-being measurement: Current practice and new frontiers

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Abstract

In the ten years since the OECD published its 2013 *Guidelines on Measuring Subjective Well-being*, the inclusion of evaluative, affective and eudaimonic indicators in national measurement frameworks and household surveys has grown. Country practice has converged around a standard measure of life satisfaction, however affective and eudaimonic measures remain less harmonised. This working paper combines findings from a stock take of OECD member state uptake of *Guidelines* recommendations with advances in the academic evidence base to highlight three focal areas for future work. Looking ahead, the OECD should prioritise (i) revisiting recommendations on affective indicators, particularly in light of recent OECD recommendations on measuring mental health; (ii) reviewing progress towards operationalising measures of eudaimonia; and (iii) creating new extended modules to measure the subjective well-being of children, to deepen advice on domain-specific life evaluation measures, and to further develop more globally inclusive measures, drawing on (for example) concepts of subjective well-being developed in Indigenous contexts and beyond western European/North American research literatures.

Résumé

Dans la décennie qui a suivi la publication en 2013 des Lignes directrices de l'OCDE sur la mesure du bien-être subjectif, l'utilisation d'indicateurs évaluatifs, affectifs et eudémoniques s'est fortement répandue dans les cadres de mesure nationaux et les enquêtes auprès des ménages. Si les pratiques nationales ont convergé vers une mesure standard de la satisfaction de la vie, il n'en va pas de même pour les mesures affectives et eudémoniques qui restent moins harmonisées. En se basant sur un bilan de la mise en œuvre par les États-membres de l'OCDE des recommandations contenues dans les Lignes directrices ainsi que sur les nouvelles données mises en évidence par la recherche académique, ce document de travail identifie trois enjeux-clé à développer. Dans cette perspective, les travaux futurs de l'OCDE devraient porter en priorité sur (i) la révision des recommandations sur les indicateurs affectifs, en s'appuyant notamment sur les récentes recommandations de l'OCDE sur la mesure de la santé mentale; (ii) l'examen des progrès réalisés dans l'opérationnalisation des mesures de l'eudémonisme; et (iii) la création de nouveaux modules étendus dédiés à la mesure du bien-être subjectif des enfants, à l'approfondissement des conseils en matière de mesures d'évaluation de la vie dans des domaines spécifiques, et à l'élaboration de mesures plus inclusives au niveau mondial en s'appuyant (par exemple) sur des concepts de bien-être subjectif développés dans des contextes autochtones et au-delà des littératures de recherche de l'Europe occidentale et de l'Amérique du Nord.

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1 Introduction

The OECD's 2013 publication, *Guidelines on Measuring Subjective Well-being*, was the first of its kind to lay out clear recommendations for how to best measure the concept of subjective well-being in a standardised way, based on a rigorous review of the evidence base. The impetus for its creation in part stems from the recommendations that came out of the Stiglitz-Sen-Fitoussi Commission (2009^[1]), published in the immediate aftermath of the Great Financial Crisis. This influential report made a clear case for the need to move beyond GDP when measuring societal progress, and emphasised the importance of measuring economic, environmental and social dimensions of well-being. The OECD's workstream on well-being began soon after, with the development of a multidimensional well-being framework incorporating the key outcomes that matter most to people (Box 1.1).

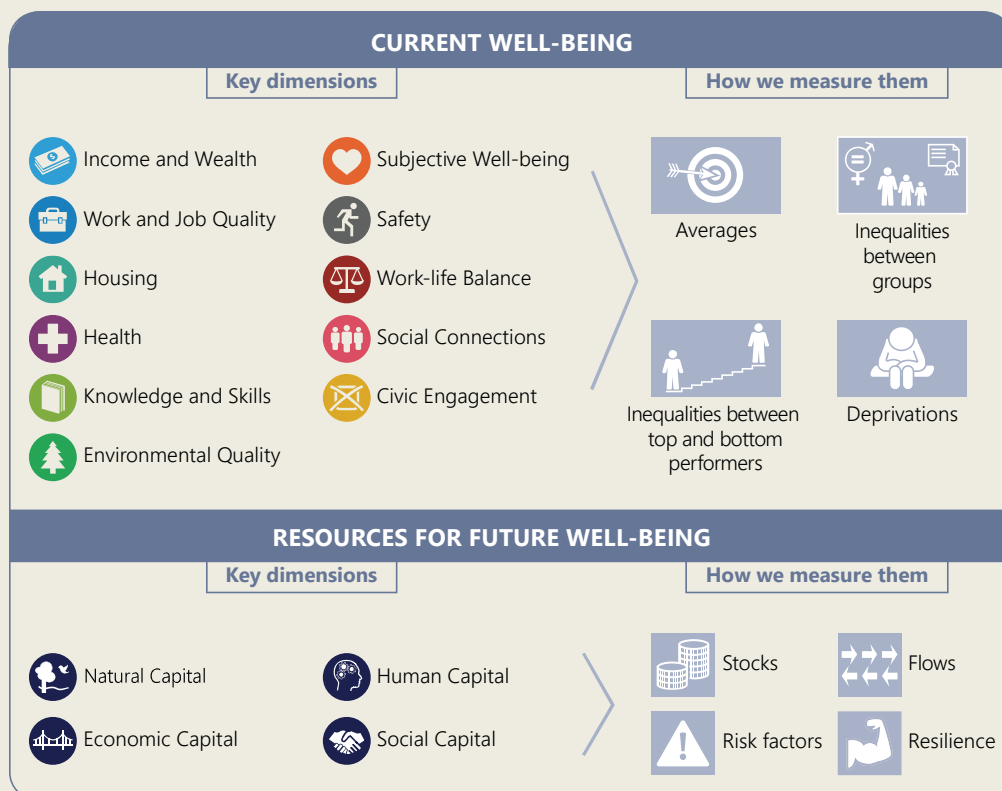
The OECD's well-being framework guides the organisation's measurement work on population well-being and outlines the ways in which well-being approaches are, or could be, integrated into policy making processes. The framework is also a useful tool in outlining gaps in the evidence base, and highlighting areas in which more measurement work is needed. Indicators for some domains – especially those relating to economic and labour market outcomes – are often well harmonised across member states and available at relatively high levels of frequency. However, for other domains, official statistics are either completely unavailable, insufficiently harmonised, or only available with significant time lags. This inhibits the ability to account for important components of peoples' well-being, or to make meaningful comparisons across time and place.

Box 1.1. The OECD well-being framework guides both measurement practice and analytical work

First introduced in 2011, the OECD's well-being framework guides the organisation's work in monitoring trends, highlighting inequalities and examining the sustainability of well-being outcomes across member states (Figure 1.1). It underpins the flagship *How's Life?* report series, the most recent iteration of which was published in 2020 (OECD, 2020^[2]), and provides the framing for the continuously updated OECD Well-being database (OECD, 2023^[3]). It also provides the foundation for other analytical work at the OECD, such as research on the impacts of digitalisation (OECD, 2019^[4]), COVID-19 and well-being (OECD, 2021^[5]) and the interlinkages between mental health and a range of well-being outcomes (OECD, 2023^[6]).

The OECD takes a multidimensional approach to measuring well-being, with each of the eleven dimensions of current well-being entering into an individual's overall quality of life, while changes in the level of the four capital stocks reflect impacts on the well-being of future generations. The framework places an emphasis on the distribution of well-being outcomes, as opposed to simple averages, and highlights inequalities in outcomes across different population groups (e.g. by gender, age, and educational attainment) as well as deprivations in well-being, and the overall dispersion of outcomes (i.e. the gap between people at the top of the distribution and those at the bottom).

Figure 1.1. The OECD well-being framework



Source: OECD (2020^[2]), *How's Life? 2020: Measuring Well-Being*, OECD Publishing, Paris, <https://dx.doi.org/10.1787/9870c393-en>.

Subjective well-being is a stand-alone dimension of well-being in the OECD framework. However, additional concepts that are tangential, but related, to subjective well-being outcomes are included in other dimensions. For example, the health dimension includes mental health, captured in practice by a screening tool for those at risk for depression (which includes a battery of questions covering depressive symptoms and affective states); the social connections dimension covers loneliness; and social exclusion is covered in social capital. Whilst some measurement instruments blend these concepts together in a way that makes them indistinguishable, the definition adopted in the 2013 *OECD Guidelines on Measuring Subjective Well-being* aimed to maintain a clear distinction between it and other domains featured in the OECD Framework.

The OECD's well-being measurement work aims to fill these gaps by providing national statistical offices with consensus-based guidelines on how to collect these indicators. Guidelines publications improve the quality, consistency and international comparability of data, by defining these missing target concepts, reviewing what is known in terms of the reliability and validity of existing measures, and discussing survey methods and design. Guidelines publications culminate with concrete suggestions on question wording, response scales and survey administration. These reports encourage greater consistency and comparability of outcomes that are important in determining what makes a good life – but may not yet be widely available – thereby making data for these concepts more useful to policy makers.

In addition to subjective well-being measurement (OECD, 2013^[7]), the OECD has published guidelines for measuring trust (OECD, 2017^[8]); micro statistics on household wealth (OECD, 2013^[9]); the distribution of household income, consumption and wealth (OECD, 2013^[10]); and the quality of the working environment (OECD, 2017^[11]). Aside from explicit guidelines, the OECD also publishes informative measurement reports on topics including digital platform employment (jointly with the ILO and European Union) (OECD/ILO/European Union, 2023^[12]), social and emotional skills in children and young people (OECD, 2021^[13]) and population mental health (OECD, 2023^[14]).

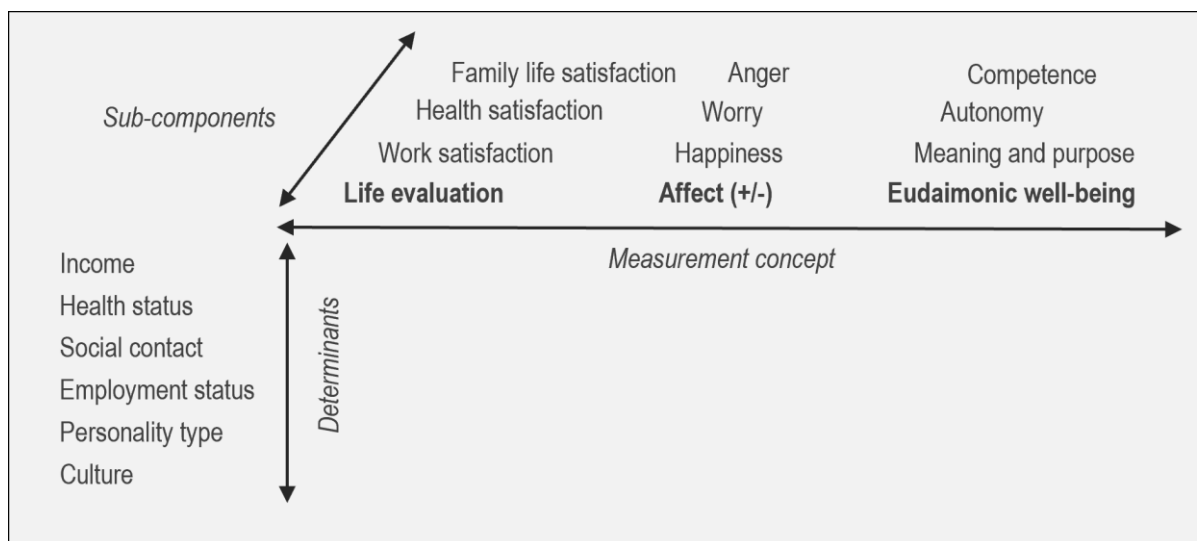
Subjective well-being is defined in the *Guidelines* as “**good mental states, including all of the various evaluations, positive and negative, that people make of their lives and the affective reactions of people to their experiences**” (OECD, 2013^[7]). This definition distinguishes subjective well-being from overall well-being – which the OECD defines using a multidimensional approach (Figure 1.1) – as well as from perception-based and self-reported indicators more broadly (e.g., perceptions of, say, safety, as compared to objective metrics of crime within an area). As is depicted visually in (Figure 1.2), the *Guidelines* definition of subjective well-being is operationalised by grouping the constituent parts into three overarching measurement concepts:

- **Life evaluation:** Evaluative measures of subjective well-being refer to the general assessments people make of their lives, or specific aspects of it, and is most commonly captured through an indicator asking respondents to reflect on how satisfied they are with their lives (i.e. life satisfaction). Domain satisfaction measures, relating to how satisfied one is with various aspects of one’s life, also fall under the evaluative heading.
- **Affect:** Affective measures capture people’s feelings, emotions or states, often measured with respect to a defined time period (e.g., “over the course of yesterday”, etc.).
- **Eudaimonia:** Eudaimonia can be thought of as psychological flourishing, operationalised in the *Guidelines* as a measure of feeling one’s life has purpose or meaning, though also containing aspects of autonomy, competence and self-actualisation.

The *Guidelines* were created to provide data producers – primarily national statistical offices (NSOs), though including sub-national and local-level government data collectors, community organisations and private businesses – with a better understanding of *why* subjective measures of well-being are important and useful, and *how* to collect these data in a statistically reliable and valid way. The full report is hundreds of pages long, and provides multiple extended modules with recommendations for the measurement of different aspects of subjective well-being. At its heart, the *Guidelines* can be distilled into five key recommended indicators; these form the core module, which is recommended for broad use and inclusion across a range of population surveys collected in an official capacity (Figure 1.3).

The report also includes longer, extended modules for each of the subjective well-being components (life evaluation, affect and eudaimonia – for the final, see Figure 1.4), domain evaluation indicators (capturing satisfaction with various aspects of one’s life, see Figure 1.5) and experienced well-being question modules for inclusion in time use surveys (Figure 1.6, Panels A and B).

Figure 1.2. The *Guidelines* provide a simple model of subjective well-being to clarify measurement



Source: Adapted from OECD (2013^[7]), *OECD Guidelines on Measuring Subjective Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264191655-en>.

Figure 1.3. The core module from the *Guidelines* contains five questions

Box B.1. Core questions

The following question asks how satisfied you feel, on a scale from 0 to 10. Zero means you feel “not at all satisfied” and 10 means you feel “completely satisfied”.

A1. Overall, how satisfied are you with life as a whole these days? [0-10]

The following question asks how worthwhile you feel the things you do in your life are, on a scale from 0 to 10. Zero means you feel the things you do in your life are “not at all worthwhile”, and 10 means “completely worthwhile”.

A2. Overall, to what extent do you feel the things you do in your life are worthwhile? [0-10]

The following questions ask about how you felt yesterday on a scale from 0 to 10. Zero means you did not experience the feeling “at all” yesterday while 10 means you experienced the feeling “all of the time” yesterday. I will now read out a list of ways you might have felt yesterday.

A3. How about happy? [0-10]

A4. How about worried? [0-10]

A5. How about depressed? [0-10]

Source: OECD (2013^[7]), *OECD Guidelines on Measuring Subjective Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264191655-en>.

Figure 1.4. The 2013 publication also included a nine-indicator extended module on eudaimonia

Box B.4. Eudaimonic questions	
<i>I now want to ask you some questions about how you feel about yourself and your life.</i>	
<i>Please use a scale from 0 to 10 to indicate how you felt. Zero means you “disagree completely” and 10 means “agree completely”.</i>	
D1. In general, I feel very positive about myself	[0-10]
D2. I'm always optimistic about my future	[0-10]
D3. I am free to decide for myself how to live my life	[0-10]
D4. I generally feel that what I do in my life is worthwhile	[0-10]
D5. Most days I get a sense of accomplishment from what I do	[0-10]
D6. When things go wrong in my life it generally takes me a long time to get back to normal	[0-10]
<i>I am now going to read out a list of ways you might have felt during the past week. On a scale from 0 to 10, where zero means you felt that way “not at all” during the past week and 10 means you felt that way “all the time” yesterday, can you please tell me how much of the time yesterday...</i>	
D7. ... you had a lot of energy?	[0-10]
D8. ... you felt calm?	[0-10]
D9. ... you felt lonely?	[0-10]

Source: OECD (2013_[7]), *OECD Guidelines on Measuring Subjective Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264191655-en>.

Figure 1.5. A separate extended module on domain evaluation contains ten questions

Box B.5. Domain evaluation questions	
<i>The following questions ask how satisfied you feel about specific aspects of your life, on a scale from 0 to 10. Zero means you feel “not at all satisfied” and 10 means “completely satisfied”.</i>	
E1. How satisfied are you with your standard of living?	[0-10]
E2. How satisfied are you with your health?	[0-10]
E3. How satisfied are you with what you are achieving in life?	[0-10]
E4. How satisfied are you with your personal relationships?	[0-10]
E5. How satisfied are you with how safe you feel?	[0-10]
E6. How satisfied are you with feeling part of your community?	[0-10]
E7. How satisfied are you with your future security?	[0-10]
E8. How satisfied are you with the amount of time you have to do the things that you like doing?	[0-10]
E9. How satisfied are you with the quality of your local environment?	[0-10]
<i>For respondents who are employed only:</i>	
E10. How satisfied are you with your job?	[0-10]

Source: OECD (2013_[7]), *OECD Guidelines on Measuring Subjective Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264191655-en>.

Figure 1.6. The Guidelines includes extended modules on experienced well-being measurement

Panel A: Extended module on day reconstruction method questions

Box B.6. Day reconstruction method questions

I now want to ask you some questions about how you felt yesterday.
 The computer has selected three time intervals from your diary that I will ask you about.
 [For each episode:]
 Between [start time of episode] and [end time of episode] yesterday, you said you were doing [activity]. The next set of questions asks you how you felt during this particular time.
 The following questions ask how you feel about yourself and your life, on a scale from 0 to 10. Zero means you did not experience the emotion “at all” at that time while 10 means you experienced the emotion “a lot” at that time.

F1. Overall, how happy did you feel during this time? [0-10]
 F2. Overall, how calm did you feel during this time? [0-10]
 F3. Overall, how angry did you feel during this time? [0-10]
 F4. Overall, how sad did you feel during this time? [0-10]
 F5. Overall, how much pain did you feel during this time? [0-10]
 F6. Overall, how tired did you feel during this time? [0-10]
 F7. Were you interacting with anyone during this time, including over the phone? [yes/no]
 If yes, with whom were you interacting? [include people on the telephone/online chat, etc.]

Note: [Activity] refers to the respondent's primary activity for the episode being discussed.

Panel B: Extended module on experienced well-being questions

Box B.7. Experienced well-being question

Question F8 below should be included in the time-use diary filled out by respondents. See below for an example.

F8. Was this moment pleasant or unpleasant? [from -3: very unpleasant to +3: very pleasant]

	Qu'avez-vous fait durant les 3 heures qui ont précédé la visite de l'enquêteur ?	Faisiez-vous autre chose en même temps ?	Était-ce un moment agréable ou désagréable ? (de -3 : très désagréable à +3 : très agréable)
..... h 00			-3 -2 -1 0 +1 +2 +3
10			-3 -2 -1 0 +1 +2 +3
20			-3 -2 -1 0 +1 +2 +3
30			-3 -2 -1 0 +1 +2 +3
40			-3 -2 -1 0 +1 +2 +3
50			-3 -2 -1 0 +1 +2 +3
..... h 00			-3 -2 -1 0 +1 +2 +3

Source: OECD (2013^[7]), *OECD Guidelines on Measuring Subjective Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264191655-en>.

Some questionnaire items used to measure subjective well-being – affect, in particular – are similar to items used to measure population mental health outcomes. For example, mental health screening tools, designed and psychometrically validated to pick up on symptoms indicating risk for mental health conditions such as depression and/or anxiety, or general mental distress, often require participants to answer a battery of questions asking them about their mood and emotional state. In the years since the original subjective well-being *Guidelines* were published, the OECD has developed a separate set of recommendations for official data producers on population mental health outcomes to include in household survey modules (OECD, 2023^[14]). These new recommendations acknowledge the common ground between subjective well-being questionnaire items and population mental health instruments – and the 2023 recommendations deliberately aim to complement (rather than duplicate or supersede) the 2013 *Guidelines* by providing a distinct set of tools. Similarly, this paper seeks to maintain and further reinforce this approach to increase conceptual clarity and minimise redundancy.

Although some national statistical offices were already active in the space of subjective well-being measurement when the 2013 *Guidelines* were drafted, many were not, and there was little harmonisation across the measurement approaches taken. The first edition of the OECD's *How's Life* report in 2011 sourced all of its life satisfaction data from the Gallup World Poll, because of a lack of internationally harmonised data from official sources (OECD, 2011^[15]). Ten years on, this working paper investigates how successful the *Guidelines* have been in encouraging OECD member states to begin collecting data on the different aspects of subjective well-being, and furthermore, whether or not these indicators have begun entering policy conversations. In addition, the final section of this paper provides a brief overview of advances in the evidence base in the years since the *Guidelines* were written, to see whether any of these changes have implications for the statistical quality of OECD recommended indicators, or whether new findings have highlighted conceptual gaps in the core module. This exercise results in a short-list of three priority areas for future OECD measurement work in subjective well-being, to further enhance our understanding of what matters most for people and society, and to ensure our recommended subjective well-being measures resonate widely for all population groups, everywhere.

2 Policy use of subjective well-being

Before moving into the specific measurement details of subjective well-being indicators, it is useful to first spend some time outlining why and how these data are of interest. Subjective well-being data can, and do, play a role in policy, and a growing number of governments, community organisations and businesses have begun not only collecting these data, but using them to monitor important trends and to inform decision-making processes. However, as this section will outline, while there is growing interest in the general multidimensional concept of well-being and using this multidimensional well-being evidence to inform policy, the use of *subjective* well-being indicators is not always consistent, nor fully embedded. When subjective measures are considered, life satisfaction tends to be the indicator of choice. Showcasing the ways in which each type of data can be used may encourage more policy makers to consider integrating them into goal setting, development plans, the budgeting process and/or cost-benefit analyses.

How subjective well-being data can inform policy

At a high level, subjective well-being data can be used by governments in three key ways. First, to reveal trends, at times highlighting growing tension or dissatisfaction, that traditional metrics sometimes fail to capture. Second, these data are able to predict real-world behaviours empirically, and provide explanatory power in addition to – or exceeding – objective measures. Finally, subjective well-being data can provide support to policy design, implementation and evaluation processes. Importantly, these data are particularly beneficial and relevant to governments when difficult-to-measure non-market outcomes are at play,¹ or when trends in subjective outcomes diverge from traditional measures of economic and social progress.

Subjective well-being data are useful in monitoring society's pulse to see where problems and challenges may be developing. Of course, traditional economic and social measures of progress are also useful in this regard: GDP, interest rates, unemployment and consumer spending metrics are indicative of business cycle volatility and material living conditions; changes in greenhouse gas emissions help track movement towards (or away from) climate goals; and life expectancy can help reveal societal progress, or regression, in the field of public health. However subjective well-being trend data also reveal important societal developments, and in certain instances, may be particularly well-placed to do so. Subjective well-being measures differ from traditional social indicators in that they are particularly well-placed to capture the combined impact of events across multiple different areas of a person's overall well-being (Delhey and Kroll, 2012^[16]).

Two examples are shown in Figure 2.1. Panels A and B show trends in life satisfaction in selected Middle Eastern countries in the years leading up to the Arab Spring, taken from a World Bank study (Ianchovichina, 2018^[17]). Panel A juxtaposes trends in life satisfaction with those of GDP per capita. Countries falling in the bottom right-hand quadrant saw *rising* GDP per capita, but *falling* life satisfaction, in the years 2007 to 2010: most all Middle Eastern countries that experienced the Arab Spring fall in this quadrant. Conversely, other MENA, non-Arab spring countries are located in the top right-hand quadrant,

¹ Examples of non-market outcomes might include physical health, environmental factors including exposure to (air or noise) pollution, or experiencing life events (e.g., marriage, divorce, having children).

which shows both life satisfaction and GDP per capita rising. Panel B further illustrates the divide between Arab Spring and non-Arab spring countries: there was a clear deterioration in life satisfaction in these countries that stands out from trends in the region as a whole. Life satisfaction measures were illustrative of growing discontent that eventually manifested in social unrest, in ways that GDP per capita trends were not.

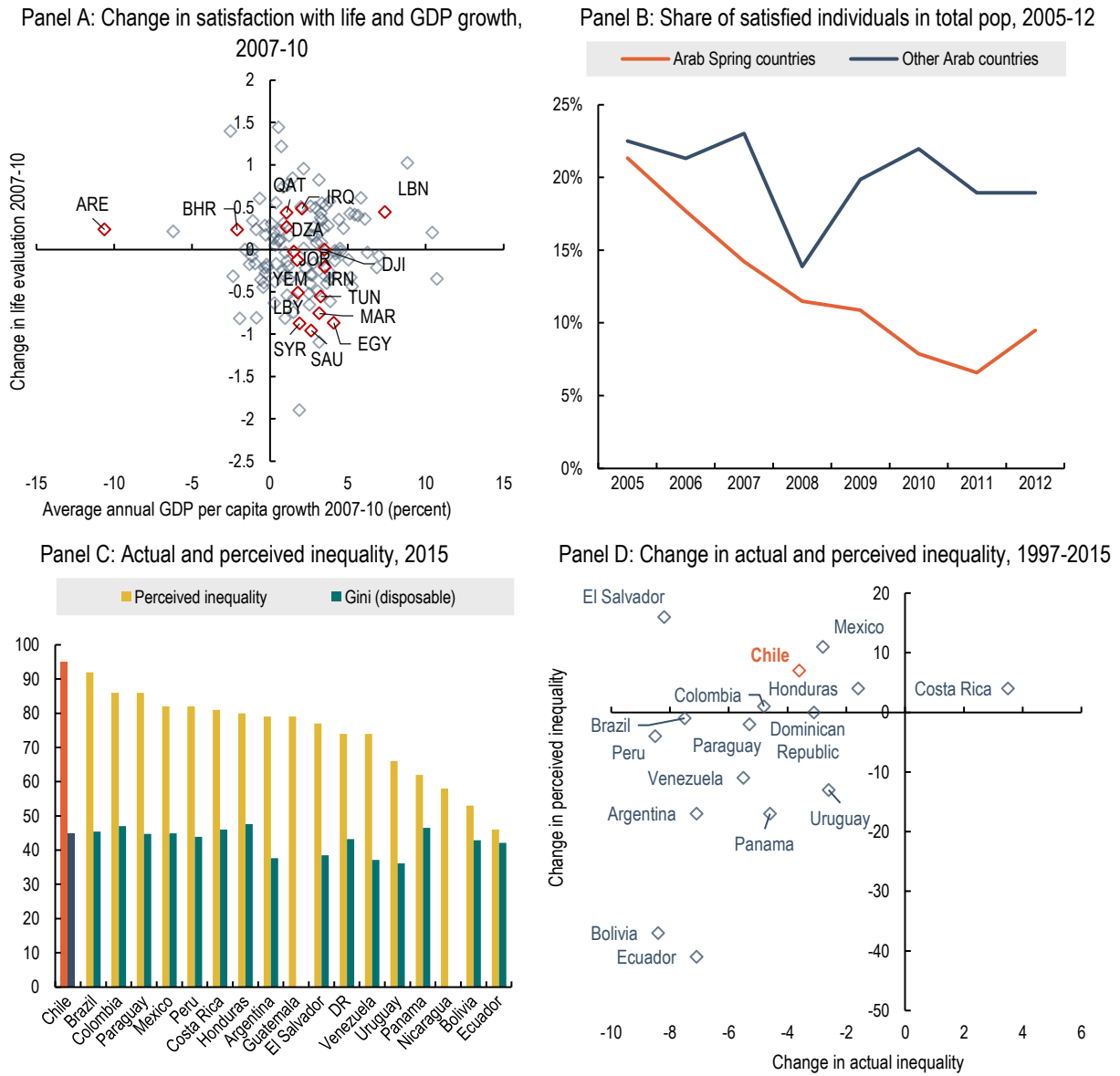
Panels C and D show the divide between subjective and objective indicators, taking the example of social unrest and large demonstrations in Chile (*Estallido Social*) beginning in 2019, on issues of cost of living, unemployment and inequality (Hadzi-Vaskov and Ricci, 2021^[18]). As measured in 2015, the gap between perceived and actual inequality (with the latter measured by the disposable income Gini coefficient) in Chile was the largest in Latin America (Panel C); similarly, in the years 1997 to 2015 Chile experienced rises in *perceptions* of inequality, but declines in the Gini coefficient. This again underscores that trends in subjective indicators do not necessarily move in tandem with trends in routinely measured economic outcomes, and policy makers who ignore trends in subjective outcomes may miss important signs of dissatisfaction or unrest. Indeed, the Chilean Ministry of Social Development and Family referenced this example as providing the impetus for the roll-out of its new, biennial Social Welfare Survey containing subjective well-being indicators (Ministerio de Desarrollo Social y Familia, 2022^[19]).

Beyond simply monitoring, trends in subjective well-being data shed light on how people experience, and feel about, their lives. Research in the United States has found that extreme misery (measured as the share of people reporting major mental and emotional problems in all 30 of the preceding 30 days) rose sharply between 1993 and 2019, with implications for worsening labour-market prospects of which policy makers should take heed (Blanchflower and Oswald, 2020^[20]).

Decades of research have shown that subjective well-being data are predictive of real-world behaviours that can be measured objectively, and that these data contain genuine information about human feelings. One strand of literature shows how subjective feelings predict “exit” behaviours (Kaiser and Oswald, 2022^[21]): job dissatisfaction predicts job quits (Clark, 2001^[22]; Clark, Georgellis and Sanfey, 1999^[23]); marital dissatisfaction predicts divorce (Powdthavee, 2009^[24]); and housing dissatisfaction, or feelings of neighbourhood exclusion and lack of belonging, predicts moves (Clark and Coulter, 2015^[25]). While perhaps intuitive, there are clear government or workplace policies that follow from this: track subjective metrics to monitor worrying trends for early intervention.² Another strand of literature illustrates how subjective well-being, and positive affect in particular, is predictive of longevity (Chida and Steptoe, 2008^[26]). Other research has shown that positive affect can be a protective factor against future illnesses: those with higher levels of affect are less likely to develop a cold if exposed to the virus, or if infected, have milder symptoms (Cohen et al., 2006^[27]). Different types of subjective indicators have also been shown to be predictive of voting behaviour (Ward, 2019^[28]). One case study investigating the predictors of favouring a vote for Brexit found that *feelings* of financial precarity were twice as influential as an objective measure of income (Liberini et al., 2019^[29]). Section 4 below further discusses the ways in which measures of hope are correlated with voting patterns, using the 2016 United States election as an example (see also Figure 4.3).

² One concern with using survey responses for decision- or policy-making this way is that if survey respondents are aware that their responses will lead to certain actions, they may attempt to respond strategically (Frey and Stutzer, 2010^[230]). There is little evidence of this occurring as of yet, but is a consideration for future research into the use of subjective data for policy.

Figure 2.1. Subjective well-being data can identify trends that reflect societal shifts in ways that traditional measures of economic and social progress may not



Note: Panels A and B: Figures taken directly from (Ianchovichina, 2018^[17]), refer to Figures P2.2 and 4.2. In Panel A, real annual GDP per capita growth is taken from the World Bank World Development Indicators; life satisfaction data are from the Gallup World Poll and refer to the Cantril ladder question formulation (see footnote 11 for more details). Points are weighted averages for 124 economies. ARE = United Arab Emirates; BHR = Bahrain; DJI = Djibouti; DZA = Algeria; EGY = Arab Republic of Egypt; IRN = Islamic Republic of Iran; JOR = Jordan; LBN = Lebanon; LBY = Libya; MAR = Morocco; QAT = Qatar; SAU = Saudi Arabia; SYR = Syrian Arab Republic; TUN = Tunisia; WBG = West Bank and Gaza; YEM = Republic of Yemen. In Panel B, “satisfied” is defined as having a life satisfaction score of 8 or above on a 0-10 scale. Panels C and D: Figures taken directly from (Hadzi-Vaskov and Ricci, 2021^[18]), refer to Figure 10. Actual inequality is measured by the disposable income Gini coefficient from the Standardized World Income Inequality Database; perceptions of inequality are measured by the share of respondents who consider the income distribution to be unfair.

Source: Panels A and B: Ianchovichina (2018^[17]), “Eruptions of popular anger: The economics of the Arab Spring and its aftermath”, *MENA Development Report*, World Bank, Washington, DC, <https://doi.org/10.1596/978-1-4648-1152-4>; Panels C and D: Hadzi-Vaskov (2021^[18]), “Understanding Chile’s social unrest in an international perspective”, *IMF Working Paper*, No. 21/174, International Monetary Fund, <https://www.imf.org/en/Publications/WP/Issues/2021/06/25/Understanding-Chiles-Social-Unrest-in-an-International-Perspective-461279>.

Finally, subjective well-being data can be used to support policy design and evaluation. The OECD has previously described the ways in which multidimensional well-being dashboards more generally are integrated into policy, outlining different levers such as informing strategic planning and performance frameworks (e.g. Slovenia's National Development Strategy 2030 and accompanying performance indicators), shaping new institutional structures (e.g. the What Works Centre for Wellbeing in the United Kingdom) and informing the budgeting process (e.g., monitoring an array of well-being indicators to inform budgeting decisions, or assessing budget proposals based on expected well-being impacts) (OECD, 2023^[30]; Durand and Exton, 2019^[31]; Exton and Shinwell, 2018^[32]). However, the large majority of these country practices feature many objective domains and indicators of well-being beyond the subjective (similar to the OECD Framework, in Box 1.1 above), and several country practices exclude subjective well-being altogether.³ Still, there are countries directly integrating subjective well-being indicators in policy design and valuation; real-world examples of practical applications are expanded upon later in this section.

Subjective well-being indicators may be of particular value-add when supplementing cost-benefit analyses to design policies *ex ante*, or evaluate them *ex post*. Cost-benefit analyses (CBA) are used by government to assess and sometimes rank potential interventions based on efficacy and efficiency. In order to do so, policy makers need to quantify all potential costs and benefits, to then inform the outcome ratio. For market-based goods this process is straightforward, but for many other outcomes – benefits of improved health or enhanced social cohesion, the costs of environmental degradation – this is not the case, but methodologies first developed in the behavioural economics field can be instructive. These so-called “shadow prices” can be estimated indirectly via a few different channels: “stated preference”, in which individuals state the amount they would pay to receive a benefit, or the amount of compensation they would need to offset a cost (i.e. their willingness to pay); “revealed preference”, in which valuations are made based on observed behaviour rather than direct questioning; and the use of life satisfaction data to inform “subjective shadow prices” (Murtin et al., 2017^[33]) (see Box 2.1 for OECD work on subjective shadow pricing).

Box 2.1. OECD methodological work on shadow pricing

The OECD has published work exploring different methods of calculating shadow prices for non-monetary goods, such as good health, better access to jobs or lack of exposure to pollution. These shadow prices can then be used as inputs, along with traditional monetary goods, in aggregate welfare measures.

The approach is built off the money-metric utility, or income equivalent approach. The basic regression form identifies the amount of income an individual would need to be compensated in order to maintain the same standard of living (as measured by life satisfaction). This can be aggregated to the societal level to calculate the equivalent income necessary to compensate for unemployment, for example. A key assumption of the model is that life satisfaction can be viewed as a proxy for utility.

To provide a practical example, the equivalent income approach was used to evaluate the impact of different labour market policy reforms in Slovenia. OECD researchers calculated the shadow price of unemployment using life satisfaction as a proxy for total utility, to encompass the societal gains of

³ In recent years, the government of Canada has introduced quality of life indicators into its annual budget impact assessments, outlining the ways in which each budget measure is expected to advance each of the five overarching quality of life domains: prosperity, health, environment, society and good governance. (This analysis is done in addition to Canada's long-standing work on gender budgeting (Government of Canada, n.d.^[243].) While life satisfaction and feeling that one's life has meaning are headline cross-cutting indicators in Canada's *Quality of Life Framework*, they do not fall under any single individual domain; thus budget impact assessments do not directly include subjective well-being indicators. Mental health is considered under the health domain, however the outcomes measured tend to focus on healthcare system performance and self-reported mental health (Government of Canada, 2022^[242]).

employment beyond direct injections of income to employed individuals. An aggregate welfare index – combining household income and employment – was created, defined as the degree of life satisfaction that can be explained by both income and employment inputs, while holding constant other important socio-economic characteristics. This welfare index was then used to rank potential labour market interventions based on the total net societal welfare gain they offer.

Results of the multidimensional policy evaluation found that the employment channel is a stronger determinant of welfare as compared to the direct income channel, underscoring the importance of employment to well-being. The analysis also showed the importance of structural reforms on outcomes relating to household well-being. While some policy reforms may benefit GDP (e.g., a cut in corporate income tax), they yield a loss in welfare – showing the need for multidimensional considerations of total welfare.

While OECD methodological work on shadow pricing has focused on the valuation of non-market goods, these techniques can in principle be applied to goods that *are* valued on the market, for instances in which there is general recognition that market valuation is not an accurate reflection of the well-being value, or where it is desirable to use a common method to estimate values for comparison purposes.

Sources: Murtin et al., (2017^[33]) “Beyond GDP: Is there a law of one shadow price?”, *European Economic Review*, Vol. 100, pp. 390-411, <https://doi.org/10.1016/J.EUROECOREV.2017.09.001>; Murtin et al., (2022^[34]), “Well-being analytics for policy use: Policy evaluation through a well-being lens in Slovenia”, *OECD Papers on Well-being and Inequalities*, No. 7, OECD Publishing, Paris, <https://doi.org/10.1787/9ca973f1-en>.

Beyond CBA, another valuation approach is to use cost-effectiveness analysis (CEA). In well-being CEA, costs and benefits are estimated in different units: the former in monetary units, and the latter in a well-being metric (Wright, Peasgood and MacLennan, 2017^[35]). In CEA, the total amount of expenditure is taken as a given; the task is then to maximise the effectiveness of the expenditure allocation (Clark et al., 2019^[36]; HM Treasury, 2021^[37]). One way of doing so is by using well-being-adjusted life-years (WELLBYs) as the main outcome of interest for governments to maximise.⁴ WELLBYs can be thought of as the total societal number of happy years lived; one WELLBY is one unit of life satisfaction on a 0-10 scale for one person for one year (Layard and Oparina, 2021^[38]; McGuire, Dupret and Plant, 2022^[39]). The goal of government is then to maximise the total societal number of happy life years.

The use of subjective well-being in policy valuation is not just an academic exercise; some OECD countries have rolled out tools and guidance for civil servants to conduct CBA or CEA in standardised ways. HM Treasury in the United Kingdom issues official guidance on policy appraisal in the form of the *Green Book*, the most recent iteration of which was published in 2022 (HM Treasury, 2022^[40]). Its detailed technical annex includes in-depth descriptions for how to use life satisfaction data, and WELLBYs, in cost-benefit (CBA) and cost-effectiveness (CEA) analyses (HM Treasury, 2021^[37]); currently, these methods of subjective well-being CBA and CEA are recommended as complements to traditional CBA valuation techniques, rather than as a replacement for them.

In addition, the New Zealand Treasury has developed a standardised approach to monetising CBA across government departments and agencies, known as the CBAX Impacts Database, and an accompanying guidance document. The database enables civil servants to work off the same assumptions when monetising policy impacts through CBA, since the assumptions made can have a large effect on the

⁴ WELLBYs can also be used in CBA; to do so, policy analysts would need to have price lists for the effects of different outcomes (i.e., unemployment) on life satisfaction. In principal, CBA and CEA can be equivalent if WELLBYs are used as the standardised form for expressing all costs and benefits, however many of the assumptions underpinning traditional CBA – i.e., the assumption that individuals are well-informed and able to predict what they want – makes this untrue in practice (Frijters and Krekel, 2021^[240]).

ultimate values estimated. CBAX draws on several different methodologies to derive standard values for specific policy outputs or outcomes – ranging from the cost of a general practitioner visit, to the value of additional educational qualifications (derived from marginal gains in earnings), health gains assessed through additional quality adjusted life years (QALYs), and the social cost of fatal transport accidents based on the value of a statistical life. For some particularly difficult-to-monetise policy outcomes, CBAX values are based on subjective well-being valuation methods, using data from the Australian Social Value Bank and New Zealand studies (Durand and Exton, 2019^[31]; The Treasury, 2022^[41]).

Any valuation method has its drawbacks or areas of weakness. In stated preference scenarios, research has shown that people are poor at predicting what will maximise their future well-being; in the case of willingness to pay, respondents are often asked theoretical questions for which they have little experience, and little knowledge as to how they might react or feel (Durand and Exton, 2019^[31]). Life satisfaction valuation techniques can then be a useful complementary approach, in that they avoid these issues. In addition, one of the largest advantages offered by subjective well-being measures in non-market valuation is the ability to cross-check non-market values arrived at via alternate methodologies. However, subjective well-being valuation is also not without its limitations: it relies on a (perhaps) strong assumption that life satisfaction is a convincing proxy for utility, and is underpinned by a view of utility maximisation as the ultimate goal of policy. Furthermore, any conclusions based on data from a specific sample or moment in time may not scale to the population elsewhere or at some later moment. Yet revealed preference and subjective well-being valuation approaches – though both individually imperfect – have complementary drawbacks, meaning the use of both often enables a closer approximation of true valuation (OECD, 2013^[7]).

Another way in which subjective well-being data can be used is in the design of national (or sub-national) development strategies. These plans are not created to implement specific policies – for which subjective well-being valuation techniques might be useful – but rather to decide upon relevant factors that should be emphasised when considering long-term sustainable growth. One such example is Mexico's National Development Plan 2019-2024 (OECD, 2021^[42]).

When to use each type of subjective well-being indicator in policy

Examples of subjective well-being in policy use in the previous section almost entirely centred on life satisfaction. Indeed, the evidence base for life satisfaction is much larger than that of affect or eudaimonia. This is in part self-fulfilling: life satisfaction data are largely harmonised across countries (as will be shown in greater detail in Section 3), meaning that life satisfaction data are more readily available to be tested by researchers, thus generating more evidence on life satisfaction, which encourages its uptake by policy. The increased collection of affect and eudaimonia may encourage more research to be done on their potential uses in policy.

Still, beyond ease of availability, life satisfaction is preferred by many economists in that it is viewed as a proxy for decision utility (recall the assumptions underpinning shadow pricing in Box 2.1). Some also view the measure as a more holistic metric of well-being measurement, in that it “incorporates positive and negative emotions (overall well-being being a balance of these) together with a cognitive assessment of how well one's life measures up to aspirations, goals and the achievements of others” (HM Treasury, 2021^[37]). This is not to say that affective and eudaimonic measures cannot, or have not, been used in policy or program evaluation. Table 2.1 synthesises recommendations from governments active in well-being policy appraisal (notably, the United Kingdom) and academic work to show when and how each measure of subjective well-being might be used.

Table 2.1. Existing recommendations for scenarios in which each type of subjective well-being indicator can be used in policy

Policy Area	Subjective Well-being Measures					
	Evaluation		Affect		Eudaimonia	
	Suitable	Not suitable	Suitable	Not suitable	Suitable	Not suitable
Monitoring general trends	Useful in picking up trends not captured by traditional measures of economic and social progress (refer to above discussion, and Figure 2.1)	Insufficient evidence	Evidence from country practice during the COVID-19 pandemic; many began collecting data on affective states (feelings of worry, anxiety, sadness, depression and stress) on a high frequency basis (see (U.S. Census Bureau, 2020 ^[43]), as just one example)	Conflicting evidence from other sources, suggesting affective measures are better suited to targeted questions rather than for monitoring general trends (HM Treasury, 2021 ^[37])	Evidence from country practice; Iceland tracked Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) outcomes on a monthly basis as a snapshot of national mental well-being (Statistics Iceland, 2023 ^[44])	Insufficient evidence
Assessing policy impacts	Clear changes: flooding, noise pollution, changes in social groups; Policies not subject to comparison effects*: volunteering, charity, improving inter-personal relationships; and States not subject to adaptation†: unemployment, noise pollution, poor job quality, volunteering (HM Treasury, 2021 ^[37])	Areas subject to comparison* (e.g., wealth in comparison to a reference point – i.e., one's neighbour); and Areas subject to adaptation† (e.g., job promotion) (HM Treasury, 2021 ^[37])	Child-custody arrangements, physical health or healthcare needs (e.g., end-of-life care), transitory changes such as the impact of a cultural event or feelings while commuting (National Research Council, 2013 ^[45] ; HM Treasury, 2021 ^[37]) Highlight affective trade-offs: sacrifice enjoyment now for long-term worthwhile goals (Krueger et al., 2011 ^[46] ; White and Dolan, 2009 ^[47])	A clear change of state with expected persistence – in these instances, life satisfaction may be the more appropriate impact measure (HM Treasury, 2021 ^[37])	Determinants of meaning and purpose may be different than those for life satisfaction (i.e., the work environment may be more important for the former) (What Works Wellbeing, 2021 ^[48]); potential implications for areas of policy relevance WEMWBS scale used as an outcome measure in evaluations of programs to improve mental health outcomes (Hey, Musella and Hvide, 2022 ^[49])	Insufficient evidence
Ability to integrate into cost-benefit or monetization approaches	Contribute to cost-benefit analyses, or cost-effectiveness analyses, in providing standardized values for non-market outcomes (e.g., WELLBYs) (HM Treasury, 2021 ^[37] ; Wright, Peasgood and MacLennan, 2017 ^[35])	Not suitable if there is insufficient robust evidence on valuation (HM Treasury, 2021 ^[37])	Potential applications when looking at granular aspects of policy for which life satisfaction is not sensitive enough to pick up changes in outcomes; little empirical evidence thus far (Krekel and MacKerron, 2023 ^[50] ; Smith, forthcoming ^[51])	No official recommended approaches for monetising well-being changes using affective measures (HM Treasury, 2021 ^[37])	Not applicable	No official recommended approaches for monetising well-being changes using eudaimonic measures (HM Treasury, 2021 ^[37])

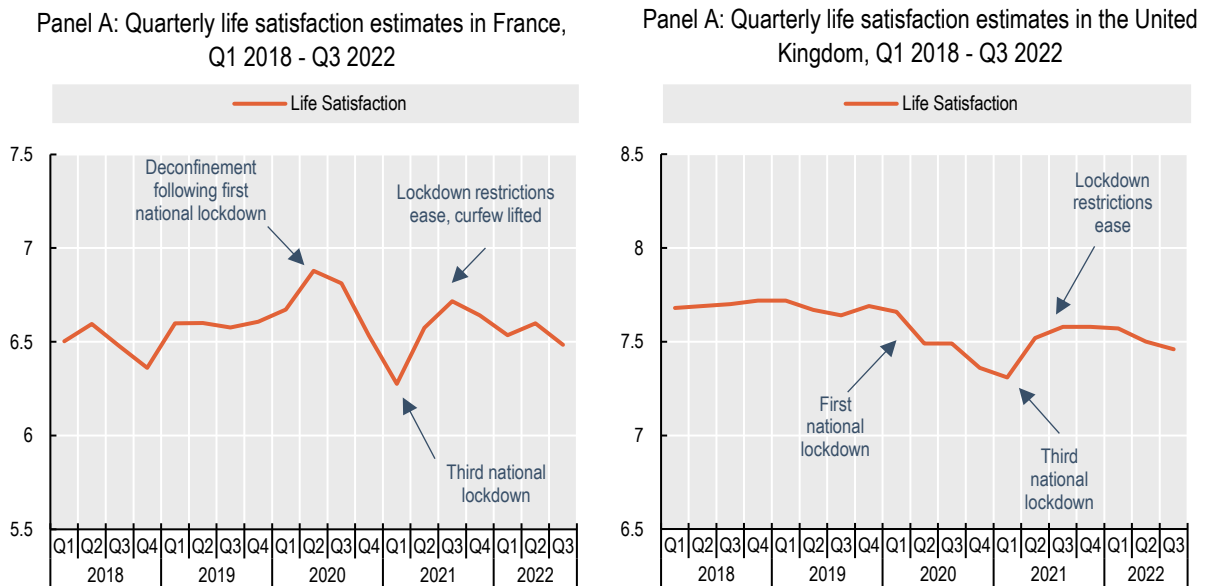
Note: This table pulls evidence from existing practice – with an emphasis on official publications put out by OECD member governments – but is not necessarily a reflection of official OECD recommendations on policy use of subjective well-being indicators. For example, while some sources such as the UK's *Green Book* suggest that life evaluation indicators are not suitable policy assessment indicators for situations subject to comparison and/or adaptation effects, the original *Guidelines* offers examples from research suggesting that life satisfaction data can still provide policy makers with insight in these cases (OECD, 2013^[7]). *In the context of subjective well-being literature, comparison effects refer to the phenomena of a reference group influencing an individual's subjective evaluations of their own life: for example, how someone feels about their income may depend on how much their colleagues, neighbours or spouses earn. †Adaptation refers to the process by which individuals become accustomed to a given life circumstance: using job promotion as an example, the fact of an initial boost in life satisfaction that quickly returns to a baseline level once the employee becomes accustomed to their new job status.

Regardless of the measure used, subjective well-being data will be most useful for policy, and most informative, if they are collected frequently, and reported in a timely fashion. Infrequent data collection may give the impression that these measures are not sensitive to change, and therefore are not suitable to measure impacts of a given policy. Furthermore, quarterly publication of life satisfaction data more closely mirrors the release schedule of GDP – an important consideration if subjective well-being data are to be considered complements to existing measures of societal process.

Quarterly data collection of life satisfaction data during the COVID-19 pandemic highlights how sensitive this measure is, in fact, to policy decisions, but that taking averages over long time periods would mask these changes (Figure 2.2). In France (Panel A), life satisfaction hit a record high in mid-2020 – coinciding with deconfinement (and summer weather) following the first national lockdown. In both France and the United Kingdom (Panel B), record lows in life satisfaction coincided with the third national lockdown in the second quarter of 2021. Annual averages in 2020 and 2021 would have masked the sensitivity of life satisfaction measures to government policies around confinement and deconfinement, and measurements separated by long time lags would entirely miss changes in the interval. Other studies using semi-annual, or high-frequency data, found that the pandemic had a persistent negative impact on measures of subjective well-being (Easterlin and O'Connor, 2023^[52]; Sarracino et al., 2021^[53]); by contrast, studies using annual data found average life satisfaction to be more or less resilient over a similar period (Helliwell et al., 2022^[54]).

While quarterly data collection can provide a great deal of insight, moving to annual data collection is already a significant step forward, relative to where many OECD countries stood at the time the *Guidelines* were originally written. And indeed, with a sufficiently long time series, annual measures of subjective well-being are sensitive to trends in public opinion (recall again Figure 2.1 and trends in life satisfaction deprivation leading up to the Arab Spring). Thus, if quarterly data collection is not feasible from a resource perspective, official data producers should still prioritise annual data collection.

Figure 2.2. Quarterly data collection throughout the pandemic reveals the sensitivity of life satisfaction to policy decisions



Note: Data in Panel B are seasonally adjusted.

Source: Panel A: CEPREMAP (2021^[55]), *Le Bien-Être en France*, Centre pour la recherche économique et ses applications (CEPREMAP) <http://www.cepremap.fr/Duree.html>; Panel B: ONS (2023^[56]), *Quarterly Personal Well-being Estimates*, Office for National Statistics, <https://www.ons.gov.uk/datasets/wellbeing-quarterly/editions/time-series/versions/6>.

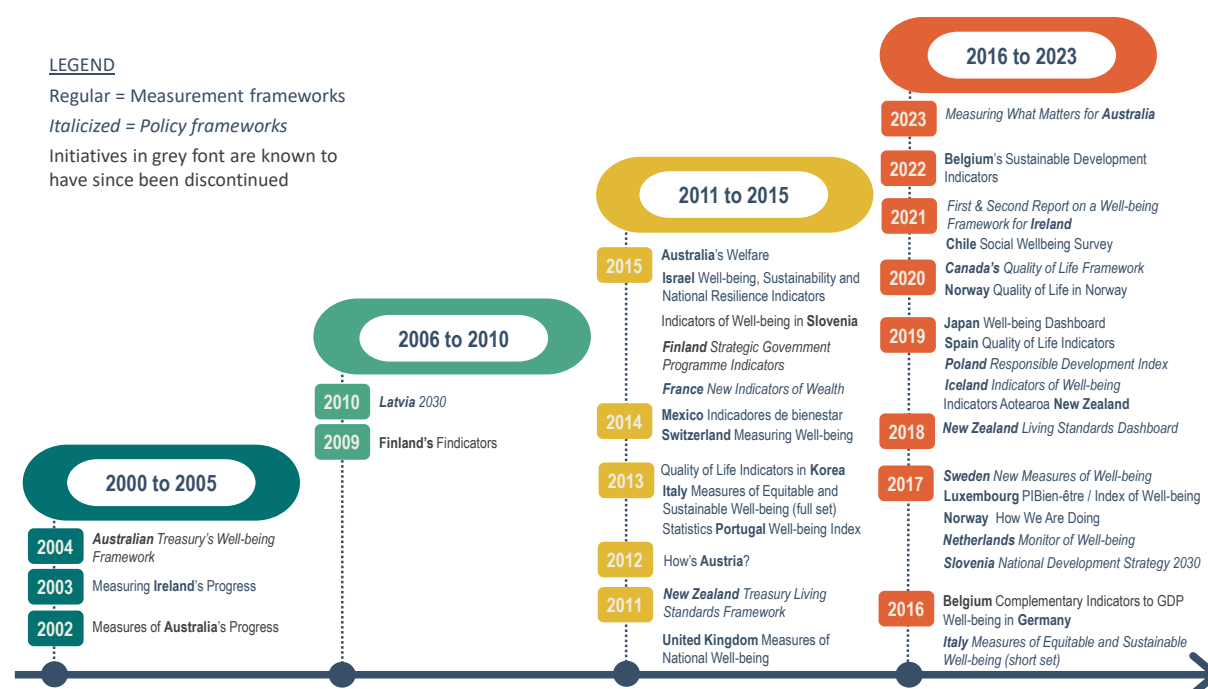
The development of national well-being frameworks and their inclusion of subjective well-being data

Over the past two decades, more than 70% (27 of 38) of OECD member states have developed their own, national multidimensional well-being initiatives: a mix of measurement frameworks and dashboards, well-being focused surveys and strategic development plans (Figure 2.3). A handful of countries instituted multidimensional well-being measurement, monitoring and reporting frameworks in the early 2000s, however momentum truly began ten years later, following the publication of the Stiglitz-Sen-Fitoussi Commission report, which emphasised the need to move beyond GDP when measuring societal progress (Stiglitz, Sen and Fitoussi, 2009^[11]), and as countries navigated the difficult process of recovering from the Great Financial Crisis. These frameworks all include a mix of objective and subjective indicators.

In developing national frameworks, governments have taken different approaches. Several have used the OECD's well-being framework (Figure 1.1) as an initial starting point. Indeed, of the initiatives developed since 2016, many have made explicit mention of the OECD's approach to well-being measurement, and have shaped their chosen dimensions and indicator focus accordingly.⁵

⁵ For recent examples, see *Measuring What Matters for Australia's Budget* (The Treasury, 2023^[58]), the *First and Second Report on a Well-being Framework for Ireland* (Government of Ireland, 2022^[78]), Chile's *Social Wellbeing Survey* (Ministry of Social Development, 2019^[235]), *Canada's Quality of Life Framework* (Department of Finance, 2021^[65]) and the Japanese Cabinet Office's well-being workstream (Cabinet Office, 2021^[234]). (Note that this list is illustrative, but not exhaustive.)

Figure 2.3. More than 70% of OECD countries have developed national frameworks, development plans or surveys with a multidimensional well-being focus



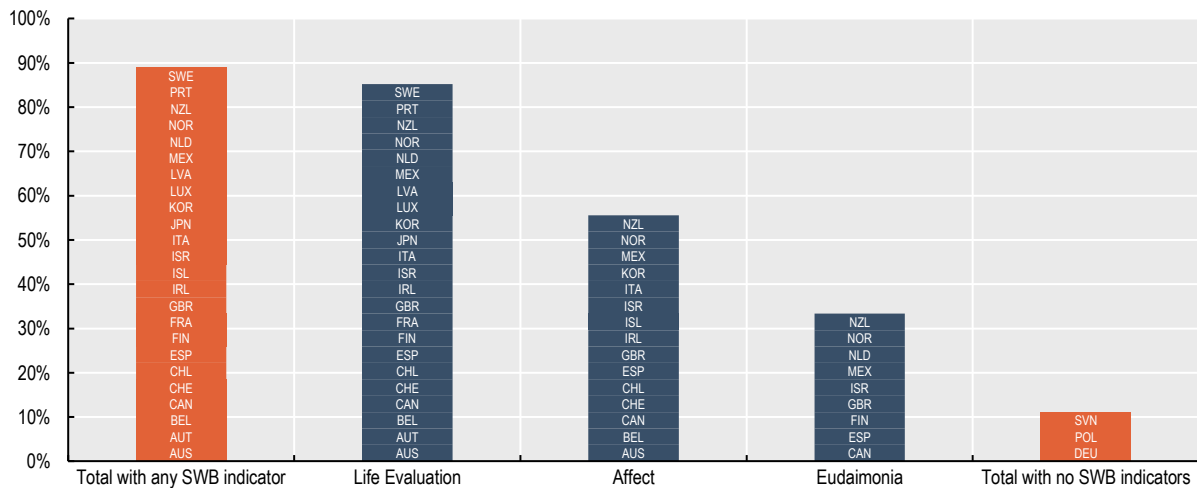
Others, including Belgium, have developed their approach to more closely align with the United Nation's Sustainable Development Goals, though has tailored its approach to SDG measurement to include subjective well-being measures such as life satisfaction.⁶ This is not to say that countries copy-paste from the OECD, the United Nations or other existing country practice. National well-being initiatives are tailored to the local context, and the majority of countries have held public consultations to enable citizens to weigh in on what matters most to them when considering what makes for a good life. In a 2019 stock-taking exercise, the OECD found that over half (16 of 30) of well-being initiatives held public consultations (OECD, 2019^[57]); newly developed initiatives in the years since have continued this processes, including *Measuring What Matters for Australia's Budget* and Ireland's *Well-being Framework* (The Treasury, 2023^[58]; Government of Ireland, 2021^[59]).

The measurement frameworks outlined in Figure 2.3 vary in terms of scope, with some having over 20 dimensions, or 100+ individual indicators, while others are more compact: only three dimensions, or as few as eight distinct indicators (OECD, 2019^[57]). While the vast majority of frameworks perhaps unsurprisingly include indicators relating to health and material conditions (such as income, work and housing), it is perhaps less expected that almost all also include some measure of subjective well-being (Figure 2.4). 89% of the 27 OECD countries with a current national multidimensional well-being initiative include a measure of subjective well-being. A life evaluation indicator – almost always in the form of a life satisfaction question – is the most common at 85%, followed by affect (56%) and eudaimonia (33%). Of the 27 countries with currently active multidimensional well-being initiatives, 11% do not include any subjective well-being measures.

⁶ The Sustainable Development Goals comprise 17 development goals underpinned by 169 targets; over 230 SDG indicators are recommended to monitor country progress towards each goal. Goal 3 covers "Good health and well-being", however the SDG indicators mostly relate to physical health outcomes or health care system quality, rather than mental health or subjective well-being. For more of the OECD's work on SDGs, refer to (OECD, 2022^[229]).

Figure 2.4. Almost 90% of countries include some form of subjective well-being indicator in their national well-being approaches, the most common of which is a life evaluation question

Of the countries who have developed a national well-being approach, the share that include subjective well-being indicators (and if so, by type), and the share that do not



Note: Only current national well-being approaches are considered. Refer to Table A.1 for a full list of the approaches included.

OECD work has emphasised the importance of reporting inequalities in outcomes for all measures of well-being, and subjective well-being data are no different (Box 1.1). To illustrate the importance of considering the distribution in addition to the mean, a large-scale global study found that while trends in average values of flourishing (measured via a composite index) were correlated with trends by other groupings, average outcomes moved in a distinct pattern from trends in outcomes disaggregated by geography or age (Shiba et al., 2022^[60]).

Indeed, when national well-being initiative data are reported, many countries move beyond averages to report on the distribution of outcomes. To highlight just one example, Israel's *Well-being, Sustainability and National Resilience Indicators* are hosted in an online database that provides breakdowns of all indicators – including measures of subjective well-being – by sex, age, educational attainment, among others (CBS, 2023^[61]). Another approach is to focus on the extreme ends of the distribution: Ireland's *Well-being Information Hub* has an indicator for the share of the population rating their overall life satisfaction as high (CSO, 2023^[62]); by contrast, the United Kingdom's Office for National Statistics recently decided to focus reporting on the share of the population with low levels of subjective well-being (life satisfaction, affect and eudaimonia) (ONS, 2023^[63]). Other countries consider geographic distribution, by reporting subjective well-being outcomes at the sub-national level. For example, Italy's *Measures of Equitable and Sustainable Well-being* (Benessere Equo e Sostenibile, or BES) indicator set provides outcomes for all indicators – including life satisfaction and mental distress – at the NUTS II level (IStat, 2022^[64]);⁷ Italy also included a set of subjective well-being indicators in the 2022 edition of the permanent Census, and will test the results to evaluate the possibility of future dissemination of these data.

Beyond the core subjective well-being measures of life evaluation, affect and eudaimonia, countries may include domain satisfaction indicators. These are questions asking respondents how satisfied they are with different aspects of their lives, serving as a subjective complement to objective metrics of well-being: for

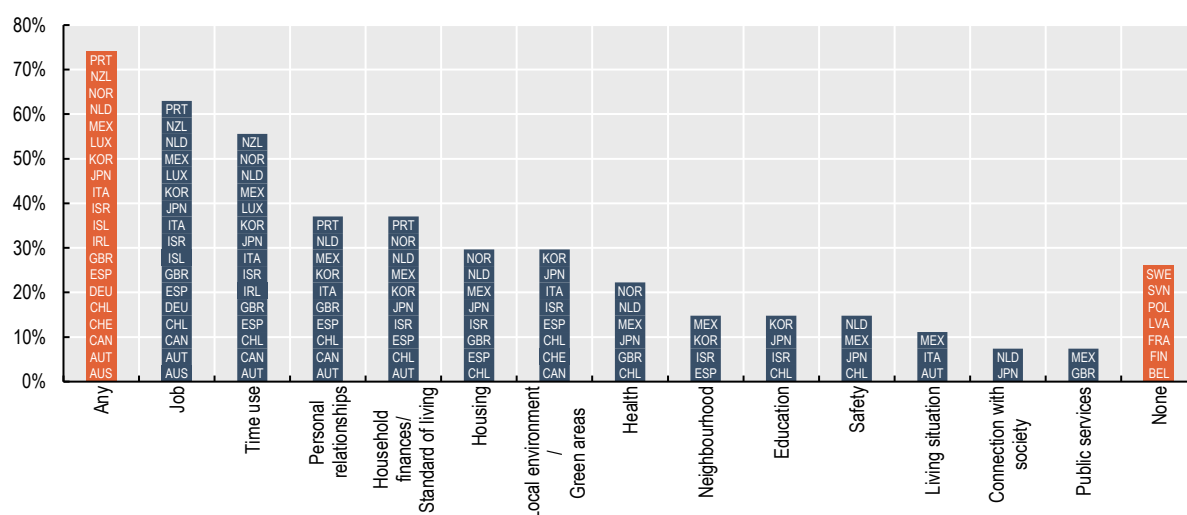
⁷ NUTS (nomenclature of territorial units for statistics) is a geographic classification system used by Eurostat to enable the harmonised collection of sub-national data in Europe. NUTS 1 contains 92 major socio-economic regions; NUTS 2 contains 242 basic regions; and NUTS 3 1 166 smaller regions (Eurostat, 2021^[238]).

example, comparing objective metrics of employment (labour market status, hours worked, wages) with job satisfaction. While the *Guidelines* include a domain satisfaction module (Figure 1.5), the core module does not include any of these indicators. Still, the OECD *How's Life?* well-being report and database include two domain satisfaction questions, one for time use and another regarding personal relationships, within the work-life balance and social connections dimensions, respectively (OECD, 2020^[2]).

Domain satisfaction questions are frequently used in national well-being frameworks: over 70% of member countries with currently active well-being initiatives include some form of domain satisfaction indicator (Figure 2.5). Job satisfaction (63%) and satisfaction with time use (56%) are the most commonly included, followed by satisfaction with personal relationships and satisfaction with household finances and/or one's standard of living (37%).

Figure 2.5. Job and time use satisfaction are the most commonly included domain satisfaction indicators in national well-being approaches

Of the countries who have developed a national well-being approach, the share who include domain satisfaction indicators (and if so, by domain type), and the share who do not



Note: Only current national well-being approaches are considered. Refer to Table A.1 for a full list of the approaches included.

The placement of domain satisfaction indicators within framework organisational structures – for example domains or dimensions of well-being or quality of life – typically fall under their respective dimension (e.g., housing satisfaction falls under the housing dimension, job satisfaction under employment, etc.), however the placement of other subjective well-being indicators can vary across countries. Recall that the OECD well-being framework includes “subjective well-being” as a standalone domain. Note, however, that the OECD’s framework also includes a separate domain of “health”, which includes indicators relating to mental health – which covers aspects of affect.

The potential overlap between measurement of aspects of mental health and subjective well-being can be seen in individual country initiatives, as well. When health and subjective well-being are considered separate domains, affect-based questions are almost as likely to be housed under the health dimension (50% of the time) as they are the subjective well-being dimension (43%) (Table 2.2). Conversely, life evaluation indicators never appear under the health dimension when subjective well-being is a separate domain. Eudaimonia is more likely to fall under subjective well-being (33% of the time) rather than health (11%) dimensions.

Other countries take approaches that diverge from the OECD’s organisational framework. Some have fewer overall dimensions and therefore group indicators into higher level concepts of, for example, quality of life, which then encompasses all types of subjective well-being data. Others use a different format, such as an in-depth well-being survey rather than a dashboard or specific organising framework. Still others treat subjective well-being as a topic distinct from all other dimensions of well-being. Canada includes “life satisfaction” and having a “sense of meaning and purpose” in its quality of life framework, but as cross-cutting headline indicators rather than falling under any distinct dimension (Department of Finance, 2021^[65]); Australia’s new *Measuring What Matters* initiative takes a similar approach with life satisfaction (The Treasury, 2023^[58]). During the COVID-19 pandemic, Iceland introduced monthly data collection of the population’s mental well-being using the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) (Statistics Iceland, 2023^[44]).⁸ While this measure was already included in Iceland’s *Prosperity Indicators* as a Social (Health) Indicator, during the pandemic it was reported on independently as a part of the National Health Service’s Public Health Watch to serve as an overall snapshot of national well-being (Statistics Iceland, 2023^[66]).

Table 2.2. Affect indicators are equally likely to be collected under health or subjective well-being dimensions, while life evaluation indicators are never included in health-specific domains

Of the countries reporting the collection of each type of subjective well-being indicator, the share reporting the indicator falls under each dimension type

	Cross-cutting (not a part of any single domain)	Separate dimensions		Combined dimension (e.g. Good health and well-being; Quality of life)	NA (e.g., a survey rather than a framework)
		Subjective well-being dimension	Health dimension		
Life evaluation	9%	30%	-	43%	17%
Affect	-	43%	50%	14%	21%
Eudaimonia	4%	33%	11%	22%	22%

Note: Percentages refer to the share of countries who capture each type of well-being indicator within each dimension type, out of the total number of countries who report collecting each aspect of subjective well-being in their national initiative (of the 27 with currently-active initiatives, 23 collect life evaluation indicators, 14 collect affect and 9 collect eudaimonia). Note that the well-being initiatives for some countries contain multiple indicators for affect, which can then be located under different dimensions; for this reason (in addition to rounding), the row for affect does not sum to 100%. Only current national well-being approaches are considered. Refer to Table A.1 for a full list of the approaches included.

The organisational structure of well-being initiatives is interesting beyond pure classification systems: the ways in which subjective well-being data are grouped may have implications for the ways in which they are used in policy, or for which government agencies view the data as relevant to them. Given that in practice affect indicators appear to be just as likely to be considered “health” data as they are “subjective well-being” data, it should perhaps come as no surprise that the specific indicators many countries are using to capture affective states come from the mental health literature, rather than those recommended by the *Guidelines* (see Section 3 for a detailed discussion); it may also imply more policy engagement on affect indicators from health ministries, as compared to life satisfaction or eudaimonic indicators. The OECD has recently published a report on measuring population mental health outcomes (OECD, 2023^[14]), and the aim of future work is to ensure good alignment between mental health and subjective well-being measurement work-streams.

Countries for which subjective well-being data are cross-cutting themes, or an overarching theme – that is, frameworks in which subjective well-being data are given *more* weight than other well-being indicators – either directly or indirectly propose different policy goals. Canada, which includes life satisfaction as a

⁸ For more information on SWEMWBS, and tools that can be used to measure population mental health more generally, see (OECD, 2023^[14]).

cross-cutting indicator, describes the metric as “a complementary summary measure of overall experienced quality of life” (Department of Finance, 2021^[65]). This organisational structure reflects the evidence that a person’s life satisfaction, or living a life full of meaning, is derived from a combination of their well-being across many other life domains.

Rather than highlight a single subjective well-being indicator, such as life satisfaction, as an overarching metric of well-being, some countries have opted to use composite indices (see Table 4.3). In some instances, the composite measure is domain-specific, and combines indicators within a domain to create an overall index of a certain concept: a housing index, and employment index, a health index, or indeed an index of subjective well-being (for example, the Netherland’s Personal Wellbeing Index comprising eight subjective well-being inputs (van Beuningen and de Jonge, 2011^[67])). In other instances, indicators across domains are combined to create a single composite index of well-being (for example Poland’s Responsible Development Index (Bąkowska et al., 2019^[68]), which includes only objective inputs). Other similar approaches combine both subjective and objective indicators, for example Luxembourg’s Index of Wellbeing (LIW), first introduced in 2018, (Allegrezza, 2022^[69]; Fumarco, Peroni and Sarracino, 2018^[70]), Spain’s Multidimensional Quality of Life Indicator (MQLI) (INE, 2022^[71]) and Belgium’s composite indices: a single composite index for current well-being, and four composite indices for each of the capital stocks for future well-being (Joskin, 2018^[72]; Joskin, 2020^[73]). The relative advantages and drawbacks of using a composite index, a single indicator (such as life satisfaction) or a dashboard approach are discussed in Section 4.

How subjective well-being indicators within national initiatives inform policy

Whereas the previous section covered both well-being measurement and policy frameworks, this section focuses in on the ways in which national initiatives are – or are not – incorporating subjective well-being indicators into the policy making process. This is not to say that measurement frameworks designed to track trends in well-being are not used by policy-makers: as previous evidence has shown, monitoring subjective well-being trends can be of great use to policy makers (see again Figure 2.1), and can shape policy dialogues and strategic decision-making in broad and diffuse ways. However, we are also interested in cataloguing the ways in which governments are moving beyond measurement, and using subjective well-being data in specific cases of policy decision-making. It is worth noting that the set of indicators used for reporting trends may be different from those used in policy making; both activities are important, but address different needs. It is therefore not surprising that when looking at the inclusion of subjective well-being indicators in policy making processes the landscape shifts, and indeed some countries use a different sub-set of indicators for policy.

“Policy” is a broad concept that encompasses any number of activities: developing overarching strategies; stakeholder engagement; monitoring trends for policy targeting; and the design, implementation and evaluation of individual policy or programme interventions. The larger policy ecosystem is subject to a huge array of different influences, including the need to set strategic objectives and to be accountable to the legislature. As such, different tools are used for different aspects. A review of all national multidimensional well-being initiatives shown in Figure 2.3 suggests that, broadly speaking, country practice falls into one of five broad categories:

- The first category covers national well-being initiatives that inform policy in some way, but in doing so, use a subset of indicators that do not include subjective well-being. For example, Italy’s full *Measures of Equitable and Sustainable Well-being* measurement framework includes a life satisfaction indicator, which is then reported on regularly by the Italian National Institute of Statistics (IStat, 2022^[64]). Italy was the first OECD country to integrate well-being frameworks into the budgeting process, with the introduction of a new law in 2016 stipulating that well-being indicators should be included in a Ministry of Economy and Finance-drafted report (the Document on the Economy and Finance (DEF)) to be submitted to both house of Parliament at the onset of the

annual budget cycle. The DEF is then used to measure and forecast policy impact on a range of outcomes. However, the inputs to the DEF include a subset of 12 indicators (out of the full 153), which as noted before do not include life satisfaction: only objective indicators are included (Exton and Shinwell, 2018^[32]; Blazey, Lelong and Giannini, 2022^[74]).

- A second broad grouping includes countries that – at least initially – integrated subjective well-being indicators into policy in some form or another, however that momentum was not maintained over time or across political administrations. France provides an instructive example. Life satisfaction is included as one of France’s twelve New Wealth Indicators (Les nouveaux indicateurs de richesse): each indicator was chosen as a part of a public consultation process. Under the 2015 law introducing the program, the Prime Minister’s Office is then tasked with drafting an annual report, which is then presented to Parliament, showing trends in each measure and the ways in which political reforms impact the indicators (Exton and Shinwell, 2018^[32]). Although INSEE, the French statistical office, continues to publish statistics on the twelve with regularity (INSEE, 2022^[75]), the New Wealth Indicators have not been presented to Parliament since 2018 (Sénat, 2022^[76]; Sas, 2022^[77]).
- On the other hand, many of the more recently established multidimensional well-being initiatives have explicit policy aspirations, though the role of subjective well-being indicators within these aspirations remains unclear at present. By way of example, Ireland has published a series of working papers relating to its new multidimensional well-being framework (the second report was published in 2022, see (Government of Ireland, 2022^[78])), outlining how it could be used in future to inform policy making and budgeting processes (Kennedy, 2022^[79]; Kennedy, 2022^[80]). In Ireland’s approach, subjective well-being is one of many domains of well-being, and is not accorded a particular status or centrality. Meanwhile, the Japanese Cabinet Office has set up a Liaison Council of relevant Ministries and Agencies working on the topic of multidimensional well-being to better coordinate their activities, including the development of key performance indicators for its well-being initiatives (Cabinet Office, 2022^[81]). In the Cabinet Office’s Well-being Dashboard, subjective well-being is given a prominent role, but again the Dashboard features a large number of objective well-being domains.
- For countries currently integrating subjective well-being into policy, there are two over-arching ways this tends to be done. The first is setting the improvement of subjective well-being as a goal of policy. A good example of this is the United Kingdom’s *Levelling Up* white paper: the strategy in general aims to level the playing field in the United Kingdom by providing equal opportunities for all people, regardless of who they are and where they live. This goal is to be achieved through 12 over-arching missions, one of which (mission 8) is to improve well-being: “By 2030, well-being will have improved in every area of the UK, with the gap between top performing and other areas closing” (HM Government, 2022^[82]).⁹ Distinct from most all other policy applications highlighted in this paper, mission 8 of the *Levelling Up* strategy includes subjective well-being indicators beyond just life satisfaction. The technical annex notes that all of the Office for National Statistics four subjective well-being measures (the ONS 4) – covering evaluative, affective and eudaimonic aspects of subjective well-being – will be used, at least initially, to monitor the progress of this mission (HM Government, 2022^[83]).

⁹ In contrast to OECD work, in the United Kingdom context the phrase “well-being” is often used to mean *either* multidimensional objective and subjective approaches, *or* to mean subjective well-being specifically. For example, the ONS Measures of National Well-being are multidimensional (i.e., first definition), whereas the What Works Centre for Wellbeing is mostly – although not exclusively – focused on subjective well-being (i.e., the second definition). (The Centre has produced significant research on the subjective well-being indicators included in the national framework given their relative novelty, however also conducts in-depth research on other indicators in the framework such as loneliness and social capital.) In the context of the *Levelling Up* white paper, the term “wellbeing” is used to describe the target of the mission, and the metrics proposed for its measurement include only subjective well-being indicators.

- Aside from setting well-being improvement as a policy goal, the second way in which these subjective indicators are used by government tends to be in the design, appraisal and evaluation of policy. The United Kingdom's aforementioned *Green Book* is designed to provide policy makers with technical guidance on good practices relating to policy appraisal. It includes examples for how to incorporate subjective well-being evidence to frame the longlist stage of appraisal as a means of estimating the estimated social costs and benefits of a program, and in informing valuation methods for non-market goods. The *Green Book* and its accompanying technical annex include explicit recommendations for how and when to use both cost-benefit and cost-effectiveness analyses (HM Treasury, 2022^[40]; HM Treasury, 2021^[37]). The *Magenta Book*, a related publication for policy evaluation, also covers CBA and CEA as methods for assessing a policy's 'value-for-money' (HM Treasury and Evaluation Task Force, 2020^[84]). The New Zealand Treasury has also provided instruction on CBA across the government, by developing a standardised approach through its CBAX Impacts Database and guidance documentation (The Treasury, 2022^[41]).

Conclusion

The academic literature sets out several potential policy applications of subjective well-being measures, however uptake by policy makers has been tentative thus far. While country governments have begun collecting subjective well-being data in high numbers, their application in very specific policy use cases – either as an explicit policy goal in their own right, or to inform policy design, appraisal and evaluation – remain the exception, rather than the rule. Currently country use of subjective well-being data is clearly primarily centred on reporting and monitoring trends, and holding the legislature accountable. Fewer OECD member states are using subjective well-being data for policy design and implementation, although there are a few examples. Life satisfaction is the most commonly measured indicator, and when subjective well-being data *do* enter the policy decision-making arena in specific use cases, it is almost always in the form of a life satisfaction indicator. There seems to be less clear consensus by policy makers as to whether and how to use affect data, and these preliminary findings suggest limited direct policy use of eudaimonia in the context of applying national well-being initiatives to budgeting, performance monitoring, or policy design, appraisal and evaluation. Improving the availability and international comparability of these indicators may encourage more research into their applications, which could incentivize more use in future.

3 Current measurement practice and uptake of OECD recommendations

The previous section focused on subjective well-being indicators at a high level, and though some distinctions between evaluative, affective and eudaimonic measures were made, it did not concern itself with the details of measurement. This section will delve into measurement practice to unpack the specifics of the indicators countries are using to measure subjective well-being and how closely aligned they are with *Guidelines* recommendations. The results of this exercise show that significant steps towards international harmonisation have been made in some areas – notably, in the collection of life satisfaction – however international comparability in other areas remains a challenge.

Core module recommendations for the measurement of subjective well-being

The *Guidelines* is a 300+ page publication containing a number of recommendations and best practices, along with a series of proposed question modules for each of the three domains of subjective well-being: life evaluation, affect and eudaimonia. However, the main recommendations from the publication can be distilled into the five questions included in the core module (Figure 3.1).

Figure 3.1. The core module has five questions covering three aspects of subjective well-being

Box B.1. Core questions

The following question asks how satisfied you feel, on a scale from 0 to 10. Zero means you feel “not at all satisfied” and 10 means you feel “completely satisfied”.

A1. Overall, how satisfied are you with life as a whole these days? [0-10]

The following question asks how worthwhile you feel the things you do in your life are, on a scale from 0 to 10. Zero means you feel the things you do in your life are “not at all worthwhile”, and 10 means “completely worthwhile”.

A2. Overall, to what extent do you feel the things you do in your life are worthwhile? [0-10]

The following questions ask about how you felt yesterday on a scale from 0 to 10. Zero means you did not experience the feeling “at all” yesterday while 10 means you experienced the feeling “all of the time” yesterday. I will now read out a list of ways you might have felt yesterday.

A3. How about happy? [0-10]

A4. How about worried? [0-10]

A5. How about depressed? [0-10]

Source: OECD (2013^[7]), *OECD Guidelines on Measuring Subjective Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264191655-en>.

The core module recommends a single question for life evaluation, “Overall, how satisfied are you with your life as a whole these days?” There is also a single-item recommendation for eudaimonia, asking respondents “how worthwhile [they] feel the things [they] do in [their] life are”. There are three recommended questions for affect – two negative affect, one positive – asking respondents how happy, worried and depressed they felt yesterday. All five questions use a 0-10 answer scale, anchored by *not at all* at the lower bound, and *completely* or *all the time* at the upper. The key motivation behind the core recommendations was to create a module short enough to enable its widespread integration into population surveys. Given that national statistical offices (NSOs) have limited capacity to include questions, the *Guidelines* placed a premium on brevity.

In scoping the uptake of *Guidelines* recommendations, this exercise will compare the subjective well-being indicators countries report collecting with the core module, focusing in particular on question phrasing, response scale used, recall period and overall frequency of data collection. Because most countries collect multiple types of subjective well-being measures – especially when considering affective indicators, though to a lesser extent this also applies to eudaimonic ones – this exercise will consider only the *most frequently collected* measures of “happiness”, “worry”, “depression” and feeling life has “meaning” or is worthwhile”. Country practice is sourced from three sets of surveys and/or data requests sent by the WISE Centre to member country NSOs (Box 3.1).

Box 3.1. Source of information for figures and tables outlining current country practice

The figures and tables in this section draw their evidence from three separate surveys sent to National Statistical Offices by the WISE Centre (and, prior to WISE’s creation, the division of the Statistics and Data Directorate leading work on well-being measurement). Findings on current country practice are thus triangulated from three sets of reporting. Country practice is constantly evolving, and furthermore, there is a large degree of heterogeneity in the comprehensiveness of country reporting. Thus, the findings in this report are meant to be an illustrative snapshot of subjective well-being measurement in 2023, rather than a complete and comprehensive account of all surveys that include subjective well-being questions.

2016: Taking stock of OECD country experiences in measuring subjective well-being

In 2016, the Household Statistics and Progress Measurement Division of the Statistics and Data Directorate circulated a survey to OECD member state, assessment and partner country NSOs to run a stock-take of subjective well-being measurement practice a few years following the *Guidelines* publication. All countries responded, meaning data are available for all 38 current (as of 2023) OECD countries.

The exercise focused on data availability for life evaluation, affect, eudaimonia and domain satisfaction indicators; survey methods used, including things like question wording, survey mode, survey timing, question order and sampling procedures; data reporting, including frequency and production of statistical releases; and any other methodological work conducting, including cognitive testing and split sample trials. This survey provided in-depth feedback, though at the time of drafting this current working paper many of the responses are now dated.

2022: Measuring population mental health: Tools and current country practice

As a part of a larger project applying a well-being lens to population mental health, in 2022 the WISE Centre surveyed official data producers in OECD countries on their current measurement practice in the area of mental health. The project considers the full spectra of mental health measures, ranging from tools to diagnose or assess the risk of symptoms of specific mental health conditions (e.g. major depressive disorder, generalised anxiety disorder), to metrics of positive mental health and

psychological flourishing. These measures at times overlap with aspects of subjective well-being, especially affective and eudaimonic indicators. All OECD member states, aside from Estonia, provided feedback.

2023: Updates to the OECD Well-being database

The WISE Centre maintains the OECD's Well-being Database, a publicly available resource which houses the 80+ indicators that underpin a wide range of OECD and external analytical work (including the *How's Life?* report and country profiles). As a part of maintaining the database and keeping it up-to-date, WISE has established a single annual data request to NSOs for information on indicators that either are not publicly available, or which require additional disaggregation (e.g., by sex, age, educational attainment level). In early 2023 WISE received feedback from many countries regarding current practice in collecting data on life satisfaction, depression and anxiety, among other topic areas.

Existing country practice in measuring life evaluation

The push to collect harmonised data on life satisfaction with regular frequency has largely been a success. All OECD countries, save one,¹⁰ collect data on life satisfaction, and just under 90% do so in ways that are highly comparable to the indicator recommended in the *Guidelines* core module (Figure 3.2, Panel A). Comparability is assessed on question phrasing, answer scale and response formats used.

Regarding question phrasing, any life satisfaction question that asks respondents overall how satisfied they are with their lives currently is more or less considered to be comparable. An example of a question framing that would *not* be comparable is the Cantril ladder,¹¹ which uses the metaphor of a ladder to provide respondents with a verbal framing device. Although some countries do use the Cantril ladder in some surveys, none use it exclusively; that is, all OECD countries capturing life satisfaction data have at least one survey containing a question with comparable question framing. There is slightly more variation in answer scales: most all countries report using a 0-10 scale, however some use a 1-10 scale, and others use a 4- or 5-point answer scale. These answer scale deviations account for the 8% of countries collecting life satisfaction data in ways that are “not comparable” with OECD recommendations (Figure 3.2, Panel A).

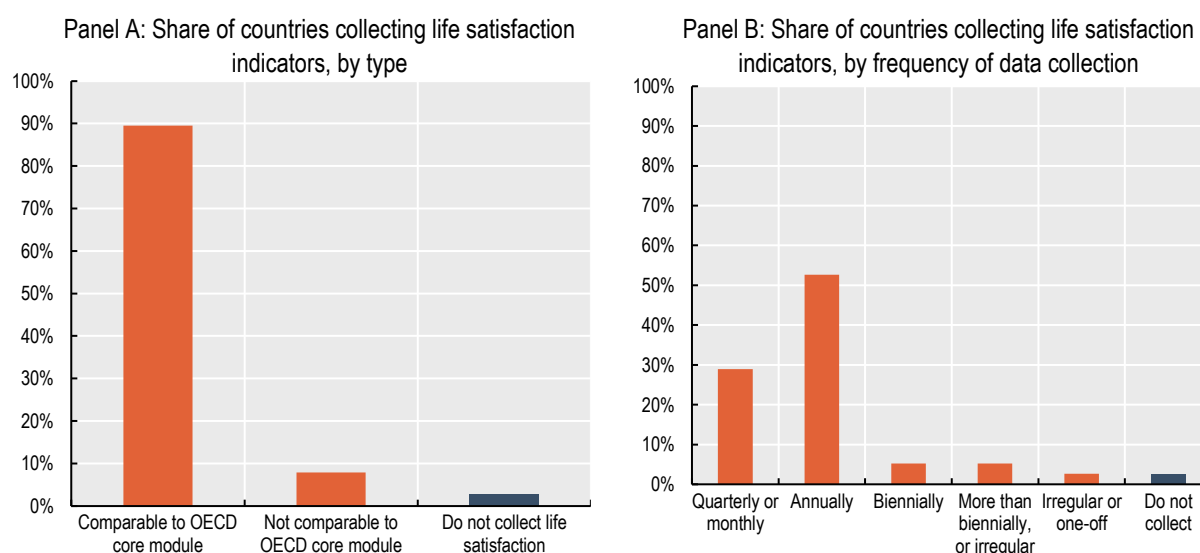
There is also a high degree of convergence when looking further into response formats used (Figure 3.3). The original *Guidelines* recommends using unipolar, as opposed to bipolar scales. That is, a scale ranging from “not at all satisfied” to “completely satisfied”, *rather than* a scale ranging from “completely dissatisfied” to “completely satisfied”. However, the *Guidelines* notes that unipolarity is more important for affect questions, because there is a difference between being “not at all happy” (a unipolar end-point descriptor) and being “completely unhappy” (a bipolar end-point descriptor). Despite polarity being less of a sensitive issue for life evaluation questions, there is still a large degree of harmonisation in that 84% of countries use unipolar scales (Figure 3.3, Panel A). There is even more agreement around answer label anchoring, with 89% of countries including labels only at the extreme ends of the scale (“not at all satisfied” on the far-left, and “completely satisfied” on the far-right, with no verbal descriptors in between), rather than including

¹⁰ Costa Rica is the only OECD member state that does not collect life satisfaction data in an official capacity.

¹¹ The Cantril ladder question, more formally known as the Cantril Self-Anchoring Striving Scale, as included in the annual Gallup World Poll, reads as follows: “Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. Suppose we say that the top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. If the top step is 10 and the bottom step is 0, on which step of the ladder do you feel you personally stand at the present time?” (Gallup World Poll, 2023^[241]). Refer to the *Guidelines* for an extended discussion on why the OECD recommends a general satisfaction with life question, as opposed to the Cantril ladder framing (OECD, 2013^[7]).

a verbal anchor at each step (Figure 3.3, Panel B). This approach is recommended in the *Guidelines*, since verbal labels are often difficult to translate, both from a linguistic and cultural perspective.

Figure 3.2. Almost 90% of OECD member countries collect harmonised life satisfaction data, and more than three-quarters do so annually or more frequently



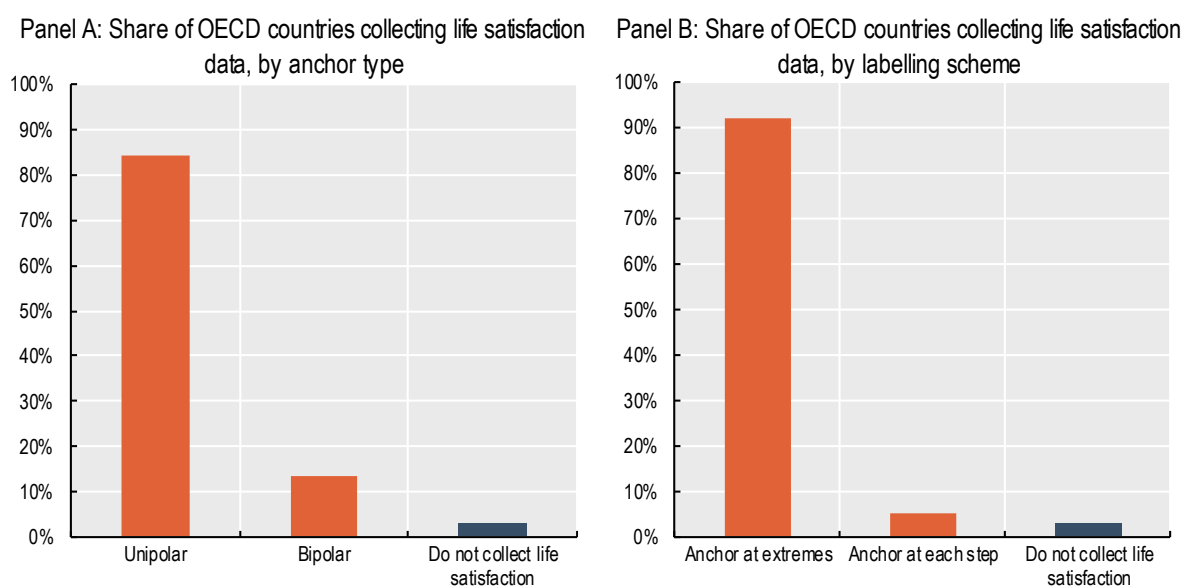
Note: “Comparable to OECD core module” means the life satisfaction measure has similar question phrasing and uses a 0-10 answer scale. For countries that collect multiple types of life satisfaction indicators, only the one most comparable to the OECD guidelines is considered. For a detailed list of which indicators, from which surveys, are considered, refer to Table A.2 in the Annex.

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

Beyond the progress made in indicator harmonisation, a key point of success over the past decade has been to increase the frequency of life satisfaction data collection. Over 80% of OECD countries collect these data annually, or more frequently – a huge improvement relative to when the original *Guidelines* were written (Figure 3.2, Panel B). Much of this progress has been recent. Beginning in 2021, Eurostat added a life satisfaction question to the core, annual module of the *EU Survey on Income and Living Conditions* (EU-SILC) household survey (Eurostat, 2022^[85]). Previously this indicator had only been included in the well-being ad hoc survey fielded once in 2013 and again in 2018. Given that a large number of OECD member states participate in EU-SILC, this one action significantly raised the share of OECD countries with annual collection. Furthermore, nine OECD Eurostat countries have been participating in an exercise to collect quarterly living conditions data – including life satisfaction – from 2021-22. These two years marked the first phase of the project, it is unclear the extent to which quarterly collection will continue into the future (though all participating countries will continue to collect at least annual life satisfaction data, as a part of the core EU-SILC questionnaire) (Eurostat, 2023^[86]). It is not just European OECD countries collecting life satisfaction at higher frequency: Colombia, Israel, Japan and Korea all collect annual life satisfaction data, and Canada, Mexico and the United Kingdom do so quarterly.¹²

¹² New Zealand collected life satisfaction quarterly as a part of a well-being supplement added to the household labour force survey (HLFS) during the pandemic, from June 2020 through March 2021, however quarterly data collection has since been suspended (Statistics New Zealand, 2021^[250]).

Figure 3.3. Most countries follow core module recommendations to use unipolar scales, with anchor labelling at extreme end-points rather than at each step



Note: For a detailed list of which indicators, from which surveys, are considered, refer to Table A.2 in the Annex.

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

Existing country practice in measuring affect

Country practice in measuring affect is less harmonised, and there has been less take-up of the *Guidelines* recommended indicators. In contrast with the *Guidelines*' focus on short-term affective states, much country practice adopts measures focused on the more persistent affective states captured in mental health measurement tools, covering concepts like anxiety and depression, with these indicators pulled from mental health screening tools fielded on health surveys. Still, this is not to say that the *Guidelines* has held no influence. Recall that OECD recommendations were to collect two questions on negative affect (feeling worried or depressed) and one on positive affect (feeling happy), asking respondents to rate the extent to which they felt the given emotion the day prior, on a scale from 0-10. Nine countries have fielded these questions, though only half have done so on a semi-regular basis (Table 3.1).

Table 3.1. Some countries have introduced affect indicators in line with core module recommendations, but they tend to be fielded in one-off or irregular surveys

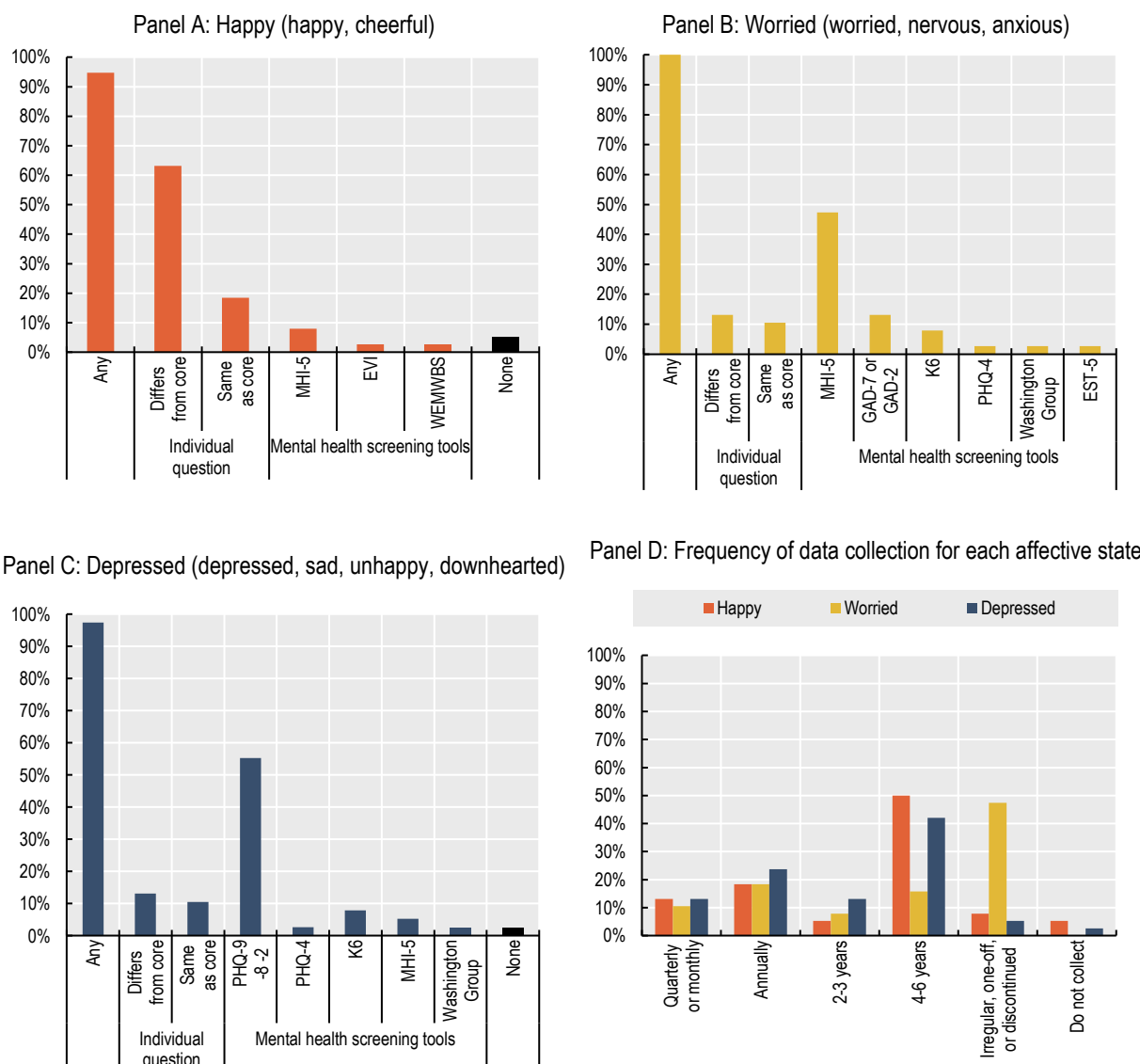
Country	Survey	Frequency	Emotions from core module
Canada	Pilot Study on Everyday Wellbeing	One-off, 2021	happy / anxious
Denmark	Quality of Life	One-off, 2015	happy / worried / depressed
France	CAMME	Quarterly	happy / depressed
Ireland	QNHS special module on volunteering and wellbeing	One-off, 2013	happy / anxious
Japan	Quality of Life Survey	Annual from 2011-2013	happy / worried / depressed
Korea	Korea Social Integration Survey	Annual	happy / worried / depressed
Mexico	BIARE (Básico)	Quarterly	happy / worried / depressed
New Zealand	Household Labour Force Survey	Irregular; during COVID	happy / anxious
United Kingdom	Opinions and Lifestyle Survey (+ many others)	Quarterly	happy / anxious

Note: Table only includes affect modules corresponding to core module recommendations for answer scales (0-10) and recall period (yesterday).

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Figure 3.4. Countries are collecting data on core module recommended affective states, but with a range of different tools at varying degrees of frequency

Share of OECD countries collecting each type of affective state, by type of survey tool used (Panels A-C) and frequency of data collection (Panel D)



Note: Most countries capture each concept – happiness, worry, depression – through a variety of different indicators and screening tools. These figures show the indicator that is collected most frequently, per country. For Panel D, surveys that ran during the COVID-19 pandemic, but have since been discontinued, are included in the “irregular, one-off, or discontinued” category. High-frequency surveys that began during the pandemic but are still on-going, are not considered as irregular. For a detailed list of which indicators, from which surveys, are considered, refer to Table A.3, Table A.4 and Table A.5 in the Annex. For more details on each type of mental health screening tool, refer to Chapter 2 of (OECD, 2023^[14]).

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

This is not to say that OECD countries are not capturing *Guidelines* recommended affective states: they are, but are doing so in ways that diverge from OECD recommendations. All OECD countries collect data on feeling worried, nervous, anxious (Figure 3.4, Panel B); and almost all collect data on feeling depressed, sad, unhappy or downhearted (97%, see Figure 3.4, Panel C); or feeling happy or cheerful (95%, see Figure 3.4, Panel A). The figures in Panel A-C of Figure 3.4 disaggregate each emotional state by the type of tool used to collect the data. For feelings of worry and depression, the vast majority of data points are sourced from individual indicators taken from within a mental health screening tool: for example, the Mental Health Inventory 5 (MHI-5), which measures the risk for psychological distress, or the Patient Health Questionnaire (PHQ) which measures risk for depression. Individual questions – a broad category which includes *Guidelines* recommended question framing and answer scales – are a minority.

The case for happiness appears slightly different, in that 82% of countries who report collecting data on feeling happy, collect it most frequently through an individual question. However, this figure is slightly misleading. “How much of the time, during the past four weeks, have you been happy?” is a single question included in the longer MHI-5, which had been included in EU-SILC’s rotating well-being and quality of life module. Moving forward, Eurostat has decided to drop the MHI-5 and instead only retain a single question from it: that of happiness (European Commission, 2020^[87]). Therefore, although this is now an individual question on happiness, its origins do still lie in mental health screening tools.

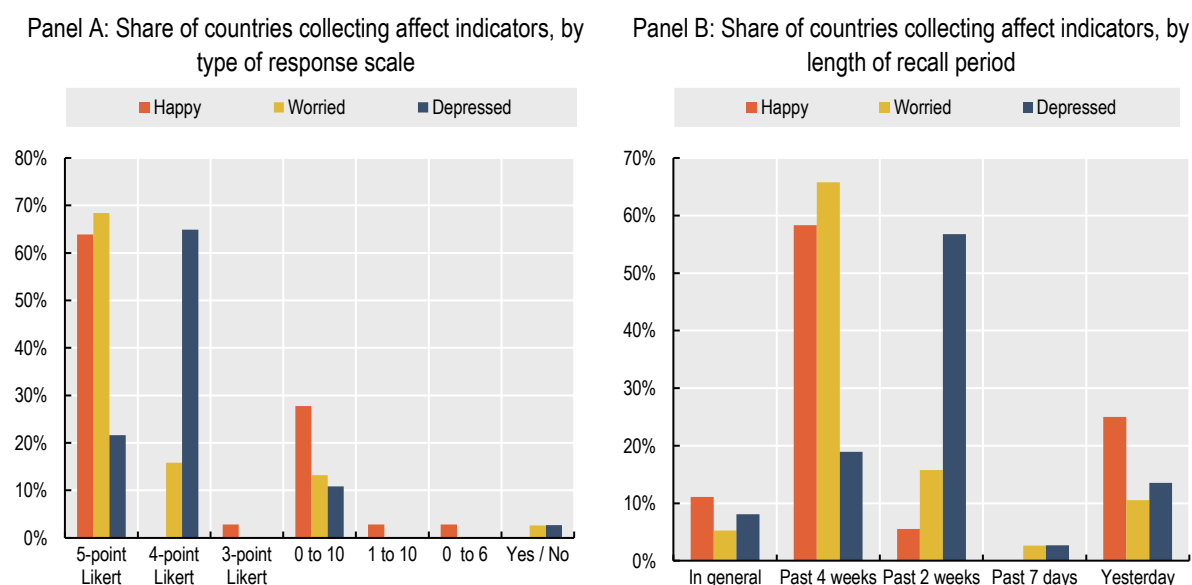
The influence of mental health screening tools is just as apparent when looking at answer scales and recall periods (Figure 3.5). The *Guidelines* recommendation to use a 0-10 scale is less commonly adopted than are 4- or 5-point Likert scales;¹³ the latter of which are almost always used in the mental health survey items (Figure 3.5, Panel A). Similarly, most mental health tools employ a recall period of the past two to four weeks, as opposed to the OECD recommendation of “yesterday” (Figure 3.5, Panel B). Given the goal of mental health screening tools this makes sense: rather than prioritising accurate recall of short-term affective states, mental health screening tools are designed to identify those at risk for mental health conditions, meaning that capturing information on the persistence of symptoms over a longer time frame is of central importance.

The findings from Figure 3.5 show that the indicator details for the affective states of worry/anxiety and sadness/depression are more likely to follow the form of mental health screening tools (Likert scales, longer recall periods) than are those for happiness. Questions about feeling happy do appear on mental health screening tools, for both mental ill-health but especially positive mental health, but overall less frequently.

In general, data on affect are collected less frequently than data on life satisfaction. While some countries are collecting annual, or even quarterly data, the majority of data appear on surveys that run less frequently (i.e., every four to five years), or on surveys that are fielded irregularly or have since been discontinued (Figure 3.4, Panel D). Many of these irregular or discontinued surveys were initiated during the COVID-19 pandemic, which in part explains why indicators of worry and anxiety (a major public health policy concern throughout the pandemic) are particularly likely to appear in this category. Although these data were often collected at high frequency during the pandemic, their having since been discontinued limits their effectiveness as policy relevant data points into the future.

¹³ A Likert scale is one type of psychometric scale used to collect respondents’ opinions on a topic. Common examples of Likert scale responses include: “All of the time / some of the time / a little bit of the time / none of the time” or “Strongly agree / somewhat agree / neither agree nor disagree / somewhat disagree / strongly disagree”. Likert scales range in length, but common formats are four, five or seven answer options.

Figure 3.5. The variety of tools used to collect affect data result in less harmonisation in response scales and recall periods



Note: Most countries capture each concept – happiness, worry, depression – through a variety of different indicators and screening tools. These figures show the indicator that is collected most frequently, per country. For a detailed list of which indicators, from which surveys, are considered, refer to Table A.3, Table A.4 and Table A.5 in the Annex.

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

When it comes to capturing the affective states included in the *Guidelines* core module, the use of mental health screening tools is more prevalent in national household surveys than the *Guidelines*-recommended “yesterday” question formulation. Mental health screening tools reveal important insights into the overall health and well-being of society, and tracking trends in mental distress and/or positive mental health is an important policy consideration in its own right. Indeed, the OECD supports improving the quality of population mental health outcomes, and expanding the use and harmonisation of mental health screening tools (OECD, 2023^[14]). Whilst both approaches ask about affective states, the different answer scales and recall periods of mental health screeners and the “yesterday” framing in the 2013 *Guidelines* means that they are targeting different underlying constructs, and are subject to different sources of measurement error (OECD, 2013^[7]).

Existing country practice in measuring eudaimonia

Findings relating to OECD country practice in measuring eudaimonia are somewhat similar to affect in that there has been similar rates of take-up (or lack thereof) of OECD recommendations. However the particular aspects and concepts of eudaimonia that are measured are even less harmonised. Still, some countries have adopted the indicator included in the *Guidelines* core module: six OECD countries collect these data regularly, while another five have done so on an ad hoc (or now discontinued) basis (Table 3.2).

Table 3.2. Some countries collect data on feeling one’s life is meaningful or worthwhile, but these data are not collected frequently

Country	Survey	Frequency	Question text
Canada	Canadian Social Survey	Quarterly, beginning 2021	To what extent do you feel the things you do in your life are worthwhile?
Denmark	Quality of Life Survey	One-off, 2015	Overall, to what extent do you feel the things you do in your life are worthwhile?
Eurostat	EU-SILC ad-hoc module on well-being	One-off, 2013	Overall, to what extent do you feel the things you do in your life are worthwhile? [translations varied slightly across countries]
Ireland	QNHS special module on Volunteering and Wellbeing	One-off, 2013	To what extent do you feel the things you do in your life are worthwhile?
Japan	Quality of Life Survey	Annual from 2011-2013	I generally feel that what I do in my life is worthwhile
Korea	Korea Social Integration Survey	Annual	Overall, to what extent do you feel the things you do in your life are worthwhile?
Mexico	BIARE (Básico)	Quarterly	I usually feel that what I do in my life is worthwhile
New Zealand	General Social Survey	Every 2 years	To what extent do you feel the things you do in your life are worthwhile?
Norway	Quality of Life Survey	Annual	All in all, to what extent do you feel that what you do in life is meaningful?
Switzerland	Survey on Psychological Health and Support Services	One-off, 2022	Overall, to what extent do you feel the things you do in your life are worthwhile?
United Kingdom	Opinions and Lifestyle Survey (+ many others)	Quarterly	Overall, to what extent do you feel the things you do in your life are worthwhile?

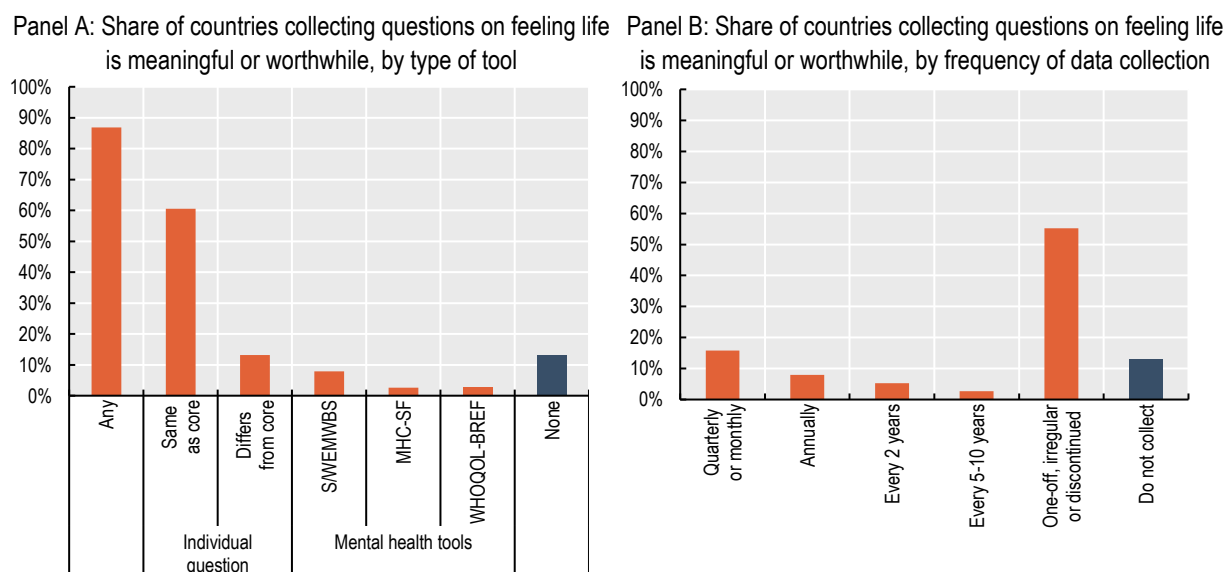
Note: Only eudaimonic questions that correspond to core module recommendations for question phrasing and answer scale (0-10) are included. Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

Yet even if the majority of OECD countries have not fielded the exact question in the *Guidelines*, almost all have – at least one time – included a question asking respondents how meaningful or worthwhile their life is (Figure 3.6, Panel B). Sometimes these indicators come from mental health tools – especially those from the positive psychology field, designed to measure mental flourishing, positive mental health or psychological well-being – however more often than not, these are individual questions that are not a part of a larger screening tool (Figure 3.6, Panel A).

Eudaimonia is an umbrella term that hosts many concepts beyond a single question relating to whether or not one’s life has meaning (Section 4 unpacks this challenge in greater depth). Recall that the *Guidelines* defined eudaimonia as “a sense of meaning and purpose in life, or good psychological functioning” (OECD, 2013^[7]): a description that leaves room for alternate measurement approaches. Indeed OECD countries are already active in collecting data on concepts that fall under this broader definition. These data collection efforts are grouped into the mostly commonly reported categories in Figure 3.7, and show that over one-fifth of countries collect data relating to hope and optimism; self-determination; ability to cope; and self-esteem.

Since the onset of the COVID-19 pandemic, mental well-being has moved up the policy agenda for many OECD governments (OECD, 2021^[5]; OECD, 2021^[88]; OECD/European Union, 2022^[89]). Many of the measures commonly used to assess mental well-being contain individual indicators with eudaimonic aspects. For example, the Short Warwick-Edinburgh Mental Well-being Scale (SWEMWBS), used by six OECD countries (OECD, 2023^[14]), is a seven-item scale containing questions relating to feeling optimistic, useful, relaxed, able to cope with problems, clear-headed, close to others and able to make up one’s own mind. Given its growing use over the past few years, it may be worth re-engaging official data producers on the topic of eudaimonia more broadly, given shifting societal attitudes towards mental health and psychological thriving, and openness in talking about feeling meaning, worth and value.

Figure 3.6. Countries collect indicators on heaving a meaningful life, using a variety of question phrasing, and some from positive mental health tools

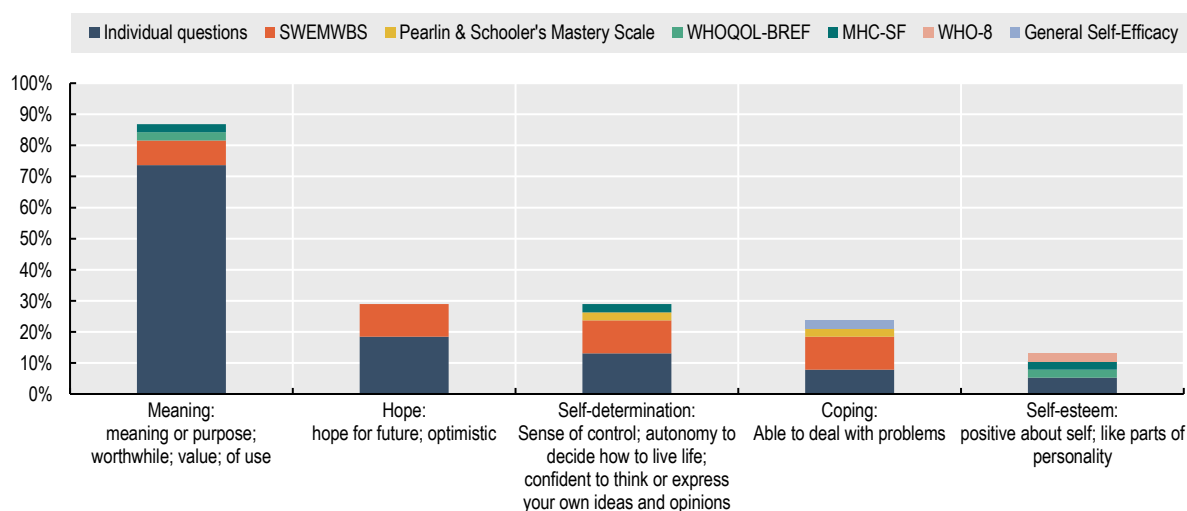


Note: Both panels show countries collecting an indicator on living a life that is “meaningful”, “worthwhile”, or “full of value”, or “of use”. These figures show the indicator that is collected most frequently, per country. For a detailed list of which indicators, from which surveys, are considered, refer to Table A.12 in the Annex. Note that in 2013, the EU-SILC ad-hoc well-being module included a eudaimonic question in line with the core module recommendations, however, the question was dropped from the 2018 iteration of the well-being module and will not be fielded again in future. This result is driving the high share of countries collecting this indicator using “individual questions, same as core” in Panel A, and in “one-off, irregular or discontinued” surveys in Panel B.

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

Figure 3.7. Beyond meaning, countries capture other facets of eudaimonia often as a part of positive mental health tools

Share of countries collecting data on different facets of eudaimonia, by type of tool used to capture said concept



Note: These figures show the indicator that is collected most frequently, per concept, per country. For a detailed list of which indicators, from which surveys, are considered, refer to Table A.12, Table A.13, Table A.14, Table A.15 and Table A.16 in the Annex.

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

Conclusion

An overview of existing OECD country practice in the measurement of subjective well-being shows that significant progress has been made over the past decade, especially regarding life satisfaction. Almost all OECD countries collect life satisfaction data in a harmonised way, and over 80% do so at least annually. These early findings suggest that in this domain, the *Guidelines* have been followed without major issue and suggests there is little in those recommendations to be reassessed.

When considering affect, most countries are collecting data with respect to the recommended emotions – happiness, worry or anxiety, and depression – however they are doing so in non-standardised ways; or in fact, are converging on instruments (regarding answer scales and recall period) that differ from OECD subjective well-being recommendations on affect, even if the tools used are consistent with OECD work on population mental health. There are outstanding methodological questions as to whether single item questions (i.e., feeling happy over the past four weeks) can be extracted from longer mental health modules (the MHI-5) and reported or analysed individually without sacrificing psychometric validity. Future OECD measurement work could explore this question in greater depth, to provide recommendations or good practices for official data producers who currently report on emotional or affective states in this way.

Finally, for eudaimonia there is a general lack of harmonisation across countries, perhaps in part due to the lack of conceptual clarity on what precisely eudaimonia is. Concepts of meaning, autonomy, self-esteem and optimism often appear in mental health modules – especially those with a focus on positive mental health – all of which have seen growing interest and uptake in recent years. This suggests the time may be right to re-engage official data producers in conversations about how best to field eudaimonic concepts in household surveys. Findings from practice help direct future work, in the sense that the convergence around OECD recommendations for life satisfaction data mean there is little need, or desire, to change practice. Findings from affect and eudaimonic measurement, however, suggest that future efforts by the OECD to clarify, expand or rework recommendations for these indicators would perhaps be welcomed.

4 New frontiers of subjective well-being measurement

The purpose of earlier sections of this paper was to highlight what countries are currently doing, in terms of measurement and application of subjective well-being data. In this section, the focus shifts, by providing some suggestions for exploratory analysis of new areas in the measurement of subjective well-being data. This is done by reviewing advances in the academic and grey literature that have been published in the years following the introduction of the *Guidelines*. Potential areas of further study include different ways of conceptualising aspects of subjective well-being – with a special focus on affect and eudaimonia; the inclusion of additional domains of subjective well-being; extended or new modules that develop measures tailored to specific population groups, or explore concepts from new viewpoints; new sources of data; and methodological issues concerning validity and reliability of the data. Throughout, we have a cross-cutting interest in ensuring that the measures chosen resonate with, and are inclusive of, all population groups globally.

Each topic area in and of itself could justify an in-depth treatment, however the goal of this scoping work is to identify areas that are most salient to the core module of the original *Guidelines* (Figure 3.1), or if not ready to enter into the core, then important areas that should be explored further in supplementary modules. The question underpinning this exercise is: does this new evidence highlight important gaps in existing OECD recommendations, or reveal ways in which the original recommended indicators have been shown to be sub-par? The goal of the recommended modules is for widespread inclusion of these data in population surveys, therefore when narrowing the focus to a short-list of areas for future in-depth measurement work, we are guided by three important criteria:

- **Consistency:** There is significant value in having generally agreed-upon statistical standards, and very little value – indeed potential harm – in changing things that do not need to be changed. At this point, many countries have been collecting subjective well-being data for close to a decade, across multiple survey vehicles. Any changes to the way in which a question is framed will lead to breaks in time series data and potentially differences across surveys, which then limits the ability to make comparisons over time and between surveys. Thus, changes to the way an indicator question is framed, or changes to answer scales, should be done so only if there is compelling evidence that the current recommendations are leading to biased and invalid data. The threshold for making changes is high, given the costs for doing so.
- **Brevity:** Space for new questions on existing surveys comes at a high premium. If the goal is for subjective well-being data to be used to inform policy, then these indicators must be fielded frequently, and across a broad array of survey types (general social surveys, health surveys, labour force surveys, surveys for special interest groups, etc.). Simply put, a standardised core module will only be adopted in full by national statistical offices if it is kept extremely brief. In terms of the OECD recommended core module, this may mean that if a new indicator is added, there is a need to drop an existing indicator to keep the module to five questions maximum: i.e., a “one in, one out” approach.

- **Value-add:** Any newly added indicator should be policy relevant, and should have predictive power beyond that of existing measures. That is, if a new measure is highly correlated with life satisfaction, it is difficult to justify why this new metric should be added to the core – taking up valuable space – if in practice, it provides no additional value-add to data users and/or policy makers beyond what life satisfaction can already do.

The remainder of this section introduces a series of new frontiers for subjective well-being measurement – including some areas that would not meet the criteria listed above for changes to the core but which are still important to explore – and culminates in the concluding section with recommendations for a short list of three areas for the focus of future OECD measurement work. This section raises questions that merit future research, but does not provide definitive answers or concise recommendations; rather, the goal is to survey the landscape of possible research avenues to select a few areas to delve more deeply into in future work. In evaluating each workstream, in addition to the above three criteria we do so with an eye to increasing the global inclusivity of subjective well-being measures. The core module is designed for widespread use: by NSOs, yes, but also by any data producer interested in measuring subjective well-being, including local governments, NGOs or community organisations or private businesses. International measurement recommendations should aspire to capture concepts that have meaning for and are valued by all population groups, in all countries. Evidence to the contrary, suggesting that measures may be inadvertently tailored to one population group over another – for example, a Western bias – would also be grounds for revisiting the recommendations.

Striking the right balance on affect

The findings from current country practice show that there is a lack of harmonisation around the collection of data on affective states. In some instances, international harmonisation seems to be coalescing around mental health tools that use different forms of question framing, longer recall periods, and Likert as opposed to 0-10 answer scales. These divergences from the *Guidelines* suggest that the core module recommendations may not be working as best as they could, and might benefit from further review.

Additional affective states for potential inclusion

Results in Section 3 show that all OECD countries are collecting data on depression and worry or anxiety, and almost all do so for happiness, therefore there seems to be general agreement on the utility of collecting information about these affective states. Yet there may be other emotions or states, not included in the original recommendations, that are just as important. The *Guidelines* included only three affect questions in the core module, however included an expanded list of ten affect questions for data producers with more space and interest (see (OECD, 2013_[7]), refer to Box B.3). Figure 4.1 shows the share of OECD countries collecting each of the ten affective states, by frequency of data collection.

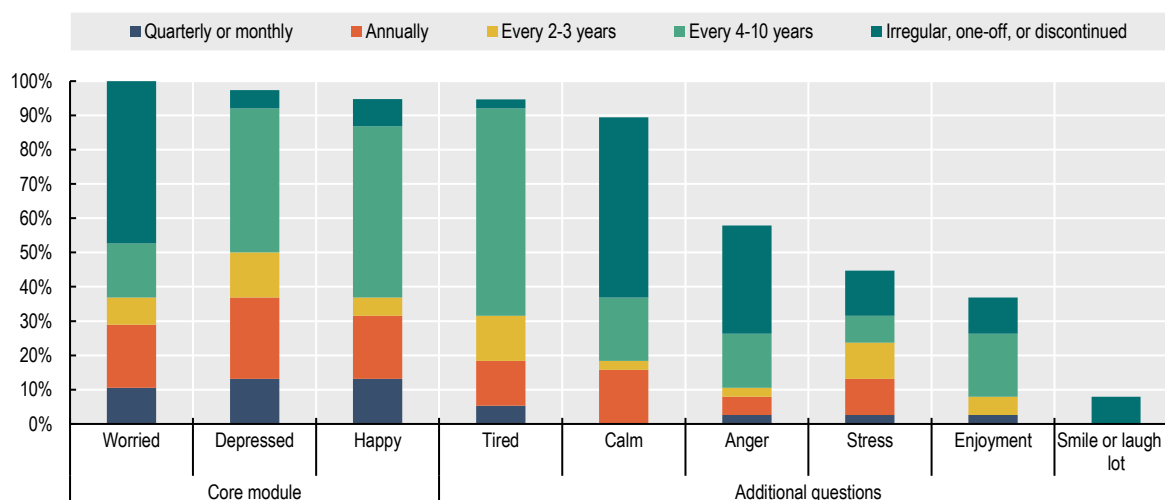
These results show that the majority of OECD countries are already collecting data on emotional states beyond the three core recommendations: questions about feeling tired or calm are most frequently collected (by 95% and 89% of countries, respectively), followed by feelings of anger (58%), stress (45%) and enjoyment (37%). Questions about feeling tired almost always appear in screening tools for depression.¹⁴ As almost all OECD countries collect data on depression (see Figure 3.4, but also (OECD, 2023_[14]) and (OECD, 2021_[90])), it is therefore not entirely surprising that there is such a high prevalence of data collection for feeling tired. Indeed, in looking at the source information for many of these affective

¹⁴ See, for example, the questions that make up the Patient Health Questionnaire (PHQ), which measures the share of those at risk for major depressive disorder. The PHQ-8 is included in the European Health Interview Survey (EHIS) and as such is available for all OECD countries participating in Eurostat; many non-European OECD countries also use some form of the PHQ. See Chapter 2 of (OECD, 2023_[14]) for more details.

states it is clear that the indicators tend to be part of longer mental ill-health screening tools or positive mental health (see Annex Table A.3 to Table A.11 for detailed information), rather than stand-alone questions.

Figure 4.1. Aside from the core affective states, most countries also collect data on feeling “tired” or “calm and relaxed”, and over half collect data on anger

Share of countries collecting affect indicators, by emotional state and frequency



Note: Most countries capture each affective concept through a variety of different indicators and screening tools. These figures show the indicator that is collected most frequently, per country. For a detailed list of which indicators, from which surveys, are considered, refer to Table A.3 through Table A.11 in the Annex.

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

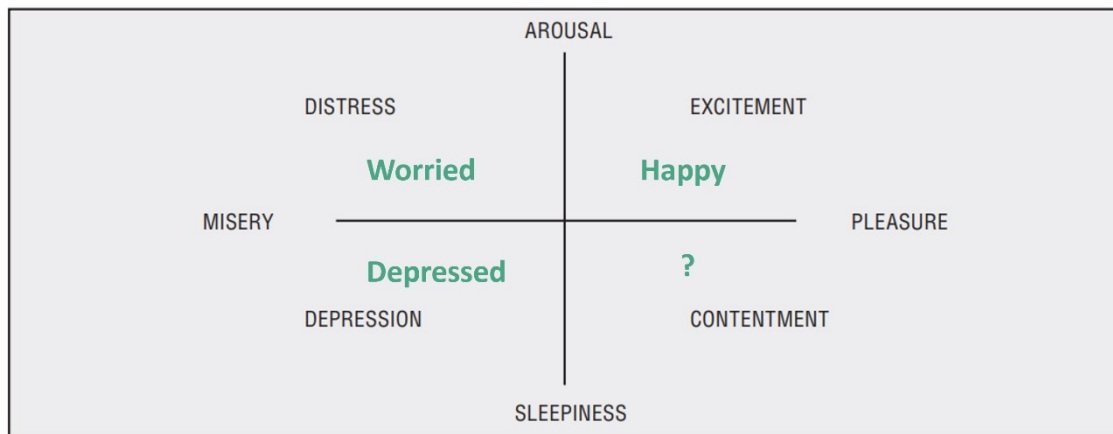
Figure 4.1 includes only the affective states outlined in the extended *Guidelines* module, but it could be that there are other concepts not included in the first iteration that should be considered for future inclusion. One consideration is the affective experience of love: data from the Gallup World Poll shows its widespread importance across countries (Wolfers, 2013^[91]). Another such state is pain: both physical pain and psychological suffering. Physical pain is not only associated with greater strains on the health care system, but also with an increased prevalence in mental health conditions, alcoholism, over-prescription of opioids, suicide and premature mortality (Case, Deaton and Stone, 2020^[92]). Rates of emotional distress and physical pain have been rising in recent decades (Daly and Macchia, 2023^[93]; Chou, Parmar and Galinsky, 2016^[94]), and furthermore, are not shared equally across society: those without a university education are much more likely to experience pain, and the gap is widening (Case and Deaton, 2020^[95]). Research in the United States has established a causal link between economic insecurity and physical pain – with feeling a of loss of control serving as the mediating factor between the two (Chou, Parmar and Galinsky, 2016^[94]). A separate study, using data from 146 countries, found that rates of physical pain are highest in wealthier countries experiencing an economic downturn, supporting the hypothesis linking economic worries to pain (Macchia and Oswald, 2021^[96]).

Given its importance for overall well-being, researchers in the field have called for physical pain to be given greater prominence in policy conversations, and are encouraging governments to collect and publish data on pain more frequently – perhaps in national well-being initiatives (Macchia, 2023^[97]). Some OECD countries have included physical pain in time use surveys or modules on feelings the day prior; pain is also included in the annual Gallup World Poll. Feeling physical pain, or having pain such that everyday activities are affected, are indicators often included in health surveys (for example, EHIS has an entire section on

bodily pain). In addition, most screening tools for depression and anxiety include indicators relating to somatic symptoms, including headaches, stomach aches, fatigue, dizziness and dry mouth.

Moving beyond country practice, it may also be useful to look at theory to inform the possibility of adding new affective states, or identifying those that may be missing. Figure 4.2 shows the circumplex model of affect, which highlights the nexus between positive and negative emotions on the one hand, and low vs. high arousal on the other (OECD, 2013^[7]; Larson and Fredrickson, 1999^[98]). The resulting figure contains four quadrants; by overlaying the three affect questions from the core module it is clear that a metric for low-arousal positive states is missing. This omission was a purposeful choice, based on research suggesting that positive affect questions are closely correlated with one another, whereas negative affect questions are less so (OECD, 2013^[7]; National Research Council, 2013^[45]). For the sake of brevity, only three affect questions (high arousal positive affect, and both low and high arousal negative affect) were recommended in the original *Guidelines*.

Figure 4.2. The circumplex model of affect



Note: Figure taken from OECD (2013^[7]), which itself was a derivation of Russell (1980^[99]). The three affect measures recommended in the core module are overlaid on top of each corresponding quadrant.

Source: OECD (2013^[7]), *OECD Guidelines on Measuring Subjective Well-being*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264191655-en>.

But might there be new evidence suggesting that low arousal positive affect is distinct from high arousal? There has been some research in this area over the past few years that suggests the utility in re-engaging with this literature. One strand of literature, for example, suggests that low arousal positive affect – and more specifically, feeling calm, relaxed, peaceful etc. – may be particularly important and desirable states for some population groups. In oft-cited research, Tsai and colleagues find that East Asian cultures (including Asian American as well as Hong Kong Chinese and Taiwanese population groups) may place higher value on low arousal positive affect measures as compared to European Americans (Tsai, Knutson and Fung, 2006^[100]; Tsai, 2007^[101]; Oishi, 2018^[102]; National Research Council, 2013^[45]). The implication from these findings, then, is that the original affect module of the *Guidelines* may be too Western focused in its recommendations, and is missing an important and highly weighted outcome measure for certain population groups.

However other research suggests that low arousal positive affect is a universally relevant outcome. The Global Well-being Initiative, a collaboration with Gallup, has introduced a series of low arousal positive

affect indicators to the latter's annual World Poll.¹⁵ Early findings from this work suggest that low arousal positive emotions such as feeling calm, at peace and balanced are prevalent and important globally, and not only of particular relevance for East Asian communities. Furthermore, factor analysis of high arousal positive emotions (e.g., excitement) and low arousal positive emotions (e.g., calm) suggest two separate latent constructs, furthering the idea that low arousal positive emotions are a distinct phenomenon, worthy of measurement in their own right (Lomas et al., 2022_[103]). Psychological studies on the interaction between hormones and well-being may support this finding as well. Research on adolescent sleep behaviour suggests that the association between cortisol and positive affect is multidimensional: high arousal positive affect is more associated with lower cortisol levels around bedtime than is low arousal (Hoyt et al., 2015_[104]; Rector and Friedman, 2018_[105]).

When considering additional affective states to measure, the target concept likely shapes the way in which measurement is conducted, be it the survey question framing, answer format, module placement, etc. Future research should also focus on better understanding variation in practical data collection needs across different types of affective states. These aspects also interact with the time dimension of affect measurement (that is, the recall period), which is covered in the subsequent section, along with considerations of data collection practicalities such as survey vehicles and modalities.

A consideration of the time dimension in affective measures

Another consideration of affect measures is the time dimension. A focus on the time dimension may be particularly relevant given findings in current country practice (refer to Section 3). In light of the limited uptake of the “yesterday” framing, as recommended for the affect indicators in the core module, future work should review this question formulation, while also considering how to ensure affect measurement recommendations in the subjective well-being *Guidelines* are sufficiently distinct from, and complementary to, OECD recommendations on the use of mental health screening tools (OECD, 2023_[14]), so as to avoid duplication in data collection efforts.

Recall that the *Guidelines* divides subjective well-being into three domains: evaluative, affective and eudaimonic. While a useful taxonomy, it may be that the time dimension distinction has become secondary. The time dimension is particularly relevant for affect in distinguishing between experienced well-being and evaluative well-being (National Research Council, 2013_[45]). The key difference in this conceptualisation is time: experienced well-being is the measurement of affective states *as they are being experienced in the moment*, whereas the evaluative component is an overall assessment of one's life, or emotional bearing, in general. Behavioural economic research has shown that the so-called remembering self (the evaluative component) and the experienced self are distinct (Kahneman and Riis, 2005_[106]): retrospective assessments of one's experiences are heavily influenced by intensity of emotion (e.g., of pain) (Redelmeier and Kahneman, 1996_[107]), or of how recent the experience was (Kahneman, 2000_[108]; Dolan, Kudrna and Testoni, 2017_[109]; Miron-Shatz, Stone and Kahneman, 2009_[110]). This was the rationale for the *Guidelines* affect recommendations to focus on a recall period of yesterday: to better approximate the experiencing self. (A two to four-week recall period, used by mental health tools, may indicate that responses are from the remembering rather than experiencing self, yielding a different set of outcomes.)

From an inclusivity lens, some research suggests that cultural differences appear more frequently in evaluative measures – and grow with the time period length – but are less likely to influence experienced well-being measures. For example, Oishi (2018_[102]) finds that online reports of positive emotional experiences – when the questions are tailored to specific situations and recently occurring events (i.e., shorter recall periods) – are less likely to be influenced by cultural norms than are global reports (i.e.,

¹⁵ Relevant questions from the 2022 Gallup World poll include: “Did you experience the following feelings during a lot of the day yesterday? ... How about Calmness?”; “In general, how often do you feel stable and secure in your life? ...are you content? ... is your mind at ease? ... can you find inner peace during difficult times?” (Lomas et al., 2022_[157]).

general assessments of how happy a person is, or should be). This research is primarily based on comparisons between East Asian (Japanese, Korean) and European American populations: more research should be done to better understand how culture influences evaluative vs. experienced assessments of one's emotional state. There is a robust literature investigating the differences in emotional expression across cultures, summarised in Exton, Smith and Vandendriessche (2015_[111]).¹⁶ This research suggests that culture may be particularly impactful for affective measures, or at least more so than an evaluative or eudaimonic indicator. Whether emotional expression varies by the recall period of an affective measure should be explored further. (For a more detailed discussion of how to expand subjective well-being measurement to be more globally inclusive – including a consideration of differences in the types of outcomes that are valued – refer to the below section, “Experimental module on new approaches: More globally inclusive measures”.)

Two recommended methods for collecting experienced well-being are *Experienced Sampling Methodologies* (Larson and Csikszentmihalyi, 2010_[112]), in which respondents note their emotions throughout the day as they complete a series of activities, and the *Day Reconstruction Method* (Kahneman et al., 2004_[113]), in which respondents recall their emotions from the day prior (refer to (OECD, 2013_[7]) for an extended discussion of each, including issues of validity). Both methods enable researchers to link emotions to activities, but the sampling method for affective states differs. In its core recommendations, the *Guidelines* suggest using a single day recall period – i.e., how a respondent felt *yesterday* – to marry practicalities of data collection in household surveys with best practice. However, in addition to the affect measures in the core module, the *Guidelines* also included a separate supplementary module (Figure 1.6) for inclusion in time use surveys, using either the Day Reconstruction Method (DRM) (which involves seven questions on emotional states during given points in time the day prior) or a single item instrument asking about how pleasant an experience was in the context of a time use diary. Although there are important trade-offs between these two approaches in terms of respondent burden and the amount of detail collected on affective valence, both approaches generate largely comparable data (Flèche and Smith, 2017_[114]).

The *Guidelines* recommendations were in part based on practicalities of data collection at the time of its writing. National statistical offices do conduct time use surveys, however they are time intensive and expensive to conduct. However, the advent of electronic data collection, and in particular, the ability to integrate smartphones into data collection practice within NSOs and among other official data producers, have facilitated the collection of experienced well-being measures. In the United States, the American Time Use Survey (ATUS) uses Day Reconstruction Methods to assess the amount of time people spent on given activities; in its irregular well-being iterations (most recently in 2021), the ATUS includes questions on the extent to which respondents felt a range of emotions¹⁷ while engaged in randomly selected activities (U.S. Bureau of Labor Statistics, 2022_[115]). Statistics Canada is currently engaged in a pilot time use project using experienced sampling methods. The Pilot Study on Everyday Well-being collects data through a smartphone app (the Vitali-T-Stat by Statistics Canada); the app randomly pings respondents throughout the day and asks them to note where they are, what activity they are engaged in and how they feel.¹⁸ Statistics Canada plans to use this to better understand what daily activities – and particularly those relating to arts and culture – impact well-being (Statistics Canada, 2021_[116]).

The lack of country take-up of *Guidelines* recommended affect measures in general household surveys, and the more widespread use of mental health derived tools, suggest that there may be scope for revisiting

¹⁶ Differences in the *intensity* of reporting affective states is one of the reasons underpinning the use of affect balance measures, rather than separate indices of positive and negative affect.

¹⁷ Affective states include: happy, tired, stressed, sad, pain and feeling that the activity is meaningful (U.S. Bureau of Labor Statistics, 2022_[115]).

¹⁸ Affective states include: happy, anxious, relaxed, focused and in control of one's emotions (Statistics Canada, 2021_[116]).

the OECD approach to affect measures. It may be that these measures are of greatest value to policy makers when integrated in time use surveys; and furthermore, that advances in digital sampling techniques and smartphone apps have made gold-standard measures for experienced well-being measures more cost effective for data producers, including NSOs (de Vries, Baselmans and Bartels, 2021^[117]). Future OECD work could explore more explicit time use survey recommendations.

This leaves an open question as to whether and how affective questions can be integrated into the short, core module for inclusion in household surveys. In following country practice, it could be that aligning these measures with the mental health literature, to ensure they provide complimentary rather than duplicative information, is more appropriate and provides more value add. This would also have the benefit of better aligning subjective well-being measurement with concurrent OECD work in recommending measures to capture population mental health outcomes (OECD, 2023^[14]).

Seeking the most meaningful measures of eudaimonia

In the original *Guidelines*, the concept of eudaimonia was more loosely defined as compared to the other two domains. Eudaimonia is described as “a sense of meaning and purpose in life, or good psychological functioning” (OECD, 2013^[7]). The recommendation in the core module focuses on the first aspect – a sense of meaning and purpose – and this conceptualisation of eudaimonia has spread across national well-being measurement practice¹⁹. However, this indicator covers just the first part of the definition. The second half of the definition, “good psychological functioning”, covers a great deal more. This begs the question: are there important eudaimonic concepts that are missing from the *Guidelines*, that should be explored further?

The concept of eudaimonia far predates the *Guidelines* and has a rich history in philosophy and psychology. According to some the concept in its initial formulation from Aristotle centres on knowing oneself, and striving to realise one’s potential (Ryff, 2014^[118]): it implies a sense of virtue or personal excellence. Another school of thought focuses on the concepts comprising self-determination theory (discussed in the sub-section below), including autonomy, competence and relatedness (Ryan and Deci, 2000^[119]); and a third describes eudaimonia as a feeling and condition relating to self-realisation (Waterman, 1993^[120]). While some schools of thought share some degree of similarity, especially in the focus on nature fulfilment, there is no clear consensus on how to operationalise this in the form of concrete survey measures. In a 2016 review, Vittersø outlines thirty alternate ways of defining eudaimonia, in addition to the aforementioned definitions, which he terms the “big three” (Vittersø, 2016^[121]). Separately, a 2019 review of the literature found over 45 different ways of measuring eudaimonia (Martela and Sheldon, 2019^[122]). Given the relative lack of take-up of the *Guidelines* recommended indicator (recall Table 3.2), it may be worth considering whether a different measure, or set of measures, could better encompass the full meaning(s) of eudaimonia.

In looking at country practice, we see that countries are already collecting indicators on concepts relating to self-esteem, optimism, autonomy, coping and self-efficacy (Figure 3.7). Some research shows that emotional intelligence and certain personality traits are correlated with better mental health, positive affect and life satisfaction (Domínguez-García and Fernández-Berrocal, 2018^[123]; Sánchez-Álvarez, Extremera and Fernández-Berrocal, 2015^[124]; Inwood and Ferrari, 2018^[125]; Morelli, Lieberman and Zaki, 2015^[126]),

¹⁹ Examples of national well-being initiatives with comparable measures for eudaimonia include those of Canada, Ireland, New Zealand, Norway, Spain and the United Kingdom (see Table A.1 for details of each well-being framework). Other countries take a different approach. For example, Israel includes an indicator about expectations that life will improve in the future. In its BIARE Básico well-being survey, Mexico includes a section on eudaimonia containing battery of eleven questions covering topics relating to self-esteem, optimism, autonomy, self-determination, feel things one does have meaning, sense of achievement and ability to cope (INEGI, n.d.^[179]).

although evidence is thus far relatively scarce. Academic explorations of the measurement of eudaimonia have found that indicators capturing meaning or purpose, optimism, autonomy, competence, relatedness and engagement are most common (Martela and Sheldon, 2019^[122]). Below, two additional concepts – hope/optimism and self-determination theory (comprising autonomy, mastery and relatedness) – are briefly touched upon, however more work should be done to see how these measures perform in comparison to that already included in the core module, and to gauge the extent to which these concepts are *outcomes* in and of themselves, rather than the *drivers* of these outcomes or personality traits.

Hope and optimism

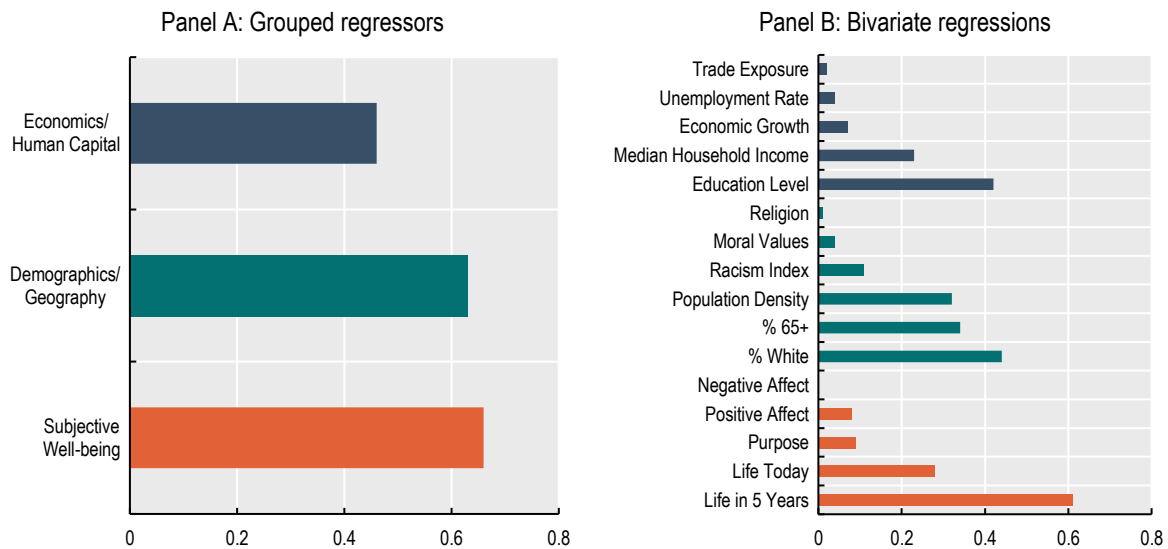
Hope and optimism are closely related to one another, and though they may at times be grouped together as a single trait or state in the psychology literature (Peterson and Seligman, 2004^[127]), other studies argue that the concepts are distinct (Bruininks and Malle, 2005^[128]). Optimism is associated with lower levels of anxiety, exerting more effort and engagement in tasks, and stronger social connections (Dolcos et al., 2016^[129]; Carver and Scheier, 2014^[130]); hope has been found to be correlated with a greater likelihood to invest in one's life, with a lack of hope leading to worse labour market, educational and marital outcomes, and a higher likelihood of incarceration (Graham and Pozuelo, 2018^[131]; Graham, 2017^[132]). Both are found to promote greater resilience in the face of traumatic events, an increased ability to cope and adapt, and are associated with better physical health outcomes, lower morbidity and greater life expectancy (Gallagher, Long and Phillips, 2020^[133]; Carver and Scheier, 2014^[130]).

There are a number of existing tools to measure hope and/or optimism, some of which countries may already be collecting. Examples include single-item questions, such as asking respondents to anticipate how satisfied they expect to be with their lives in five years' time, or self-identifying as an optimistic person. Indeed, the original *Guidelines* included the question "I'm always optimistic about my future" in its longer experimental eudaimonia module (though the question does not appear in the core module) (see Figure 1.4).²⁰ Some national well-being initiatives include a measure of hope or optimism. For example, in its annual *Well-being and Sustainability* (BES) publication, Italy reports on the share of people who believe their personal situation will improve or deteriorate over the next five years (IStat, 2022^[134]); in the United Kingdom, the ONS has recently updated the indicators making up its *Measures of National Well-being*, and has identified "hope for the future" as a priority indicator for future development (ONS, 2023^[63]). Longer scales or screening tools also exist, such as the Positive Orientation Scale, and positive mental health tools including the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) include individual question items relating to feeling optimistic about the future (OECD, 2023^[14]).

Hope and optimism have predictive power for a range of topics, include the aforementioned areas of investment in one's future, mental health outcomes and overall physical health and longevity. However new research has also found strong links between hope and voting behaviour. As is shown in Figure 4.3, Ward et al., (2021^[135]) find that when considering a respondent's likelihood to vote for Donald Trump during the 2016 United States presidential election, the predictive power of subjective well-being outcomes was greater than that of economic and human capital, and more or less on par with demographic and geographic considerations (Panel A). In unpacking these bundled outcomes, however, it becomes clear that by far the strongest predictor of a vote for Trump is how hopeful (or rather, how unhelpful) the respondent is for the future, as measured by their expectations for how satisfied they will be with their lives in five years' time (Panel B). This measure has more than double the predictive power of household income. Extensions to this research find similar results for populist voting patterns elsewhere: in the 2017 French presidential election, voters for Marine Le Pen had low levels of current subjective well-being and pessimism towards the future (Ward, 2019^[28]).

²⁰ The life evaluation extended module also contains a question relating to hope or optimism for the future: "As your best guess, overall how satisfied with your life do you expect to feel in 5 years' time?"

Figure 4.3. Hope for the future, or lack-there-of, was the strongest predictor of voting for Donald Trump in the 2016 presidential election



Note: Figures are taken directly from (Ward et al., 2021^[135]). Each horizontal bar shows the R² value from separate regressions with “Trump vote swing” as the dependent variable. Subjective well-being data are county-mean values sourced from the Gallup Daily Poll, from January 2009 and October 2016.

Source: Ward, G. et al. (2021^[135]), “(Un)happiness and voting in U.S. presidential elections”, *Journal of Personality and Social Psychology*, Vol. 120/2, pp. 370-383, <https://doi.org/10.1037/PSPI0000249>.

Self-determination

As was shown in Section 3’s review of country practice, many OECD member states are collecting data on concepts relating to autonomy and competence. These two concepts, along with relatedness, comprise the necessary inputs for human wellness as described by self-determination theory (Ryan and Deci, 2000^[119]). The original *Guidelines* extended module on eudaimonia includes indicators touching on autonomy and competence, however a measure of relatedness – a sense of belonging, having supportive and nurturing relationships – is not included.²¹ Evidence has shown the importance of self-determination theory in a variety of contexts, for example in improving outcomes in healthcare settings (Ng et al., 2012^[136]), and research has illustrated how the three components of self-determination theory are requirements for psychological well-being across different countries and cultural contexts, even when controlling for socio-demographic factors (Chen et al., 2015^[137]; Church et al., 2013^[138]; Martela et al., 2023^[139]). Increasingly, researchers are calling for its inclusion in subjective well-being frameworks and national well-being measurement initiatives (Martela and Ryan, 2023^[140]; Fabian, 2022^[141]).

Many mental health screening tools capture aspects of self-determination theory, with indicators covering aspects of autonomy, competence and relatedness appearing on positive mental health tools such as the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) and the Mental Health Continuum Short-Form (MHC-SF), in addition to other mental health adjacent tools such as Pearlin and Schooler’s Mastery Scale. Many of these scales are lengthy, each containing more indicators than the length of the entire *Guidelines*

²¹ For autonomy, “I am free to decide for myself how to live my life”, and for competency, “Most days I get a sense of accomplishment from what I do” (see Figure 1.4). One reason for the lack of inclusion of a relatedness concept is that the quantity and quality of social relationships are captured in a separate dimension of the OECD’s Well-being Framework, that of social connections (see Figure 1.1). Refer to the next sub-section on “Social and communal well-being” for a discussion on ways that social well-being might be captured in the subjective well-being dimension.

core module. On-going work in validating single-item questionnaires for each component of self-determination theory may enable these concepts to be included in general, more high frequency, population surveys (Martela and Ryan, forthcoming^[142]).

When viewed from the global inclusivity lens, it may also be instructive to contemplate self-determination – and specifically, the autonomy sub-component – from a communal level, and to consider the viewpoint of Indigenous peoples. Policy statements in Australia, Canada and New Zealand stress the importance of autonomy and self-determination for Indigenous communities (examples below). Given the histories of colonisation, oppression and lack of self-representation, communal self-determination and ability to decide for one’s own community how to govern oneself, use one’s resources and determine one’s own future are of particular importance to Indigenous groups (Yap and Yu, 2016^[143]). Indeed, governments of OECD countries with significant Indigenous populations have made explicit statements outlining the need for, and inherent right to, communal self-determination:

- *Australia*: “**Self-determination** is central to the provision of Aboriginal and Torres Strait Islander health services” (Australian Government, 2017^[144]).
- *Canada*: “As stewards and rights-holders of land and resources—and with a young, dynamic, and growing population—Indigenous communities play a vital role in our shared economic recovery and in achieving our long-term environmental goals. This path to shared prosperity, however, must be founded on a recognition of Indigenous peoples’ inherent right to **self-determination**” (Department of Finance, 2022^[145]).
- *New Zealand*: “The whānau-centred approach Te Puni Kōkiri uses advances the following core characteristics: a focus on whānau at the centre; holistic wellbeing; effectiveness based on outcomes; **self-determination and autonomy**; strengths-based methods; effective relationships; basis in te ao Māori and kaupapa Māori; integrated systems; supportive environment” (Te Puni Kōkiri and the Treasury, 2019^[146]).

These government statements address concrete legal concepts of self-determination and autonomy, which are of course distinct from psychological theory. However the importance, and influence, of a historical lack of community autonomy does influence one’s own ability to function well and thrive. Furthermore, there may not be a clear delineation between individual and communal autonomy or self-determination from a subjective well-being perspective. New Zealand provides an instructive insight into how these concepts can be operationalised in a survey context, and highlights this interplay between individual- vs. communal-level focal outcomes. In applying an Indigeneity lens to the country’s *Living Standards Framework*, the Treasury showcases indicators – some already available from other official surveys, some that would need to be developed further – that are able to convey key points of information as to whether whānau²² are empowered to self-manage (Table 4.1).

²² Whānau is a Maori word that loosely translates to “family”, although typically is viewed as extending well beyond the nuclear family to include extended family members and others connected to the family. The Encyclopedia of New Zealand defines whānau as including “physical, emotional and spiritual dimensions and is based on whakapapa [genealogical table]. Whānau relationships include those with whāngai (foster children) and those who have passed on. There are roles and responsibilities for individuals and for the collective. The structure of whānau can vary from immediate family to much broader collectives. The most important features of whānau that distinguish it from family and other social groupings are whakapapa, spirituality and the responsibility to marae [meeting grounds and hapū [clan]]” (Walker, 2017^[251]).

Table 4.1. Applying an Indigeneity lens to New Zealand’s Living Standards Framework highlights the importance of autonomy and self-determination

Well-being outcomes	Domain areas	Suggested indicators: Already available	Suggested indicators: Needing development
Whānau are self-managing and empowered leaders	<ul style="list-style-type: none"> • Pathways to independence • Sense of purpose • Capability within whānau • Planning for emergencies • Control over their life • Home ownership • Housing stability 	<ul style="list-style-type: none"> • % Feel in control over their life • % Whānau /households that own or partly own their home • % Housing affordability / housing cost • % Living at same house for five years • % Feel a sense of purpose 	<ul style="list-style-type: none"> • % Believe have gained the skills/knowledge to adequately manage their lives • % Believe have gained the skills and knowledge needed to contribute to their whānau/family • % Whānau that are aware of the capability that exists in their whanau network • % Whānau have a household emergency plan • % Whānau /households have home contents insurance • % Aware of their rights and interests regarding assets held in common

Note: Adapted from (Te Puni Kōkiri and the Treasury, 2019^[146]); bolded text added by the OECD Secretariat to identify indicators most closely aligned with the concepts of autonomy and self-determination.

Source: Te Puni Kōkiri and the Treasury, (2019^[146]), *An Indigenous Approach to the Living Standards Framework*, New Zealand Government, <https://treasury.govt.nz/publications/dp/dp-19-0>.

Additional concepts of subjective well-being

The OECD’s framing of subjective well-being as having three constituent parts (evaluation, affect, and eudaimonia) draws on an extensive body of literature and expert consultation. Nevertheless, there are many other conceptual frameworks that often cover similar topics, but arrange the core elements somewhat differently, or introduce additional concepts. Some of the more well-known models come from the field of positive psychology: Martin Seligman’s PERMA (Positive Emotions, Engagement, Positive Relationships, Meaning, Accomplishment) (Seligman, 2018^[147]); Carol Ryff’s Six-factor Model of Psychological Well-being (Ryff, 2014^[118]) – however there are many others (Fabian, 2022^[141]; VanderWeele, 2017^[148]).

The OECD three-factor model has gained a good traction since it was introduced in 2013.²³ However, ten years on, some additional concepts not highlighted in this original framing are worth examining. Two such additional concepts – societal and communal well-being; and feelings of inner peace, balance and harmony – are discussed below. While these may be related, or tangential, to existing subjective well-being outcomes (affect and eudaimonia, in particular), they have thus far not been included in either the core or extended concept-specific modules of the *Guidelines*. These concepts are explored because they frequently appear in the literature, and different OECD countries are experimenting with their measurement; they are not, however, the only additional measures that could be considered. It is left to future work to consider other relevant concepts, including, but not limited to, spiritual well-being, resilience and self-esteem. As per the caveat in the previous section, which introduced new approaches to measuring

²³ Examples of national well-being initiatives containing a subjective well-being component that is structured similarly to the OECD *Guidelines* include Canada’s *Quality of Life* framework (Department of Finance, 2021^[65]), the *Understanding Life in Ireland* well-being framework (Government of Ireland, 2022^[78]), Mexico’s wellbeing surveys including the annual BIARE Básico (INEGI, n.d.^[179]), Norway’s *Quality of Life* surveys (Statistics Norway, 2022^[249]), Spain’s *Quality of Life Indicators* (INE, 2022^[71]); and the four subjective wellbeing measures used by the United Kingdom’s Office for National Statistics (ONS, 2023^[182]).

eudaimonia, the *Guidelines* is primarily concerned with final *outcomes*, rather than the intermediary components, mediating factors, or *drivers* of those outcomes.

Social and communal well-being

Social well-being often appears in mental health screening tools derived from the positive psychology literature, much of which includes aspects of interpersonal relationships as a core part of functioning (recall that relatedness is one of the three components of self-determination theory, for example). Popular positive mental health tools such as the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) and the Mental Health Continuum Short-Form (MHC-SF) contain indicators relating to social functioning.²⁴

The OECD's well-being approach recognises that social relations are a core component of one's overall quality of life, however, it operationalises this understanding by housing "social connections" in a unique, stand-alone domain in the OECD Well-being Framework, making it a distinct dimension from that of subjective well-being (Figure 1.1). The social connections domain includes indicators covering the quantity and quality of people's relationships with friends and family, including a measure of loneliness; the social capital domain for future well-being covers social inclusion (OECD, 2020_[2]). Given that some aspects of social functioning are covered by other domains of the OECD well-being framework, any efforts to add new indicators to the subjective well-being domain should take care to avoid duplication. With that said, there may be certain aspects of social well-being that are not well covered by existing measures in the social connections and social capital domains, and might merit inclusion within subjective well-being as a category.

Beyond how individuals experience their own lives and their social connections with others, some well-being frameworks emphasise well-being as a collective asset or attribute that can be shared by a community. The concept of collective health and well-being²⁵ appears frequently in Indigenous frameworks and understandings of well-being (Yap and Yu, 2016_[143]; OECD, 2020_[149]; Gee et al., 2014_[150]). Again, New Zealand provides an example of how this might be operationalised in a household survey question. Figure 4.4 shows a sample question that originally appeared in *Te Kupenga* – a survey designed to capture the social, cultural and economic well-being of the Māori from their cultural perspective (Statistics New Zealand, 2014_[151]). The question asks respondents how well their *whānau* is doing,²⁶ on a scale from 0 (extremely badly) to 10 (extremely well). In part based on the success of this measure in Māori-specific surveys, New Zealand adapted the question as a general family well-being question and has since included it in the biennial population-wide General Social Survey (GSS), among others (Statistics New Zealand, 2018_[152]).²⁷ Preliminary analytical work suggests that family well-being, while highly correlated with life satisfaction, seems to be distinct, especially in its drivers: an individual's own health and material well-being are stronger determinants of life satisfaction than they are of how well one's *whānau* or family is doing (Smith, Peach and Cording, 2019_[153]).

²⁴ For example, WEMWBS includes question items such as: "I've been feeling close to other people" and "I've been feeling interested in other people"; while MHC-SF includes: "How often in the past month did you feel ... that you belonged to a community? ... that you had warm and trusting relationships with others?" (OECD, 2023_[14]).

²⁵ For example, Yap and Yu note that Samoan and Hawaiian models of a good life focus on ecological well-being with "a collective orientation to wellbeing, and through the collective, [show] how the individual is shaped by the ecological environment in which they belong and participate". They also outline how models of well-being developed in the Australian and New Zealand context have come from the health sector, and emphasise "holistic views of health to incorporate the spiritual, social, emotional, cultural and physical" (Yap and Yu, 2016_[143]).

²⁶ See footnote 22 for definition.

²⁷ The question asks respondents how, in general, their family is doing. In addition to the GSS, the question has also been included in the New Zealand Health Survey (Ministry of Health NZ, 2022_[247]).

Figure 4.4. An example of an indicator on communal well-being from New Zealand

Module 9. Whānau: Questions about whānau well-being, and social connectedness with whānau and others

Introduction (qWHAIntro)

I now have some questions about your whānau.

How's your whānau doing (qWHAWhanauDoingWell)

First of all I'd like you to think in general about how your whānau is doing.

Where zero means extremely badly and ten means extremely well, how would you rate how your whānau is doing these days?

[Note: Interviewers can use the following prompts:]

- Include all areas of life for your whānau.
- Your 'whānau' is the group of people that you think of as your whānau.

0	1	2	3	4	5	6	7	8	9	10
Extremely badly	-	-	-	-	-	-	-	-	-	Extremely well

Source: Statistics New Zealand (2014_[151]), *Te Kupenga 2013 (English)*, <https://www.stats.govt.nz/information-releases/te-kupenga-2013-english>

Another approach in adding a social dimension to subjective well-being measurement is to consider collective emotions. These are emotional states experienced at the *group*, rather than individual, level, in which the influence of the larger collective strengthens and reinforces affective responses. Examples might include feelings of collective guilt; anger or pride associated with social movements and/or collective action (e.g., the Arab Spring protests, student movements, collective pride over the performance of a national/local sports team); hate and resentment (in war and conflict scenarios); or transcendence (in a religious context, such as going on pilgrimage) (von Scheve and Salmela, 2014_[154]; Hopkins et al., 2016_[155]; Draper, 2014_[156]). While some work has been done to clarify the conceptual and theoretical issues underpinning collective experiences and communal feelings (von Scheve and Salmela, 2014_[154]), much work remains to be done, especially in the development of tools appropriate to their measurement (National Research Council, 2013_[45]).

Inner peace, balance and harmony

The Global Well-being Initiative’s partnership with Gallup has added a few new indicators to the annual World Poll relating to inner peace, balance and harmony. These indicators are in addition to the low arousal positive affect questions discussed in the preceding section. Rather than measuring affective states, these measures are more evaluative in that they ask respondents to make overall assessments of their outlook on life: for example, “In general, how often ... are the various aspects of your lie in balance? ... are you in harmony with those around you? ... are your thoughts and feelings in harmony?” (Lomas et al., 2022_[157]). The project aims to fill an important gap in harmonised international measures relating to happiness and subjective well-being; an impetus for the work is to expand the global inclusivity of such measures.

Some scholars have posited that dialectical thinking, and an emphasis on balance and harmony rather than joy or happiness, is more valued in certain cultures than in others: in particular East or South Asia (Li, 2012_[158]; Ip, 2014_[159]; Salagame, 2017_[160]). Other scholars disagree, arguing that concepts of inner peace

feature prominently in most all major world religions, and ancient Greek philosophical thought, thereby showing their universal relevance (Xi and Lee, 2021^[161]; Fave et al., 2016^[162]). Empirically, early results from the Global Well-being Initiative's work with Gallup suggest that reported prevalence of feeling one's life is in balance is not particularly specific to one region, and if anything, rates are slightly higher in European countries (Lomas et al., 2022^[103]).²⁸ More detailed findings from the project's work suggest that feelings of balance are less commonly experienced than harmony, and that while external environments are likely to influence feelings of balance, experiencing harmony with others is felt by the majority of the world's population. Furthermore, both experiences are only weakly correlated with measures of life evaluation and negative or positive affect indices – suggesting the concepts may measure a distinct component of subjective well-being (Gallup World Poll, forthcoming^[163]).

Aside from the questions piloted in the Gallup World Poll, there are other tools designed to measure concepts relating to inner peace, serenity and tranquillity. In developing and psychometrically testing their own Inner Peace Scale, Xi and Lee (2021^[161]) also provide an overview of other existing tools in the literature. Many of these have been psychometrically tested as well, though currently most studies have only been done in small samples.²⁹ More statistical work should be done to test the reliability and validity of these measures, and to better understand how they interact with existing subjective well-being measures, especially life satisfaction.

Extended or experimental modules

The *Guidelines* included not just a core module, but also extended modules on a variety of topics – for example, domain evaluations (Figure 1.5) or experienced well-being (Figure 1.6). While the core is aimed for inclusion in household surveys primarily, the extended modules also included different types of survey vehicles (e.g., time use surveys, etc.). Therefore beyond considerations for how the core might be expanded upon in future work, there may also be scope to revisit some of the existing extended modules, or to develop modules in new areas of importance that merit measurement work. Three such options are explored below: first, the development of an extended module on child and youth subjective well-being, for inclusion in child-focused survey vehicles; second, an experimental module overviewing promising examples of globally inclusive concepts that do not fit the current *Guidelines* structure; and third, expanding existing recommendations on domain-specific evaluation measures.

Extended module for specific populations: Children and young people

Improving the well-being of children and young people aged 0 to 17 is a high-profile policy goal in many OECD countries. More than half of OECD countries have an integrated policy plan to promote child well-being (OECD, 2023^[164]), while three-quarters of OECD countries have a national youth strategy (OECD, 2020^[165]). Concerns around the mental health and well-being of young people reached particular salience during the COVID-19 pandemic: young people were particularly affected, as their schooling and labour market entry were disrupted, and their mental health declined precipitously (OECD, 2021^[5];

²⁸ Reporting that one's life is in balance is different from placing higher importance on balance as an outcome in one's life. It could, in fact, be the case that people who place a higher importance on balance are less likely to report truly experiencing it in their own life. The authors address this in part by comparing the findings of this question – on self-reports of feeling one's life is in balance – with another question asking respondents whether they would prefer to live an exciting or calm life. There is little geographic difference in the latter, either (though it should be noted there is little global variation in response rates, with 84% of respondents preferring a calm life) (Lomas et al., 2022^[103]).

²⁹ Examples include the Being at Peace (Büssing et al., 2013^[233]), the Brief Serenity Scale (Kreitzer et al., 2009^[245]), Peace of Mind Scale (Lee et al., 2013^[246]), Tranquillity (Berenbaum, Huang and Flores, 2019^[228]) and Tranquillity (Ellison, Burdette and Hill, 2009^[237]) scales and measurement approaches.

OECD/European Union, 2022^[89]). It has not just been the mental health of adolescents that is of concern; there have also been worrying trends in the mental health of pre-teens and younger children (Statistics Netherlands, 2022^[166]; Abramson, 2022^[167]). The foundations for good life-long mental health are set in childhood, meaning the implications of these trends could be long-lasting.

Yet despite the general recognition that children's well-being – both subjectively and objectively measured – is important, large measurement gaps remain. The OECD's WISE Centre has a significant workstream devoted to child well-being data and measurement, including the OECD Child Well-being Data Portal and the accompanying Child Well-being Dashboard. The Data Portal contains over 200 comparative measures on child well-being outcomes, the drivers of these outcomes, and child-relevant public policies. The Portal includes data on social, emotional and cultural outcomes, which encompass topics relating to safety, emotional security, and basic emotional needs (i.e., support from family); socio-emotional skills; mental health outcomes including diagnosed conditions; and subjective well-being outcomes including affective states, life satisfaction and a sense of meaning in life (OECD, n.d.^[168]). While some of these outcomes are available for a wider age range, notably outcomes relating to mental health diagnoses and family support (and to a lesser extent, some affective states), the subjective well-being indicators are primarily taken from the OECD's PISA survey. This means that the questions are fielded to 15-year-olds, and thus provide information on social and emotional outcomes for adolescents but not for younger children. Indeed, the Child Well-being Dashboard – which is designed to be a tool for policy makers and the public to monitor the important headline indicators that matter in the promotion of child well-being – includes indicators for which data are available for only 15-year-olds in its social and emotional outcomes domain (OECD, n.d.^[169]).

Measures that are appropriate for adults may not be appropriate for adolescents, and measures that resonate with adolescents may not be suitable for young children. Similarly, there are also important differences in terms of emotional states and emotional regulation throughout the life course. Adolescence, for example, is a period during which young people experience rapid changes their emotional regulation ability and therefore emotional stability; this could strongly impact the predictive quality of subjective well-being measures, and might require considering different optimal time frames between measures depending on age group. A child's developmental stage has an impact on the measure chosen, conceptual topics covered and implementation method (Table 4.2).

Table 4.2. How to collect data on children's social and emotional outcomes depends on their developmental stages, with different indicators appropriate for different age groups

	Early childhood (0-5)	Middle childhood (6-12)	Late childhood (13-17)
Topics	<ul style="list-style-type: none"> Screening tools for possible mental health problems: Strengths and Difficulties questionnaire (SDQ) Functional difficulties, e.g., fine motor skills or controlling behaviour 	<ul style="list-style-type: none"> Screening tools for possible mental health problems: Strengths and Difficulties Questionnaire (SDQ) Functional difficulties Questions about (somatic) symptoms Topics relating to positive mental health and subjective well-being: life satisfaction, emotional affect Traditional bullying Satisfaction with appearance 	<ul style="list-style-type: none"> Screening tools for possible mental health problems (SDQ) and eating disorders (SCOFF) Functional difficulties Questions about (somatic) symptoms Topics relating to positive mental health and subjective well-being: life satisfaction, emotional affect, eudaimonia Suicidal ideation / suicide attempts Traditional / cyber bullying Body image issues Substance use
Survey format	Mainly caretaker-reported	Both caretaker and self-reported	Mainly self-reported

Source: OECD, forthcoming publication on the measurement of child and youth mental health.

Previous OECD measurement work on mental health screening tools has shown that when measuring outcomes for younger children, the 25-question Strengths and Difficulties Questionnaire (SDQ) is the most commonly cited tool in use by member states (OECD, 2023^[14]). In their comprehensive overview of the determinants of happiness throughout the life course, Clark et al. (2019^[36]) use the SDQ to measure outcomes for children, and life satisfaction for adults and adolescents.

OECD work on child well-being data and measurement has highlighted key data gaps in the evidence base, identifying focal areas for future research that include better and age-appropriate measures for social and emotional well-being, and instruments that capture the opinions, views and perspectives of children themselves – rather than evaluations from their caretakers – including better measures of children’s appraisal of satisfaction in different life domains, sense of self-realisation and perception of their future (OECD, 2021^[170]). Advances in natural language processing using artificial intelligence may enable data collectors to process and analyse free form answers to survey prompts, opening up new ways of collecting social and emotional well-being information from young children. OECD work has also emphasised the need to better capture the time dimension and attitudes towards the future reflected by the notion of child *well-becoming*, as well as to better grasp the emotional and social components of children’s sense of belonging, connectedness and meaning of life. An important challenge is also to better grasp how cultural factors and other childhood experiences may affect responses to well-being surveys, and potentially impact findings from international comparisons at the population level.

Some OECD countries have begun investing in better measures for child well-being, for example the United Kingdom’s efforts to create a bank of measures validated for use in younger population cohorts, along with a user guide and conceptual framework (What Works Wellbeing, 2021^[171]). New Zealand has also developed new indicators to measure child and youth subjective well-being outcomes to help monitor its policy efforts on improving their overall well-being; however New Zealand notes that measures on the daily lives and subjective well-being of younger children, and data on child development in early years, are still lacking (Department of the Prime Minister and Cabinet, 2022^[172]; Department of the Prime Minister and Cabinet, 2022^[173]). KOSTAT, the statistical agency of Korea, recently completed a conceptual framework of child and youth well-being in the country, containing eight overall domains – ranging from relationships, material conditions, leisure activities, health and subjective well-being – containing 60 individual indicators (KOSTAT, 2023^[174]).

To fill the gap in knowledge of appropriate subjective well-being measures for the under 15 population, it would be useful for the *Guidelines* to invest in an experimental module on child well-being. Such a module may also highlight the well-being of children’s caregivers, especially in the early years of life. Child well-being questions are usually included in separate survey vehicles, and most NSO general population surveys are geared towards the 15 or 16+ population. Therefore, any type of self-reported child well-being measure would likely appear in a dedicated, child-focused survey. Additionally, it will take time to field a range of new child-focused measures to better understand what works best. An experimental module would enable interested countries to begin adopting indicators from a short-list of possible options, based on current good practice examples, to further build the evidence base and refine recommendations around specific preferred tools.

Experimental module on new approaches: More globally inclusive measures

The goal of the core module of the *Guidelines* is to succinctly capture the important outcomes that matter for people’s subjective well-being. The five questions were crafted with the aim of being relevant for all populations, and while the OECD has invested in cross-country work that suggests measures of life satisfaction and affect are robust across cultural contexts (Exton, Smith and Vandendriessche, 2015^[111]), it is worth considering how globally inclusive the full set of measures truly are: or whether there are additional concepts that should be considered for measurement.

The *Guidelines* made its recommendations based on a rigorous review of existing evidence. However, as was notably pointed out by Henrich, Heine and Norenzayan in *Nature* (2010_[175]), much of the psychological literature is based on evidence from a relatively small – and from a global perspective, non-representative – population: what they termed Western, educated, industrialised, rich and democratic, or, WEIRD. If the evidence base is skewed towards one population type, it follows that recommendations based on that evidence may also be similarly skewed, or missing concepts that have real importance for other, non-WEIRD population groups.

There is a need to consider expanding recommended indicators of subjective well-being to account for global perspectives. There have been increasing calls among experts in the field to broaden the conceptual basis of what is measured when studying subjective well-being (Lambert et al., 2020_[176]; Lomas et al., 2022_[157]; Oishi, 2018_[102]; Biswas-Diener and Acorn, 2022_[177]). Some early work, such as the Global Well-being Initiative's additions to the Gallup World Poll, has already expanded the evidence base and provided an opportunity to test new questions widely. Other work has focused on specific population groups, such as rural sub-Saharan African women, for whom the outcomes of interest – or determinants of what makes a good life – may be different, depending on life circumstances (Greco et al., 2015_[178]). Beyond academics, national statistical offices and governments have developed measurement frameworks for specific population groups, including the Indigenous measurement approaches that have been highlighted in previous sections.

Given the importance of including all voices and moving beyond a predominantly western European and North American evidence base, when considering how to reconceptualise affect, expand *Guidelines* eudaimonic measures, or introduce new measures of subjective well-being – social and communal well-being, or inner peace, balance and harmony – a global inclusivity lens has been applied. This is done to ensure that the evidence base used to develop any new recommendations will be expansive, and inclusive.

In addition to this effort, more work can be done to showcase promising examples of approaches to measurement drawing from different cultural contexts that do not fit within the *Guidelines* core module structure. Some measurement approaches may be context-specific, in that concepts that matter to one population group in one country context may not resonate widely outside of that context. An experimental module can show how different countries are conceptualising the issue – for example, by highlighting how different OECD member states are approaching the topic of Indigenous well-being.³⁰ Collating different approaches by national statistical offices, local governments or community groups can then serve as a resource for data producers across OECD countries to learn from others as to what has worked best, and which aspects could be adapted to their own regional or cultural context.

While this work is in early stages, we recommend devoting an experimental module in the *Guidelines* to the topic, which will allow for different options that data users can implement in different types of surveys. Should some of these measures be proven to have good validity, unique value-added and promise of

³⁰ Care should be taken with the term “Indigenous”. To begin with, Indigenous groups are far from homogeneous, both across and within countries. For example, there are more than 250 distinct language groups within the Australian Aboriginal and Torres Strait Islander peoples (AIATSIS, n.d._[231]). In Canada, Indigenous peoples are broadly grouped into three over-arching categories: the Inuit, Métis and First Nations – the latter of which encompass over 630 communities, representing over 50 nations and languages (Government of Canada, 2022_[244]). Different communities and groups have drafted their own approaches to health and well-being, including Inuit wellness (Dion, Fraser and Cookie-Brown, 2021_[236]); the Nisga'a Lisims Government's Quality of Life Strategy (Bouchard et al., 2021_[232]); and BC First Nations' perspective on health and wellness (First Nations Health Authority, 2023_[239]). Secondly, the term “Indigenous” is rooted in colonial-era distinctions between settlers and the populations they encountered on their arrival. Exactly who is Indigenous and who is not is not always clear-cut, is oft-debated, and has evolved over time as both critics and proponents of the term's use engage with ever-shifting political agendas and international movements to promote and protect the rights of Indigenous peoples (Singh, 2023_[248]).

strong policy relevance across a wide range of populations (recall the criteria for inclusion proposed at the top of this section), they may be considered for inclusion in the core module in future.

Extended module: Building out recommendations for domain-specific life evaluation measures

Domain-specific life evaluation measures ask respondents how satisfied they are with certain aspects of their lives. As was shown in Section 2, a majority of OECD countries include domain evaluations in their national well-being initiatives, with job and time use satisfaction being the most common. More countries collect these data in survey vehicles, even if the indicators are not included in monitoring frameworks. Some countries are particularly active in this space (see Figure 2.5 for a breakdown of the most commonly included domain satisfaction indicators in national well-being initiatives, by country). The Japanese Cabinet Office's Well-being Dashboard is set up such that each of the eleven dimensions contains a domain satisfaction indicator, followed by a series of objective indicators. For example, the work-life balance domain contains work-life balance satisfaction, along with objective indicators on actual working hours, the percentage of employees working long hours and the rate of taking annual paid leave (Cabinet Office, 2022^[81]). Mexico includes twelve domain satisfaction indicators in its quarterly BIARE survey (INEGI, n.d.^[179]); Israel's *Well-being, Sustainability and National Resilience Indicators* also include twelve domain satisfaction measures (CBS, n.d.^[180]); the Spanish *Quality of Life Indicators* framework has seven (INE, 2022^[71]); Chile's *Social Wellbeing Survey* contains six (Ministerio de Desarrollo Social y Familia, 2021^[181]); and the United Kingdom's *Measures of National Well-being* has five (ONS, 2023^[182]).

Domain-specific life evaluation measures were covered in the *Guidelines*: there was an extended module with ten recommended measures (Figure 1.5). However less space was dedicated to researching aspects of validity and reliability unique to these measures, in contrast to the in-depth treatment given to evaluative, affective and eudaimonic measures. Another area that could be explored further are additional subjective well-being indicators – beyond just satisfaction – associated with a given domain. For example, feelings of meaning and worth have particular salience in the workplace, and have consequences for productivity, mental stress and likelihood of burnout. There is already some research underway (including at the OECD) to better measure (subjective) well-being at work from which evidence and lessons of good practice could be drawn (De Neve, Kaats and Ward, 2023^[183]; Siegerink, Shinwell and Žarnic, 2022^[184]). Similarly, domain satisfaction indicators provide policy makers with easy to interpret data on their constituents' satisfaction levels with a range of important quality of life outcomes (education, health, environment).

Furthermore, there has been research done in validating domain satisfaction responses against objective measures of the construct (Kaiser and Oswald, 2022^[21]) – but only in some areas. Other domains of life evaluation, such as time use or quality of the environment, have received less focus. More research into how these measures relate to more detailed measures of the same concept could be of particular value because these detailed indicators are costly to collect in terms of both time and resources.

New data sources: Biometric, social media and linking to administrative data

The *Guidelines* were written primarily for an audience of national statistical offices concerned with best practices in collecting official statistics. For this reason, the recommendations are primarily written with a focus on the inclusion of subjective well-being indicators in household surveys. Although official statistics have always compiled data from a variety of sources beyond household surveys, it is only in recent years that there have been alternate sources for subjective well-being data. This section briefly touches on three new avenues for exploration: biometric data from wearable technology, social media data and administrative data. At this point further analysis is not a top priority for the OECD, given that these data sources are still in experimental stages, and issues such as self-selection of participants or privacy concerns may pose challenges for producers of official statistics. However, some national statistical offices

are already working in this area, and the number is likely to increase in future years, thus it is covered here at least in brief.

Biometric data

There is a sizable literature on the relationship between subjective well-being outcomes – and affective states, in particular, and biometric indicators such as heart rate, pulse and blood pressure (Blanchflower and Bryson, 2021^[185]; Steptoe, 2019^[186]; Steptoe and Wardle, 2005^[187]). If biometric indicators are shown to be highly correlated with certain aspects of subjective well-being, they can potentially be used as “objective” proxies. This is attractive to some researchers in that it side-steps criticisms from some corners as to the validity of self-report data regarding life satisfaction, happiness, etc. (refer to the “Methodological issues” section below). In addition to perceived objectivity, these data also have the benefit of being relatively low cost to collect and available in large volume. With the advent of wearable technologies, these data are now even easier to collect.

Data from wearable technology has begun to be used by those in healthcare to remotely monitor disease progression, serve as preventative care by identifying health risks before they develop further, and may be particularly useful in providing healthcare for an aging population (Lu et al., 2020^[188]). However challenges remain. In addition to a need to strengthen the evidence base on the link between subjective well-being and biometric indicators – especially if the latter are to be used as proxies for the former – there are larger concerns about how to ensure data quality, obtain informed consent from patients and ensure data privacy (OECD, 2019^[189]).

Social media data

New research has begun using social media data to create new subjective well-being outputs. In addition to the low cost associated with collecting these data, the main benefit of social media data are their timeliness. In most instances, the work in developing social media-based subjective well-being data has been done by academics, however some national statistical offices have begun creating and disseminating these measures. While the exact methodology varies across projects, the general idea is that data producers cull text from social media posts (Tweets, Facebook statuses, etc.), categorize the overall tone of the text as a certain emotion, and use this to create aggregate emotional indices at the national or local level (Kjell et al., 2023^[190]). While the work is not inherently platform specific, in practice most of the work thus far has been done with Twitter,³¹ which could be a liability given the current instability of the platform. Moreover, there are legitimate concerns about the representativeness of the user base of these services and those who are most active on them. For example, there is evidence linking excessive use of social media to worse mental health, especially among adolescents (OECD, 2018^[191]; HHS, 2021^[192]). In terms of other sources of Big Data, the OECD has done exploratory work with Google Trends, using search term inputs to construct a subjective well-being index (Algan et al., 2016^[193]).

County-level work in the United States has shown that the emotional health of Twitter users – as measured through their language use, prevalence of negative emotions including anger and disengagement – are significant predictors of heart-disease mortality, while positive emotions and engagement are protective factors (Eichstaedt et al., 2015^[194]). INEGI, the national statistical office of Mexico, has created an online platform showing the mood of Twitter users in real-time. The platform can track spikes in positive and negative emotions nationally, correspondent with events such as holidays, sporting events and national disasters (INEGI, n.d.^[195]; Leyva, 2018^[196]). The Gross National Happiness Index was developed by academics at the University of Johannesburg and Auckland University of Technology, to monitor and track

³¹ As of Q3 2023 Twitter has been rebranded as “X”, however for ease of communication and consistency with terminology used by national statistical offices engaged in this work, the terminology “Twitter” and “Tweets” are used in this report.

the emotions in Tweets from South Africans, New Zealanders and Australians. During the pandemic, Statistics New Zealand included the index in its COVID-19 data portal as an experimental measure (Greyling, Rossouw and Greyling, n.d.^[197]; Statistics New Zealand, n.d.^[198]). Work undertaken in part by researchers from the Luxembourg statistical office, STATEC, demonstrated the external validity of Twitter-derived happiness indices over the course of the pandemic, by tracking its correlation with high-frequency data on new COVID-19 cases, containment policies and generalised trust among the population (Sarracino et al., 2021^[53]).

Linking subjective well-being outcomes to administrative data

A new frontier in the subjective well-being space is linking surveys with administrative data. Linking official statistics on subjective well-being to administrative data would enable policy makers to better understand the drivers of societal well-being, but also to isolate the impacts of programs and interventions on subjective well-being outcomes – including satisfaction with government services at the local level.

Thus far this work is in early stages, owing to the lack of interoperability between official data sources and privacy concerns around data linking. Yet some early work shows the promise of this avenue of research. A study in New Zealand looked at how being placed in social housing affected the well-being of housing recipients, by linking well-being data from social service programs with official well-being statistics (Anastasiadis et al., 2018^[199]). Researchers in Canada obtained consent from participants in the Canadian Community Health Survey to link their survey responses from 2005-2010 to administrative databases on healthcare utilisation in 2016-17; the study found that individuals with lower baseline levels of life satisfaction were more likely in future to be high-cost users of the healthcare system, even after controlling for socio-demographic factors, comorbidities and other health behaviours (Goel et al., 2018^[200]). While this approach has not yet been conducted in the United Kingdom, the What Works Wellbeing Centre has published coding for all datasets in the United Kingdom with subjective well-being data to accelerate and standardise use of these data, and to avoid common errors such as comparisons between different years or population groups, which will facilitate linking to other data sources in future as new opportunities arise (What Works Wellbeing, 2022^[201]).

Methodological issues: Validity concerns, response scales, question placement, indices and mode effects

The initial *Guidelines* devoted considerable space to delving into methodological issues relevant to subjective well-being measurement to inform its recommendations. The following methodological issues are therefore only mentioned briefly, in passing, and interested readers are directed to the original publications for in-depth discussions of each. For future research, methodological considerations are important insofar as the evidence base has evolved in the ten years since the first publication was drafted. For the most part this has not been the case; while experts continue to debate aspects of validity and fine tune the use of subjective well-being in analysis, there have not been findings that cause significant concern for the original measurement guidelines. The two areas that may be of most interest to data users are those of composite indices – not historically a recommended approach at the OECD, but growing in popularity among some country governments given their simplicity and summary value – and mode effects – given the overwhelming shift to online data collection, especially since the pandemic. Should there be sufficient interest from data producers, these issues could be explored in future work.

Validity and response scales

Several assumptions are typically made when analysing self-reported and perception-based data collected through a numerical or Likert response scale. Two common assumptions are that (1) answers on the

response scale are comparable across individuals (i.e., both you and I report the same response for a given latent construct: my "7" is the same as your "7"), and (2) that they are comparable for a given individual across time (i.e., I do not shift my concept of what a response category means over time given my changing circumstances: my "7" last year is the same as my "7" today). Some of the most common forms of statistical analysis also make the assumption of cardinality - i.e. that each step in a response scale is equidistant, so that an increase in reported well-being from 2 to 3 (or from "bad" to "moderate") has the same magnitude as an increase from 5 to 6 (or from "very good" to "excellent").

The strongest, most recent criticism of the use of subjective survey data comes from Bond and Lang (2019_[202]), who argue that without knowing the distribution of the underlying latent variable (i.e., latent life satisfaction, happiness, etc.), it is not possible to group respondents into meaningful averages to say something about the phenomenon for a given group of people. There have been a number of rebuttals to this paper (Kaiser and Vendrik, 2020_[203]; Plant, 2020_[204]; Lindqvist, Östling and Cesarini, 2020_[205]), including empirical applications showing the predictive power of subjective measures (Kaiser and Oswald, 2022_[21]) and suggestions to report median estimates rather than means (Chen et al., 2022_[206]). An upcoming pilot study will further assess questions of comparability, linearity and neutrality in subjective well-being indicators in a rigorous and thorough way (Samuelsson et al., 2023_[207]). By and large, though, the academic and policy community do not seem swayed by criticisms such that they have been dissuaded from continuing to use these subjective indicators.³²

Another group of concerns relates to scale norming, and the possibility of frame of reference shifts or ceiling effects. As applied life satisfaction (for example), this is the idea that an individual's concept and use of the response scale (i.e. what "10" or "completely satisfied" means) may change as his or her life improves. One year they may feel satisfied, and rate themselves at a 9; the subsequent year, they feel their life has markedly improved since the year prior, however they still believe their life could in theory improve more in the future. They therefore do not answer 10, but answer 9 again – despite the fact they feel more satisfied with their life this year than they did the year prior. Longitudinal data from this individual suggests no change in subjective well-being, despite changes in their latent life satisfaction. This is an issue insofar as it is not capturing some degree of adaptation (people become used to their circumstances), but rather a pure measurement issue (Fabian, 2022_[208]).

Some researchers have focused on socio-linguistic differences in the ways that individuals engage with response scales. Cross-country research has shown that population groups with lower levels of education are more likely to bunch their answers around end and mid-points of response scales (i.e., to answer 0, 5 or 10 on a 0-10 scale), whereas those with higher levels of education are more likely to use the full scale (Barrington-Leigh, 2022_[209]; Barrington-Leigh, 2022_[210]). This bunching is hypothesized by researchers to be the result of how individuals are conceptualising the answer scale, rather than how they are conceptualising of their own, latent, satisfaction. A study using Gallup World Poll data on life satisfaction in tandem with anchoring vignettes hypothesised that the gap in outcome between men and women might be due to different use of response scales: prior to scale normalisation women reported higher life satisfaction than men despite less education, lower income, worse physical health and fewer opportunities, however following normalisation women had lower life satisfaction (Montgomery, 2022_[211]). Other research has focused on the tendency of certain cultural groups (typically from East Asian countries) to either be more ambivalent, or more likely to use modest rather than extreme scale options, in comparison to other groups (typically defined as Western European or the United States) (Hamamura, Heine and Paulhus, 2008_[212]; Oishi, 2018_[102]). Another line of research suggests that a higher share of respondents rating their

³² The criticisms introduced by (Bond and Lang, 2019_[202]) are not specific to one way of measuring subjective well-being – i.e., a critique of a numeric vs. Likert answer scale – but rather a criticism of self-reported and perception-based data more generally. Considerable evidence supporting the validity of the measures included in the *Guidelines* indicates, however, that they do have value, especially when used in combination with objective well-being measures, and the total rejection of subjective data would diminish current understanding of population well-being.

life satisfaction as a 9 or a 10 in Latin America or the Middle East may be partly due to cultural influence in response styles, rather than a true reflection of latent well-being (Brulé and Veenhoven, 2017^[213]).

These critiques are not new, per se, and indeed the original *Guidelines* discussed how vignette-based studies identifying scale shifts across different cultural groups (studies include (Kapteyn, Smith and Van Soest, 2007^[214]) and (Angelini et al., 2014^[215])) do indeed reveal country differences. However the source of these differences remain unclear: they could indeed be due to cultural differences in reporting, but they could also be a feature of translation issues, or indeed reflect meaningful differences across countries or cultures relating to different policy or social environments (i.e., not measurement error).

Furthermore, the information obtained from vignettes may not always be straightforward to interpret. Vignettes – a short description of a hypothetical scenario, used to preface the survey question – are useful in cataloguing the ways in which different respondents react to the same information. They are often used with subjective data, including by other workstreams at the OECD: the 2021 *Survey of Social and Emotional Skills* used anchoring-vignettes at the beginning of the survey to correct for potential differences in individual understanding of answer scales (OECD, 2021^[133]). Yet the vignette approach requires individuals to accurately predict their subjective well-being outcomes in different theoretical circumstances, and assumes that these responses would track with responses to actual questions about their subjective well-being. Given this, the *Guidelines* recommended empirical demonstrations of vignette findings (OECD, 2013^[7]). A recent study contributes to this effort by comparing respondent-generated line graphs, in which they plot their perceptions of how their life satisfaction has evolved over the prior decade, with (1) their current self-reported level of life satisfaction and (2) their current reports of recalled life satisfaction ten years' prior (to account for recall bias in the plotting exercise). Comparisons between changes in life satisfaction over the time period as depicted in the plots, vs. as reported in answers to current and ten years' prior levels of satisfaction, provide suggestive – though not conclusive – evidence of scale norming among some survey participants (Fabian, 2022^[208]).

Aside from vignettes, another vein of research uses language analysis to approximate the latent construct of subjective well-being and better understand how respondents interact with answer scales. Using this approach, researchers use natural language processing models – and increasingly, AI – to quantify and classify respondents' free-form answers to questions on how satisfied they are with their lives. These studies have both found strong convergence with existing numerical answer scales (Kjell et al., 2019^[216]; Kjell et al., 2022^[217]), while at the same time revealing language-based insights and evidence that computational language assessments may reveal correlations with certain behaviours (e.g. cooperation) for which traditional answer scales show no association (Kjell, Daukantaitė and Sikström, 2021^[218]). As computational abilities increase, this line of research may be of growing interest to official data producers when crafting surveys, to better understand how subjective rating scales are interpreted and used by respondents.

Module placement

The *Guidelines* devoted considerable space to the question of where to place subjective well-being items within a survey, in order to minimise the potential for priming effects and contextual cueing to bias responses. For example, a natural experiment arising from a methodological change in the Gallup World Poll found that when subjective well-being questions immediately followed questions about politics, respondents reported lower levels of life satisfaction than did respondents who were not asked about politics (Deaton, 2012^[219]). The *Guidelines* recommended that subjective well-being modules be placed early on in surveys – if possible, immediately following basic demographic information – to minimise the potential for biases. Spot checks of country practice (refer to Box 3.1) reveal that many NSOs do not always do so, though it is difficult to do in practice, especially when subjective well-being modules are only included on an ad-hoc basis, or as an extension to an existing social survey.

One area that could be explored in greater depth is the survey placement effects for subjective well-being questions if they are placed in *different* modules throughout the survey. As both Sections 2 and 3 revealed, countries are often capturing affective data through mental health screening tools. These tools may be housed under “Health” sections of a survey, separated from measures of life satisfaction or eudaimonia; they may even be captured in separate, health surveys. *Guidelines* recommendations on question placement were based on the assumption that subjective well-being questions would be fielded in the same module: if these indicators are spread throughout surveys, this could have implications for priming/cueing, data quality and recommended practice.

Composite indices

As has been outlined in previous sections, the OECD uses a multidimensional approach to measuring well-being, reporting on levels, trends and the distribution of each of the indicators making up the well-being framework through a dashboard. However, other approaches favour the use of a composite index, which combines different factors into a single value. The attraction of its relative simplicity has in part encouraged its use in a number of OECD countries. Interpreting ‘at a glance’ a dashboard of indicators can be complicated if outcomes are not moving in the same direction; i.e., if one outcome improves and another deteriorates, is it possible to make definitive conclusions? Simplicity of narrative is important especially if subjective well-being measures are to be seen as a complement to GDP, which lends itself to clear stories of improvement or decline. And finally, many of the ways in which policy use subjective well-being indicators require a single metric that is then maximised: for example, in cost-benefit analysis.

When considering the topic of well-being, there are a few different ways that data producers have approached the creation of composite indices. One approach is to combine a variety of subjective and objective indicators, pulling from all domains of life, to craft a single index of overall well-being. This is the approach taken by Luxembourg, Portugal and Spain, among others (Table 4.3). Another approach is to develop a multi-item measure of a single underlying concept: the Netherland’s Personal Well-being Index is designed to be a multidimensional scale to measure life evaluation (van Beuningen and de Jonge, 2011^[67]). A final approach is to develop a synthetic measure of some latent construct, combining different aspects of a concept like, say, subjective well-being: tools used in the positive mental health arena, such as WEMWBS, exemplify this approach. The tool contains relational, evaluative, affective and eudaimonic components, all of which are combined into a single measure of flourishing. For the purposes of this paper, the latter two efforts – which focus on ways of creating a single composite index to encompass all aspects of subjective well-being – are most relevant, although lessons from any type of composite index are informative in assessing recommendations for a way forward.

Table 4.3. Some OECD statistical offices have developed composite indicators with a subjective well-being component

Country	Type of composite index	Index Name
Belgium	Overall well-being (combining subjective and objective measures)	Current well-being index: Well-being Here and Now Future well-being indices: Human Capital; Social Capital; Natural Capital; Economic Capital
Luxembourg	Overall well-being (combining subjective and objective measures)	Luxembourg Index of Wellbeing (LIW)
Portugal	Overall well-being (combining subjective and objective measures)	Statistics Portugal Well-being Index
Spain	Overall well-being (combining subjective and objective measures)	Indicador Multidimensional de Calidad de Vida (IMCV)
Netherlands	Subjective well-being inputs	Personal Well-being Index (PWI)

Note: The table does not include non-NSO initiatives (i.e., those developed by international organisations); it also does not include well-being indices with only objective inputs. The table also does not include mental health screening tools (including (S)WEMWBS) which combine responses to a series of mental health related questions into a single (composite) value.

Source: A snapshot of OECD member state practice, current as of 2023, as reported to the OECD Secretariat.

Despite their value, composite indices of any type face several significant challenges. First, in order to create a single index of, for example, subjective well-being, one is required to design a weighting scheme for each component (e.g. life evaluation, eudaimonia and affect). There is no clear consensus around the most appropriate method for performing this calculation (O'Donnell and Oswald, 2015^[220]).³³ The difficulties involved in assigning what are often arbitrary weights is illustrated by the OECD's Better Life Index, which allows individuals to assign their own weights to different dimensions of well-being based on their own preferences: changes to the weighting scheme lead to significant differences in country rankings (OECD, n.d.^[221]).

Linked to this is the assumption, within a simple index, of perfect substitutability – i.e. that any size of loss or gain in one component of subjective well-being (or among one population group) can be perfectly compensated by an equivalent loss or gain in another component (or population group). For example, that a symmetric gain in positive affect can fully compensate for a total loss of life evaluation, with no net loss of welfare. This is rarely realistic, in the context of an index where all constituent components have value to people. And the manner in which indices and averages can mask changes in the underlying structure of the distribution of outcomes across the population is particularly problematic in the context of policy use – where much of the interest is in gaining a deeper understanding of how well-being differs and evolves over time among different population groups.

Third, it is often difficult to ascertain *why* an index is moving without decomposing it into its constituent parts (Ravallion, 2011^[222]). One way to address this, as is done by Statistics Portugal, is to publish a composite index along with trends for all of the indicators that make up the index (INE, n.d.^[223]). Thus, while an index might have some interest as a summary measure for communication purposes, the process of guiding policy decision-making inevitably requires a more granular analysis.

When considering the creation of a composite index for subjective well-being specifically, there are trade-offs to weigh. That is, in using a single questionnaire item to capture the multidimensional construct of subjective well-being, some degree of detail and nuance is lost (i.e., by capturing only the evaluative component, and dropping the affective and eudaimonic component).³⁴ On the other hand, creating a composite index of all possible components (based on any number of questionnaire items) also creates some degree of measurement complexity. There are pros and cons to each approach, that could be explored in greater depth should there be sufficient desire from the policy community for guidance on single measures on subjective well-being to ease their integration into policy processes. In a nutshell, this work would need to examine which source of error is most damaging from the perspective of policy utility: the information loss/inaccuracy associated with relying on just a single questionnaire item to capture a multidimensional construct, versus the error introduced by imperfectly summing multiple items into a single aggregate measure or index. This exercise would also need to weigh up the relative ease with which information about the distribution of subjective well-being among different population groups can be most effectively integrated, monitored and communicated.

Mode effects

The survey mode – whether self- (SAQ/CASI) or enumerator-administered, computer- or telephone-assisted (CAPI/CATI), pen-and-paper (PAPI) or diaristic methods (ESM/DRM) – can have an impact on

³³ Combining different components of subjective well-being is different from multiple-item measures of subjective well-being that were specifically developed to identify a single underlying construct, such as the Netherlands' aforementioned Personal Wellbeing Index, or the Satisfaction with Life Scale (SWLS), which contains five questions, the answers to which are combined to create a composite value of life evaluation.

³⁴ Although, to be fair, this can also occur in a composite index. One of the latent common factors underlying all subjective well-being measures is personality. A composite index that is designed to measure this (or that does so unintentionally) would not be meaningfully more multidimensional than using a single item.

the way respondents behave. The *Guidelines* noted that interviewer-administered surveys typically produce higher quality data overall, but may (particularly in the case of phone interviewing) be subject to higher levels of social desirability bias. However, the effects vary from survey and survey and do not appear to be unique to subjective well-being indicators. It was recommended to use the same mode across surveys to the extent possible, and when mixed modes are used, make clear the details of which individual received the survey via which mode to correct for any potential biases at a later date.

The *Guidelines* touched on one other form of survey: computer-assisted web-interviewing (CAWI), and noted that at the time of drafting, very little evidence on the method existed because of its minimal use. Indeed at the time the *Guidelines* were conceived, few NSOs were engaged in online data collection and expressed hesitancy as to the mode's ability to collect high quality data. In the ensuing decade, however, the picture has changed significantly, and the COVID-19 pandemic further hastened the shift online. An ILO report highlights that during the pandemic, many labour market surveys shifted to CATI/CAWI mixed method modes, and some surveys that previously used CAPI/PAPI methods moved to CATI for the first time (ILO, 2020^[224]). The ways in which social desirability biases interact with CAWI may be of particular relevance, and as of yet is not well understood. A recent study from Statistics Canada found that life satisfaction values were significantly lower in electronic questionnaire (EQ) data collection than in CAPI or CATI (Wavrock, Schellenberg and Boulet, 2023^[225]). However another study from STATEC, the national statistical office of Luxembourg, found that web and telephone survey modes were more or less comparable when capturing subjective well-being data (Sarracino, Riillo and Mikucka, 2017^[226]). Research at this stage is still scant, and more work could be done to better understand how mode changes may affect responses.

Now that the majority of OECD countries have moved to online surveying techniques, there may be an opening for the *Guidelines* to address these new modes of data collection, identifying what it means for optimal question wording and response formats and scanning the literature to see whether there is sufficient evidence at this point to provide conclusive advice on how to adjust results for mode effects – given the preponderance of online and mixed-mode surveys – to enable greater comparability across surveys and across countries. It could also be useful to explore whether recommended question wording should vary across different collection methods.³⁵

³⁵ Lessons could be drawn from NSO experience. For example, New Zealand's 2023 General Social Survey included a CAWI video interview platform response option, which necessitated some minor changes to question wording.

5 Conclusions and next steps

A review of the degree to which OECD member states have adopted the five indicators comprising the core module of the *Guidelines for Measuring Subjective Well-being* shows that while practice has converged around a harmonised measure of life satisfaction, there is less agreement on the measurement of affect and eudaimonia. Advances in the evidence base over the past decade show that much of the *Guidelines* is still relevant, and that the subsequent years have not uncovered any glaring errors that necessitate making retroactive changes. However research in some areas suggests gaps in the coverage of the core module that could be addressed in forthcoming research. The many topics raised in Section 4 are compiled and summarised in Table 5.1 below. The categories are divided into two tiers: a short-list of three priority items, followed by three additional items on the long list. All areas are worthy of further inquiry, however given limited resources and limited space in the core module itself, some prioritisation must be made.

Table 5.1. Suggested focal areas for future OECD measurement work on subjective well-being

Topic	Description
Short-list	
Striking the right balance on affect (Core and extended modules)	Review latest evidence on: <ul style="list-style-type: none"> • answer scales and recall period, • developments in experienced well-being measurement, • important concepts missing, • global inclusivity of question framing, • how existing and potential affect items perform in practice (psychometric properties; validity; policy signals/relevance; value-add relative to other subjective well-being measures)
More comprehensive measurement of eudaimonia (Core and extended modules)	Review latest evidence on: <ul style="list-style-type: none"> • important concepts missing (e.g. hope or optimism, components of self-determination theory), • global inclusivity of question framing, • how existing and potential eudaimonia items perform in practice
Extended and experimental modules	New modules on: <ul style="list-style-type: none"> • Subjective well-being measures for children and young people • More globally inclusive concepts and measures, beyond adaptations to the core module • Further advice on domain-specific life evaluation measures
Long-list	
New data sources	Consideration of new data sources and recommendations for how to best collect these indicators: <ul style="list-style-type: none"> • Biometric data • Social media data • Administrative data
Methodological issues	Review advances in the methodological literature for new findings relating to: <ul style="list-style-type: none"> • New findings relating to validity concerns • New evidence on response formats • Use of composite indices rather than a dashboard approach • Module placement within surveys • Mode effects (especially with increasing use of digital data collection tools)

Affect and eudaimonia have been selected for re-evaluation given the lack of significant country uptake of existing recommendations, and potential overlap with population mental health measurement. In comparison to experienced well-being measures of affect, which focus on how one experiences different states in shorter term recall periods (e.g. “yesterday”, or reported at multiple intervals throughout the day if captured through experienced sampling methods), mental health screening tools tend to adopt longer recall periods (e.g. “past two weeks”, “past four weeks”) in order to pick up on the persistence of affective states over time, which can indicate risk for a mental health condition. Positive mental health tools, which emphasise flourishing rather than symptoms of a condition, can also contain indicators that overlap not only with positive affect, but also with aspects of eudaimonia and evaluation.

Revisiting affect and eudaimonia in a revised *Guidelines* could allow for recommendations that better delineate between subjective well-being and population mental health, so as to avoid duplication or conflicting guidance. For example, in the case of affect, this might entail a clearer distinction between an experienced well-being approach – shorter recall periods, with most value-add when these indicators are embedded in time use surveys – and a population mental health approach – use of brief, validated mental health screening tools. One possibility is to produce a single unified set of recommendations covering both subjective well-being and population mental health, highlighting their complementary nature, but also the distinct value of having dedicated measurement instruments for the different concepts therein.

In re-examining these aspects of subjective well-being at this point, we can additionally inject a global inclusivity lens, based on new evidence that has emerged since the preparation of the original *Guidelines* (including in the context of national well-being frameworks and initiatives). Where the evidence is particularly compelling, this may allow integration in the core module; where measures are of a more experimental nature, they could be signalled for further testing in an extended or experimental module. In addition, there is clear demand for valid, reliable data on child subjective well-being, and we propose to develop a set of core measures in an extended module, for adoption in child- and youth-focused survey vehicles.

Items on the long list are worthy of greater exploration, and may become priorities for data producers as the research base on each strengthens moving forward. New data sources remain relatively experimental at this stage, and while some NSOs are beginning to work in these areas, for now this remains a separate research agenda rather than something to pick up in the context of a *Guidelines* publication. And finally, academic work on methodological issues is important and should continue to assuage concerns by data users and policy makers as to the validity and reliability of subjective well-being data. The original *Guidelines* spent considerable effort outlining the main methodological concerns, addressing each with ample evidence; by and large the evidence base has not shifted significantly, and certainly not to the extent that changes to indicator formulation should be considered at this stage.

Future OECD measurement work will look to ensure that subjective well-being measures encompass the key indicators that best measure how people are doing. Our goal is to ensure that these measures resonate widely, for all people, in all countries. Moving forward we hope that these data continue to be included in a wide range of regularly fielded household surveys, so that policy makers have at their disposal frequent measures of population subjective well-being. The past decade has seen significant progress not only in the creation of high-quality subjective well-being data, but in their use in policy. The next ten years will no doubt yield new insights, and hopefully, will continue the progression towards building policy on what matters most for people’s well-being.

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Annex A. Detailed source data for findings on current country practice

Table A.1. National well-being approaches currently in use by OECD countries

Country	Well-being approach	Institutional home	Began
Australia	Measuring What Matters	The Treasury	2023
Austria	How's Austria?	Statistics Austria	2012
Belgium	Sustainable Development Indicators	Federal Planning Bureau	2022*
Canada	Quality of Life Framework	Department of Finance Canada	2020
Chile	Social Wellbeing Survey	Social Observatory Division, Ministry of Social Development and Family	2021
Finland	National Sustainable Development Monitoring Network	Prime Minister's Office, Finnish National Commission on Sustainable Development	2017
France	New Indicators of Wealth	Institut national de la statistique et des études économiques (INSEE)	2015
Germany	Well-being in Germany – What matters to us	The Federal Government	2015
Iceland	Indicators of Well-being	Statistics Iceland	2019
Ireland	First & second report on a well-being framework for Ireland	National Economic and Social Council	2021
Israel	Well-being, Sustainability and National Resilience Indicators	Central Bureau of Statistics	2015
Italy	Measures of Equitable and Sustainable Well-being (full set)	Istituto Nazionale di Statistica (IStat)	2013
Japan	Well-being Dashboard	Cabinet Office	2019
Korea	Quality of Life Indicators in Korea	Statistics Korea	2013
Latvia	Latvia 2030	Sustainable Development Strategy of Latvia, Cross-Sectoral Coordination Centre (PKC)	2012
Luxembourg	PIBien-être and the Index of Well-being	Institut national de la statistique et des études économiques du Grand-Duché de Luxembourg (STATEC)	2017
Mexico	Indicadores de bienestar	National Institute of Statistics and Geography (INEGI)	2014
Netherlands	Monitor of Well-being and SDGs	Statistics Netherlands (CBS)	2017
New Zealand	Indicators Aotearoa New Zealand	Stats NZ Tatauranga Aotearoa	2019
Norway	Quality of Life in Norway	Statistics Norway	2020
Poland	Responsible Development Index	Polish Institute of Economics	2019
Portugal	Statistics Portugal Well-being Index	Statistics Portugal	2013
Slovenia	National Development Strategy 2030	Government Office for Development and European Cohesion Policy	2017
Spain	Quality of Life Indicators	Instituto Nacional de Estadística (INE)	2019
Sweden	New Measures of Well-being	Statistics Sweden	2017
Switzerland	Measuring Well-being	Federal Statistical Office	2014
United Kingdom	Measures of National Well-being	Office for National Statistics (ONS)	2010

Note: *The Belgian Federal Planning Bureau's annual reporting on beyond GDP indicators was renamed to "Sustainable Development Indicators" in 2022, however the initiative has existed since 2016. Approaches from Figure 2.3 that have been discontinued and no longer in use are not included in this table; entries in this table are used to create Figure 2.4, Figure 2.5 and Table 2.2. For countries currently operating multiple well-being approaches at a national level, only the most relevant (i.e., most similar to the OECD well-being framework) is considered; similarly, those headed by National Statistical Offices are considered given this report's focus on NSO practices.

Table A.2. Life satisfaction data: Details and sourcing

Country	Survey	Frequency
Australia	General Social Survey	Around every four years
Austria	EU-SILC core module	Annually
Belgium	EU-SILC Quarterly data collection on living standards	Quarterly*
Canada	Canadian Social Survey	Quarterly
Chile	Encuesta de Bienestar Social	Every two years
Colombia	Encuesta Nacional de Calidad de Vida (ECV)	Annually
Costa Rica	NA	
Czech Republic	EU-SILC core module	Annually
Denmark	EU-SILC core module	Annually
Estonia	EU-SILC core module	Annually
Finland	EU-SILC Quarterly data collection on living standards	Quarterly*
France	EU-SILC Quarterly data collection on living standards	Quarterly*
Germany	EU-SILC core module	Annually
Greece	EU-SILC core module	Annually
Hungary	EU-SILC core module	Annually
Iceland	EU-SILC well-being ad hoc module	Irregularly
Ireland	EU-SILC Quarterly data collection on living standards	Quarterly*
Israel	Social Survey	Annually
Italy	EU-SILC Quarterly data collection on living standards	Quarterly*
Japan	Survey on Satisfaction and Quality of Life	Annually
Korea	Korea Social Integration Survey	Annually
Latvia	EU-SILC core module	Annually
Lithuania	EU-SILC core module	Annually
Luxembourg	EU-SILC Quarterly data collection on living standards	Quarterly*
Mexico	BIARE Básico	Annually
Netherlands	EU-SILC core module	Annually
New Zealand	General Social Survey	Every two years
Norway	Quality of Life in Norway	Annually
Poland	EU-SILC core module	Annually
Portugal	EU-SILC core module	Annually
Slovak Republic	EU-SILC Quarterly data collection on living standards	Quarterly*
Slovenia	EU-SILC Quarterly data collection on living standards	Quarterly*
Spain	EU-SILC core module	Annually
Sweden	EU-SILC core module	Annually
Switzerland	Statistics on Income and Living Conditions	Annually
Türkiye	EU-SILC well-being ad hoc module	One-off (2013)
United Kingdom	Opinions and Lifestyle Survey	Quarterly
United States	National Health Interview Survey	Irregularly

Note: Some countries collect life satisfaction data in a variety of ways; the indicator that most closely aligns to the OECD recommendations is shown in this table. Relatedly, almost all countries include a life satisfaction indicator on multiple surveys. They surveys included in this table are those that are run most frequently; i.e., this table shows the highest degree of frequency that standardised and internationally comparable life satisfaction data are collected. *Eurostat ran the first phase of its quarterly living conditions data collection from 2021-22; it is unclear at this point when and whether future phases of the exercise will run (Eurostat, 2022^[227]).

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.3. Data on happiness and feeling cheerful: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia	National Aboriginal and Torres Strait Islander Health Survey	During the past month, how much of the time have you been a happy person?	Mental Health Inventory (MHI-5)	5-point Likert scale	Past 4 weeks	Every six years
Austria	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Belgium	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Canada	Canadian Health Survey on Children and Youth	Over the last two weeks, I've been feeling cheerful	Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)	5-point Likert scale	Past 2 weeks	Irregular (in 2023)
Chile	Encuesta de Bienestar Social	How happy did you feel yesterday?	NA (individual question)	5-point Likert scale	Yesterday	Every two years
Colombia	NA					
Costa Rica	NA					
Czech Republic	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Denmark	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Estonia	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Finland	Citizens' Pulse	When you think about your own mood yesterday, how much did you experience the following feelings and sensations: I was happy and cheerful.	NA (individual question)	5-point Likert scale	Yesterday	Monthly
France	CAMME (Enquête de Conjoncture auprès des Ménages Mensuelle)	During the day yesterday, did you feel happy?	NA (individual question)	0-10 scale	Yesterday	Quarterly
Germany	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Greece	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Hungary	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Iceland	Public Health Watch	Overall, how happy do you think you are?	NA (individual question)	1-10 scale	In general	Annually
Ireland	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Israel	Israel National Health Interview Survey	During the past month, how much of the time have you been a happy person?	Mental Health Inventory (MHI-5)	5-point Likert scale	Past 4 weeks	Every four to five years
Italy	Aspects of Daily Life	During the past month, how much of the time have you been a happy person?	Mental Health Inventory (MHI-5)	5-point Likert scale	Past 4 weeks	Annually

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Japan	Quality of Life Survey	How happy did you feel yesterday?	NA (individual question)	0-10 scale	Yesterday	Annual from 2011-13, since discontinued
Korea	Korea Social Integration Survey	How happy did you feel yesterday?	NA (individual question)	0-10 scale	Yesterday	Annually
Latvia	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Lithuania	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Luxembourg	Enquête Tourisme	In general, in the last four weeks, did you feel happy?	NA (individual question)	0-10 scale	Past 4 weeks	Quarterly
Mexico	BIARE Básico	How much of yesterday were you in a good mood?	NA (individual question)	0-10 scale	Yesterday	Quarterly
Netherlands	Health Interview Survey	During the past month, how much of the time have you been a happy person?	Mental Health Inventory (MHI-5)	5-point Likert scale	Past 4 weeks	Annually
New Zealand	General Social Survey	Where zero is not at all happy, and ten is completely happy, overall how happy did you feel yesterday?	NA (individual question)	0-10 scale	Yesterday	Every 2 years
Norway	National Survey on Quality of Life	Think about how you have been feeling for the past 7 days. To what extent were you happy?	NA (individual question)	0-10 scale	Past week	Annually
Poland	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Portugal	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Slovak Republic	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Slovenia	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Spain	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Sweden	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every six years
Switzerland	Swiss Health Survey	During the past month, how much of the time have you been a happy person?	Individual question, but originally from the MHI-5	5-point Likert scale	Past 4 weeks	Every five years
Türkiye	Life Satisfaction Survey	How happy are you in general?	NA (individual question)	3-point Likert scale	In general	Annually
United Kingdom	Opinions and Lifestyle Survey	Overall, how happy did you feel yesterday?	NA (individual question)	0-10 scale	Yesterday	Quarterly
United States	American Time Use Survey	How happy did you feel during this time?	NA (individual question)	0-6 scale	Yesterday	Irregularly

Note: Countries may collect the concept of “happiness/cheerfulness” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.4. Data on feeling worried, nervous and anxious: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia	Household Impacts of COVID-19 Survey	During the last 30 days, about how often did you feel nervous?	Kessler Scale 6 (K6)	5-point Likert	Past 4 weeks	Monthly throughout the pandemic
Austria	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	Mental Health Inventory 5 (MHI-5)	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Belgium	COVID-19 Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling nervous, anxious or on edge	Generalized Anxiety Disorder Questionnaire 7 (GAD-7)	4-point Likert scale	Past 2 weeks	Monthly during COVID, and will continue through 2024
Canada	Survey on COVID-19 and Mental Health (SCMH)	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling nervous, anxious or on edge	GAD-2	4-point Likert scale	Past 2 weeks	Irregular: two waves during COVID
Chile	Encuesta de Bienestar Social	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling nervous, anxious or on edge	Patient Health Questionnaire 4 (PHQ-4)	4-point Likert scale	Past 2 weeks	Every 2 years
Colombia	Social Pulse Survey (EPS)	During the last 7 days have you felt: Worry or nervousness	NA (individual question)	Yes / No	Past 7 days	Monthly during COVID
Costa Rica	Encuesta Nacional de Hogares 2021	During this past year, have you suffered from problems of stress, worry or anxiety?	NA (individual question)	5-point Likert	Past 30 days	One-off, in 2021 COVID-19 special module
Czech Republic	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Denmark	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Estonia	Estonian Health Survey	Feeling anxious or fearful	Emotional State Questionnaire (EST-Q)	5-point Likert scale	Past 4 weeks	Every 6 years
Finland	Healthy Finland	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling nervous, anxious or on edge	GAD-7	4-point Likert scale	Past 2 weeks	Every 5 years (beginning 2023)
France	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Germany	German Health Update (GERA)	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling nervous, anxious or on edge	GAD-2	4-point Likert scale	Past 2 weeks	Monthly since 2020; will be annual in future
Greece	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Hungary	EU-SILC well-being ad	During the past month, how	MHI-5	5-point	Past 4	Irregular: in

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
	hoc modules	much of the time have you been a very nervous person?		Likert scale	weeks	2013 and 2018
Iceland	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling nervous, anxious or on edge	GAD-7	4-point Likert scale	Past 2 weeks	Every 5-6 years
Ireland	Social Impact of COVID-19	How much of the time, during the past 4 weeks, have you been very nervous?	NA (individual question)	5-point Likert scale	Past 4 weeks	Irregular: 5 rounds conducted during COVID
Israel	Israel National Health Interview Survey (INHIS)	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Every 4-5 years
Italy	Aspects of daily life	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Annually
Japan	Comprehensive Survey of Living Conditions	During the last 30 days, about how often did you feel nervous?	K6	5-point Likert	Past 4 weeks	Every 3 years
Korea	Korea Social Integration Survey	How worried did you feel yesterday?	NA (individual question)	0-10	Yesterday	Annually
Latvia	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Lithuania	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Luxembourg	Enquête Tourisme	Felt anxious over past 4 weeks	NA (individual question)	0-10	Past 4 weeks	Quarterly, beginning in 2021
Mexico	BIARE Básico	How much of yesterday did you feel worried, anxious or stressed?	NA (individual question)	0-10 scale	Yesterday	Quarterly
Netherlands	Health Interview Survey	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Annually
New Zealand	Household Economic Survey	How often do you feel worried, nervous or anxious?	Washington Group on Disability Statistics	5-point Likert scale	In general	Annually
Norway	National Survey on Quality of Life	Think about how you have been feeling for the past 7 days. To what extent were you...anxious?	NA (individual question)	0-10	Past 7 days	Annually
Poland	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Portugal	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Slovak Republic	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Slovenia	Countrywide Integrated Noncommunicable Diseases Intervention (CINDI) Survey	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Every 4 years
Spain	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
Sweden	National Public Health Survey	During the last 30 days, about how often did you feel nervous?	K6	5-point Likert	Past 4 weeks	Every 2 years
Switzerland	Swiss Health Survey	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Every 5 years
Türkiye	EU-SILC well-being ad hoc modules	During the past month, how much of the time have you been a very nervous person?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular: in 2013 and 2018
United Kingdom	Opinions and Lifestyle Survey	On a scale where 0 is “not at all anxious” and 10 is “completely anxious”, overall, how anxious did you feel yesterday?	NA (individual question)	0-10	Yesterday	Quarterly
United States	National Health Interview Survey	How often do you feel worried, nervous or anxious? Would you say daily, weekly, monthly, a few times a year, or never?	NA (individual question)	5-point Likert scale	In general	Annually

Note: Countries may collect the concept of “worry/anxiety/nervousness” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country. Note that mental health screening tools – such as the GAD-7, etc. – contain multiple indicators that touch on the concept of anxiety: one indicator is listed in the table to provide an illustrative example.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.5. Data on feeling depressed, sad, unhappy or downhearted: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia	Household Impacts of COVID-19 Survey	During the last 30 days, about how often did you feel so sad that nothing could cheer you up?	Kessler Scale 6 (K6)	5-point Likert	Past 4 weeks	Monthly throughout the pandemic
Austria	European Health Interview Survey (EHIS)	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	Patient Health Questionnaire 8 (PHQ-8)	4-point Likert scale	Past 2 weeks	Every 5-6 years
Belgium	COVID-19 Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-9	4-point Likert scale	Past 2 weeks	Monthly through COVID, will continue through 2024
Canada	Canadian Community Health Survey (CCHS)	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-9	4-point Likert scale	Past 2 weeks	Annually
Chile	Encuesta de Bienestar Social	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-4	4-point Likert scale	Past 2 weeks	Every 2 years
Colombia	Social Pulse Survey (EPS)	During the last 7 days have you felt: Sadness	NA (individual question)	Yes / No	Past 7 days	Monthly during COVID
Costa Rica			NA			
Czech Republic	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Denmark	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Estonia	Health Behavior among Estonian Adult Population	Feeling unhappy/depressed in the past 30 days	NA (individual question)	4-point Likert scale	Past 30 days	Every 2 years
Finland	Citizens' Pulse	When you think about your own mood yesterday, how much did you experience the following feelings and sensations: I was down and depressed.	NA (individual question)	5-point Likert scale	Yesterday	Monthly
France	CAMME (Enquête de Conjoncture Au près des Ménages Mensuelle)	During the day yesterday, did you feel depressed?	NA (individual question)	0-10	Yesterday	Quarterly
Germany	German Health Update	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-9	4-point Likert scale	Past 2 weeks	Monthly since 2019; will be annual in future
Greece	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Hungary	EHIS	Over the last two weeks, how	PHQ-8	4-point	Past 2	Every 5-6

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
		often have you been bothered by any of the following problems: Feeling down, depressed or hopeless		Likert scale	weeks	years
Iceland	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Ireland	Irish Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5 years
Israel	Social Survey CBS	In the last 12 months, have you felt depressed?	NA (individual question)	4-point Likert scale	Past 12 months	Annually
Italy	Italian Behavioral Risk Factor Surveillance System (PASSI)	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-2	4-point Likert scale	Past 2 weeks	Annually
Japan	Comprehensive Survey of Living Conditions	During the last 30 days, about how often did you feel so sad that nothing could cheer you up?	K6	5-point Likert	Past 4 weeks	Every 3 years
Korea	Korea Social Integration Survey	How depressed did you feel yesterday?	NA (individual question)	0-10	Yesterday	Annually
Latvia	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Lithuania	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Luxembourg	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Mexico	BIARE Básico	How much of yesterday did you feel sad, depressed or despondent?	NA (individual question)	0-10 scale	Yesterday	Quarterly
Netherlands	Health Interview Survey	During the past month, how much of the time: Have you felt downhearted and blue?	Mental Health Inventory 5 (MHI-5)	5-point Likert scale	Past 4 weeks	Annually
New Zealand	Household Economic Survey	How often do you feel depressed?	Washington Group on Disability Statistics	5-point Likert scale	In general	Annually
Norway	National Survey on Quality of Life	Think about how you have been feeling for the past 7 days. To what extent were you...Down or sad?	NA (individual question)	0-10	Past 7 days	Annually
Poland	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Portugal	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Slovak Republic	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Slovenia	Countrywide Integrated Noncommunicable Diseases Intervention (CINDI) Survey	During the past month, how much of the time: Have you felt downhearted and blue?	MHI-5	5-point Likert scale	Past 4 weeks	
Spain	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Sweden	National Public Health Survey	During the last 30 days, about how often did you feel so sad that nothing could cheer you up?	K6	5-point Likert	Past 4 weeks	Every 2 years
Switzerland	Swiss Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-9	4-point Likert scale	Past 2 weeks	Every 5 years
Türkiye	Turkey Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Every 3 years
United Kingdom	Opinions and Lifestyle Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling down, depressed or hopeless	PHQ-8	4-point Likert scale	Past 2 weeks	Quarterly
United States	National Health Interview Survey	How often do you feel depressed? Would you say daily, weekly, monthly, a few times a year, or never?		5-point Likert scale	In general	Annually

Note: Countries may collect the concept of “depression/sadness/unhappiness” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country. Note that mental health screening tools – such as the PHQ-8, K6, etc. – contain multiple indicators that touch on the concept of depression: one indicator is listed in the table to provide an illustrative example. Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.6. Data on feeling tired or exhausted: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia	National Health Survey	During the last 30 days, about how often did you feel: tired for no good reason?	Kessler 10 (K10)	5-point Likert scale	Past 4 weeks	Every 3 years
Austria	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	Patient Health Questionnaire 8 (PHQ-8)	4-point Likert scale	Past 2 weeks	Every 5-6 years
Belgium	COVID-19 Health Survey	How much during the past weeks did you feel tired?	Energy and Vitality Index (EVI) of the Short Form 36 Survey (SF-36)	5-point Likert scale	Past weeks	Monthly during COVID; will run through at least 2024
Canada	Canadian Community Health Survey (CCHS)	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-9	4-point Likert scale	Past 2 weeks	Annually
Chile	Encuesta Nacional de Calidad de Vida (ENCAVI)	How often have you felt tired over the last two weeks?	NA (individual question)	5-point Likert scale	Past 2 weeks	Every 5-10 years
Colombia	Social Pulse Survey (EPS)	During the last 7 days have you felt tiredness?	NA (individual question)	Yes/No	Past 7 days	Monthly during COVID
Costa Rica	NA					
Czech Republic	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Denmark	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Estonia	Health Behavior among Estonian Adult Population	In the past 12 months, how often have you felt overtired?	NA (individual question)	4-point Likert scale	Past 12 months	Every 2 years
Finland	Healthy Finland	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-9	4-point Likert scale	Past 2 weeks	Every 5 years, beginning 2023
France	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Germany	German Health Update	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-9	4-point Likert scale	Past 2 weeks	Monthly since 2019; will be annual in future
Greece	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Hungary	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Iceland	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Ireland	Irish Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5 years
Israel	NA					
Italy	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Japan	Comprehensive Survey of Living Conditions	During the last 30 days, about how often did you feel: that everything was an effort?	K6	5-point Likert scale	Past 4 weeks	Every 3 years
Korea	National Health and Nutrition Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-9	4-point Likert scale	Past 2 weeks	Every 5 years
Latvia	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Lithuania	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Luxembourg	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Mexico	BIARE Básico	How much of yesterday did you feel tired or without energy?	NA (individual question)	0-10 scale	Yesterday	Quarterly
Netherlands	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
New Zealand	New Zealand Health Survey	During the last 30 days, about how often did you feel: tired for no good reason?	K10	5-point Likert scale	Past 4 weeks	Annually
Norway	EHIS	Over the last two weeks, how often have you been bothered by any of the	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
		following problems: Feeling tired or having little energy				
Poland	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Portugal	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Slovak Republic	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Slovenia	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Spain	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 5-6 years
Sweden	National Public Health Survey	During the last 30 days, about how often did you feel: that everything was an effort?	K6	5-point Likert scale	Past 4 weeks	Every 2 years
Switzerland	Swiss Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-9	4-point Likert scale	Past 2 weeks	Every 5 years
Türkiye	Turkey Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Every 3 years
United Kingdom	Opinions and Lifestyle Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Feeling tired or having little energy	PHQ-8	4-point Likert scale	Past 2 weeks	Quarterly
United States	National Survey on Drug Use and Health	During the last 30 days, about how often did you feel: that everything was an effort?	K6	5-point Likert scale	Past 4 weeks	Annually

Note: Countries may collect the concept of “tiredness” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.7. Data on feeling calm, relaxed or peaceful: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia	National Aboriginal and Torres Strait Islander Health Survey	In the past month, have you felt calm and peaceful?	Short Form 36 Health Survey	5-point Likert scale	Past 4 weeks	Every 6 years
Austria	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	Mental Health Inventory 5 (MHI-5)	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Belgium	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Canada	NA					
Chile	Encuesta Nacional de Calidad de Vida (ENCAVI)	How often have you felt peaceful over the last two weeks?	NA (individual question)	5-point Likert scale	Past 2 weeks	Every 5-10 years
Colombia	NA					
Costa Rica	NA					
Czech Republic	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Denmark	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Estonia	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Finland	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
France	Working conditions national survey	Over the past two weeks ... I have felt calm and relaxed.	World Health Organization 5 Well-being index (WHO-5)	6-point Likert scale	Past 2 weeks	Every 3 years
Germany	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	Mental Health Inventory 5 (MHI-5)	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Greece	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Hungary	EHIS waves 2 and 3, voluntary module	Over the past two weeks ... I have felt calm and relaxed.	WHO-5	6-point Likert scale	Past 2 weeks	Every 5-6 years
Iceland	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Ireland	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Israel	Israel National Health Interview Survey (INHIS)	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Every 4-5 years
Italy	Aspects of daily life	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Annually
Japan	Japan Quality of Life Survey	The following question ask about how you felt yesterday on a scale from 0 to 10. Zero means you did not experience the emotion "at all" yesterday while 10 means	NA (individual question)	0-10	Yesterday	Annual 2011-13, since discontinued

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
		you experienced the emotion “all of the time” yesterday. Calm				
Korea			NA			
Latvia	EHIS, voluntary module	Over the past two weeks ... I have felt calm and relaxed.	WHO-5	6-point Likert scale	Past 2 weeks	Every 5 years
Lithuania	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Luxembourg	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Mexico	BIARE Básico	How much of yesterday did you feel quiet, calm or sedate?	NA (individual question)	0-10 scale	Yesterday	Quarterly
Netherlands	Health Interview Survey	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Annually
New Zealand	New Zealand Health Survey	In the past month, have you felt calm and peaceful?	SF 12	5-point Likert scale	Past 4 weeks	Annually
Norway	National Survey on Quality of Life	Think about how you have been feeling for the past 7 days. To what extent were you... calm and relaxed?	NA (individual question)	0-10	Yesterday	Annually
Poland	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Portugal	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Slovak Republic	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Slovenia	Countrywide Integrated Noncommunicable Diseases Intervention (CINDI) Survey	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Every 4 years
Spain	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Sweden	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
Switzerland	Swiss Health Survey	In the past month, have you felt calm and peaceful?	Energy and Vitality scale	5-point Likert scale	Past 4 weeks	Every 5 years
Türkiye	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
United Kingdom	EU-SILC 2013 & 2018 well-being ad-hoc modules	During the past month, how much of the time have you felt calm and peaceful?	MHI-5	5-point Likert scale	Past 4 weeks	Irregular, 2013 & 2018
United States	Medical Expenditure Panel Survey	In the past month, have you felt calm and peaceful?	SF 12	5-point Likert scale	Past 4 weeks	Annually

Note: Countries may collect the concept of “calm/relaxation/peace” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.8. Data on feeling angry, annoyed or irritable: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia	National Study of Mental Health and Wellbeing	During the past 30 days, about how often were you mad or angry?	Extended Kessler 10 (K10) scale, additional questions on anger	5-point Likert scale	Past 30 days	Irregular
Austria	NA					
Belgium	COVID-19 Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	Generalised Anxiety Disorder 7 (GAD-7)	4-point Likert scale	Past 2 weeks	Monthly during COVID, will run through 2024
Canada	Survey on COVID-19 and Mental Health (SCMH)	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	Irregular; two waves during COVID
Chile	Encuesta Nacional de Calidad de Vida (ENCAVI)	How often have you felt angry over the last two weeks?	NA (individual question)	5-point Likert scale	Past 2 weeks	Every 5-10 years
Colombia	Social Pulse Survey (EPS)	During the last 7 days have you felt irritability?	NA (individual question)	Yes/No	Past 7 days	Monthly during COVID
Costa Rica	NA					
Czech Republic	NA					
Denmark	NA					
Estonia	Estonian Health Survey	Feeling easily irritated or annoyed	Emotional State Questionnaire (EST-Q)	5-point Likert scale	Past 4 weeks	Every 6 years
Finland	Healthy Finland	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	Every 5 years, beginning 2023
France	EpiCov	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	One-off, 2021
Germany	COALA	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	One-off
Greece	NA					
Hungary	NA					
Iceland	EHIS	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	Every 5-6 years
Ireland	NA					
Israel	NA					
Italy	COVID Twin / Italian Twin Register	I felt that I was rather touchy	Depression, Anxiety and Stress Scale (DASS 21)	4-point Likert scale	Past week	One-off, 2021
Japan	Japan Quality of Life Survey	The following question ask about how you felt yesterday on a scale from 0 to 10. Zero means you did not experience the emotion "at all" yesterday while 10 means you experienced the emotion "all of the time" yesterday. Anger	NA (individual question)	0-10	Yesterday	Annual 2011-13, since discontinued

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Korea	National Health and Nutrition Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	Every 5 years
Latvia			NA			
Lithuania			NA			
Luxembourg			NA			
Mexico	BIARE Básico	How much of yesterday did you feel in a bad mood?	NA (individual question)	0-10 scale	Yesterday	Quarterly
Netherlands	Social Cohesion and Well-being Survey	How angry did you feel yesterday?	NA (individual question)	4-point Likert scale	Yesterday	One-off, 2016
New Zealand			NA			
Norway	National Survey on Quality of Life	Think about how you have been feeling for the past 7 days. To what extent were you... annoyed?	NA (individual question)	0-10	Yesterday	Annually
Poland			NA			
Portugal			NA			
Slovak Republic			NA			
Slovenia	National Survey on Attitudes towards Mental health / Mental Health Literacy	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	One-off, 2022
Spain	Spanish National Health Survey	Often loses temper	Strengths and Difficulties Questionnaire (SDQ)	3-point Likert scale	Past 6 months	Every 5-6 years
Sweden	Health Report's Survey on Mental Health and Lifestyle Habits	Do you have problems with ... irritation / bad mood?	NA (individual question)	3-point Likert scale	In general	Irregular; 4 waves during COVID
Switzerland	Swiss Health Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	One-off, 2022
Türkiye			NA			
United Kingdom	Mental Health of Children and Young People Surveys	Often loses temper	Strengths and Difficulties Questionnaire (SDQ)	3-point Likert scale	Past 6 months	Irregular, but annual since 2019
United States	National Health Interview Survey	Over the last two weeks, how often have you been bothered by any of the following problems: Becoming easily annoyed or irritable	GAD-7	4-point Likert scale	Past 2 weeks	Every 3 years

Note: Countries may collect the concept of “anger/annoyance/irritation” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.9. Data on feeling stressed, strained or overburdened: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia				NA		
Austria				NA		
Belgium	Health Interview Survey (HIS)	Have you recently felt constantly under strain?	General Health Questionnaire 12 (GHQ-12)	4-point Likert scale	Past 4 weeks	Every 5 years
Canada	Survey on COVID-19 and Mental Health (SCMH)	Have you ever experienced a highly stressful or traumatic event during your life?	NA (individual questions), from longer stress coping mechanisms survey module	Yes / No	Lifetime	Irregular; 2 waves during COVID
Chile				NA		
Colombia	Social Pulse Survey (EPS)	During the last 7 days, and compared to the compared to the daily routine prior to the quarantine/preventive isolation, do you feel that you are more overburdened with work tasks?	NA (individual question)	5-point Likert scale	Past 7 days	Monthly during COVID
Costa Rica	Encuesta Nacional de Hogares 2021	In the last 30 days, how much of a problem has it been for you ... manage stress?	NA (individual question)	4-point Likert scale	Past 30 days	Annual survey; 2021 iteration had a COVID-specific module
Czech Republic				NA		
Denmark				NA		
Estonia	Health Behavior among Estonian Adult Population	In the past 30 days, have you been stressed, or under pressure?	NA (individual question)	4-point Likert scale	Past 30 days	Every 2 years
Finland				NA		
France				NA		
Germany				NA		
Greece				NA		
Hungary				NA		
Iceland	Public Health Watch	How often does this apply to you? I feel a lot of stress in my daily life.	NA (individual question)	5-point Likert scale	In general	Monthly since COVID
Ireland				NA		
Israel	Social Survey CBS	In the last 12 months, have you felt stressed?	NA (individual question)	4-point Likert scale	Past 12 months	Annually
Italy				NA		
Japan	Comprehensive Survey of Living Conditions	Do you currently have any worries or stress in your daily life?	NA (individual question)	Yes / No	In general	Annually
Korea	Korea Social Integration Survey	How much stress have you felt in your daily life, overall in the past 2 weeks	NA (individual question)	4-point Likert scale	Past 2 weeks	Every 2 years
Latvia	Study of Habits Affecting the	Have you felt tense, stress or under a lot	NA (individual	4-point Likert	Past month	Every 2 years

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
	Health of The Population of Latvia, 2020", Parts I and II	of pressure during the last month?	question)	scale		
Lithuania				NA		
Luxembourg				NA		
Mexico				NA		
Netherlands	Social Cohesion and Well-being Survey	How stressed did you feel yesterday?	NA (individual question)	4-point Likert scale	Yesterday	One-off, 2016
New Zealand				NA		
Norway	National Survey on Quality of Life	Think about how you have been feeling for the past 7 days. To what extent were you... stressed?	NA (individual question)	0-10	Yesterday	Annually
Poland				NA		
Portugal				NA		
Slovak Republic				NA		
Slovenia	Countrywide Integrated Noncommunicable Diseases Intervention (CINDI) Survey	In the last 14 days, how often did you feel strained, under stress or great pressure?"	NA (individual question)	5-point Likert scale	Past 14 weeks	Every 4 years
Spain	Spanish National Health Survey	Have you recently felt constantly under strain?	GHQ-12	4-point Likert scale	Past 4 weeks	Every 5-6 years
Sweden	National Public Health Survey	Do you currently feel stressed?	NA (individual question)	4-point Likert scale	In general	Every 2 years
Switzerland				NA		
Türkiye				NA		
United Kingdom	Mental Health of Children and Young People Surveys	Have you recently felt constantly under strain?	GHQ-12	4-point Likert scale	Past 4 weeks	Irregular, annual since 2019
United States	American Time Use Survey	From 0 – 6, where a 0 means you were not stressed at all and a 6 means you were very stressed, how stressed did you feel during this time?	NA (individual question)	0-6	Yesterday	Irregular

Note: Countries may collect the concept of "stress/strain" via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.10. Data on the ability to enjoy activities in one's life, feel full of life: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia	National Aboriginal and Torres Strait Islander Health Survey	How much during the past weeks...did you feel full of life?	Energy and Vitality Index (EVI)	5-point Likert scale	Past weeks	Every 6 years
Austria	NA					
Belgium	COVID-19 Health Survey	How much during the past weeks...did you feel full of life?	Energy and Vitality Index (EVI)	5-point Likert scale	Past weeks	Monthly during COVID, will continue through 2022
Canada	NA					
Chile	Encuesta Nacional de Calidad de Vida (ENCAVI)	How enjoyable do you find life?	The World Health Organization Quality of Life - BREF (WHOQOL-BREF)	5-point Likert scale	Past 2 weeks	Every 5-10 years
Colombia	NA					
Costa Rica	NA					
Czech Republic	NA					
Denmark	NA					
Estonia	NA					
Finland	NA					
France	Working conditions national survey	Over the past two weeks ... my daily life has been filled with things that interest me	World Health Organization 5 Well-being index (WHO-5)	6-point Likert scale	Past 2 weeks	Every 3 years
Germany	NA					
Greece	NA					
Hungary	EHIS waves 2 and 3, voluntary module	Over the past two weeks ... my daily life has been filled with things that interest me	WHO-5	6-point Likert scale	Past 2 weeks	Every 5-6 years
Iceland	NA					
Ireland	NA					
Israel	NA					
Italy	Health Condition and Use of Health Services	How much during the past weeks...did you feel full of life?	Energy and Vitality Index (EVI)	5-point Likert scale	Past weeks	Irregular; 1999-2000 / 2004-2005 / 2012-2013
Japan	Comprehensive Survey of Living Conditions	The following question ask about how you felt yesterday on a scale from 0 to 10. Enjoyment	NA (individual question)	Yes / No	In general	Annually
Korea	NA					
Latvia	EHIS, voluntary module	Over the past two weeks ... my daily life has been filled with things that interest me	WHO-5	6-point Likert scale	Past 2 weeks	Every 5 years
Lithuania	NA					
Luxembourg	NA					
Mexico	National Survey on Health and Nutrition	I enjoyed life.	Center for Epidemiologic Studies Depression Scale (CES-D)	4-point Likert scale	Past week	Every 6 years
Netherlands	NA					
New Zealand	General Social Survey	Over the past two weeks ... my daily life has been	WHO-5	6-point Likert scale	Past 2 weeks	Every 2 years

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
		filled with things that interest me				
Norway			NA			
Poland			NA			
Portugal			NA			
Slovak Republic			NA			
Slovenia			NA			
Spain	Spanish National Health Survey	Have you recently been able to enjoy your normal day-to-day activities?	General Health Questionnaire 12 (GHQ-12)	4-point Likert scale	Past 4 weeks	Every 5-6 years
Sweden			NA			
Switzerland	Swiss Health Survey	How much during the past weeks...did you feel full of life?	Energy and Vitality Index (EVI)	5-point Likert scale	Past weeks	Every 5 years
Türkiye			NA			
United Kingdom	Mental Health of Children and Young People Surveys	Have you recently been able to enjoy your normal day-to-day activities?	GHQ-12	4-point Likert scale	Past 4 weeks	Annual since 2019
United States	HealthStyles 2008	How much of the time during the past 30 days have you felt...full of life?	NA (individual question)	5-point Likert scale	Past 30 days	One-off

Note: Countries may collect the concept of “enjoyment” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.11. Data on smiling or laughing a lot: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
Australia			NA			
Austria			NA			
Belgium			NA			
Canada			NA			
Chile			NA			
Colombia			NA			
Costa Rica			NA			
Czech Republic			NA			
Denmark			NA			
Estonia			NA			
Finland			NA			
France			NA			
Germany			NA			
Greece			NA			
Hungary			NA			
Iceland			NA			
Ireland			NA			
Israel			NA			
Italy			NA			
Japan	Comprehensive Survey of Living Conditions	The following question ask about how you felt yesterday on	NA (individual question)	Yes / No	In general	Annually

Country	Survey	Question phrasing	From which tool	Response scale	Recall period	Frequency
		a scale from 0 to 10. Smile or laugh a lot				
Korea				NA		
Latvia				NA		
Lithuania				NA		
Luxembourg				NA		
Mexico				NA		
Netherlands	Social Cohesion and Well-being Survey	Did you laugh yesterday?	NA (individual question)	4-point Likert scale	Yesterday	One-off, 2016
New Zealand				NA		
Norway				NA		
Poland				NA		
Portugal				NA		
Slovak Republic				NA		
Slovenia				NA		
Spain				NA		
Sweden				NA		
Switzerland				NA		
Türkiye				NA		
United Kingdom				NA		
United States	HealthStyles 2008	How much of the time during the past 30 days have you felt ...in good spirits? Extremely happy?	NA (individual question)	5-point Likert scale	Past 30 days	One-off

Note: Countries may collect the concept of “smile or laugh a lot” via a variety of indicators, across many surveys. The entry included in the table is the indicator that is collected most frequently, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.12. Data on feeling one’s life has meaning, purpose or is of use: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Australia				NA	
Austria	EU-SILC 2013 well-being ad-hoc module	To what extent do you have the feeling, that what you do in your life is valuable and useful?	NA (individual question)	0-10	One-off, 2013
Belgium	EU-SILC 2013 well-being ad-hoc module	Overall, to what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	One-off, 2013
Canada	Canada Social Survey (CSS)	Using a scale of 0 to 10, where 0 means 'Not at all' and 10 means 'Completely', to what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	Quarterly, beginning 2021
Chile	Encuesta Nacional de Calidad de Vida (ENCAVI)	How meaningful is your life?	The World Health Organization Quality of Life – BREF (WHOQOL-BREF)	5-point Likert scale	Every 5-10 years

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Colombia	NA				
Costa Rica	NA				
Czech Republic	EU-SILC 2013 well-being ad-hoc module	To what extent do you consider what you do in life to be meaningful?	NA (individual question)	0-10	One-off, 2013
Denmark	EU-SILC 2013 well-being ad-hoc module	In general, to what extent do you feel that the things you do in life have meaning?	NA (individual question)	0-10	One-off, 2013
Estonia	EU-SILC 2013 well-being ad-hoc module	Overall, to what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	One-off, 2013
Finland	Citizens' Pulse	Right now I feel my own life is valuable and meaningful.	NA (individual question)	5-point Likert scale	Monthly
France	CAMME (Enquête de Conjoncture auprès des Ménages Mensuelle)	Do you feel that what you do in your life has meaning, value?	NA (individual question)	0-10 scale	Quarterly
Germany	German Health Update	Over the last two weeks ... I've been feeling useful	The short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	One-off, 2022
Greece	EU-SILC 2013 well-being ad-hoc module	Overall, to what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	One-off, 2013
Hungary	EU-SILC 2013 well-being ad-hoc module	Overall, how meaningful do you find the things you do?	NA (individual question)	0-10	One-off, 2013
Iceland	Public Health Watch	Over the last two weeks ... I've been feeling useful	The short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Monthly since COVID
Ireland	QNHS Special Module on Volunteering and Wellbeing	To what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	One-off, 2013
Israel	NA				
Italy	EU-SILC 2013 well-being ad-hoc module	Think about the aspects that make life important and meaningful. To what extent do you think your current life has meaning?	NA (individual question)	0-10	One-off, 2013
Japan	Survey on the Daily Life of the Elderly	To what extent do you currently feel a sense of purpose in life (pleasure and enjoyment)?	NA (individual question)	4-point Likert scale	Annually
Korea	Korea Social Integration Survey	Overall, to what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	Annually
Latvia	EU-SILC 2013 well-being ad-hoc module	To what extent do the things you do give your life meaning and purpose?	NA (individual question)	0-10	One-off, 2013
Lithuania	EU-SILC 2013 well-being ad-hoc module	In your opinion, how meaningful is what you do in life?	NA (individual question)	0-10	One-off, 2013
Luxembourg	EU-SILC 2013 well-being ad-hoc module	Overall, on a scale of 0 to 10, do you think the things you do in life are worthwhile?	NA (individual question)	0-10	One-off, 2013
Mexico	BIARE Básico	On a scale of 0 to 10, how much do you agree or disagree with the sentence... I usually feel that what I do in my life has worth	NA (individual question)	0-10	Quarterly
Netherlands	Social Cohesion & Wellbeing survey	To what extent do you feel that the things you do in your life are worthwhile?	NA (individual question)	4-point Likert	One-off
New Zealand	New Zealand General Social Survey	To what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	Every 2 years
Norway	Quality of Life Survey	All in all, to what extent do you feel that what you do in life is meaningful?	NA (individual question)	0-10	Annually
Poland	EU-SILC 2013 well-being ad-hoc module	Please rate to what extent you agree or disagree with the statement: "I usually think that what I do in life has meaning"	NA (individual question)	0-10	One-off, 2013

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Portugal	EU-SILC 2013 well-being ad-hoc module	In general terms, to what extent do you feel that the things you do in your life have meaning and are worthwhile?	NA (individual question)	0-10	One-off, 2013
Slovak Republic	EU-SILC 2013 well-being ad-hoc module	In general, to what extent do you feel that the things you do in life are worth it?	NA (individual question)	0-10	One-off, 2013
Slovenia	Behavioural Insights Survey on Covid-19: Slovenia (SI-PANDA)	How often in the past month did you feel ... that your life has a sense of direction or meaning to it?	Mental Health Continuum Short-Form (MHC-SF)	6-point Likert scale	Irregular; 2 surveys during COVID
Spain	EU-SILC 2013 well-being ad-hoc module	In general, to what extent do you think that what you do in your life is worthwhile?	NA (individual question)	0-10	One-off, 2013
Sweden	National Public Health Survey	Over the last two weeks ... I've been feeling useful	The short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Every 2 years
Switzerland	EU-SILC 2013 well-being ad-hoc module	On a scale of 0 to 10, to what extent do you feel that what you do in general in your life is valuable and useful?	NA (individual question)	0-10	One-off, 2013
Türkiye	NA				
United Kingdom	Opinions and Lifestyle Survey	Overall, to what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	Quarterly
United States	HealthStyles 2012 (Internet Panel)	My life has a clear sense of purpose	NA (individual question)	5-point Likert scale	One-off, 2012

Note: This table shows the most frequently collected indicator relating to the concepts of feeling one's life has meaning or purpose; is worthwhile; or that one (or one's life) feels of use, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.13. Data on hope and optimism: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Australia	NA				
Austria	NA				
Belgium	NA				
Canada	NA				
Chile	NA				
Colombia	NA				
Costa Rica	NA				
Czech Republic	NA				
Denmark	NA				
Estonia	NA				
Finland	Citizens' Pulse	How confident are your feelings about your future at the moment?	NA (individual question)	1-10 scale	Monthly
France	CAMME (Enquête de Conjoncture auprès des Ménages Mensuelle)	When you think about what you will experience in the years to come, are you satisfied from this perspective?	NA (individual question)	0-10 scale	Quarterly
Germany	German Health	Over the last two weeks ... I've been feeling optimistic about the future	The Short Warwick-Edinburgh Mental Well-Being Scale	5-point Likert scale	One-off, 2022

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
	Update		(SWEMWBS)		
Greece			NA		
Hungary			NA		
Iceland	Public Health Watch	Over the last two weeks ... I've been feeling optimistic about the future	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Monthly since COVID
Ireland			NA		
Israel	Social Survey	In the near future, do you think that compared to today, your life will be ... better, unchanged, worse?	NA (individual question)	3-point Likert scale	Annually
Italy	Survey on Aspects of Daily Life	In the next five years, do you think your personal situation will: Remain the same, get worse, improve	NA (individual question)	3-point Likert scale	Annually
Italy			NA		
Japan			NA		
Korea			NA		
Latvia			NA		
Lithuania			NA		
Luxembourg			NA		
Mexico	BIARE Básico	On a scale of 0 to 10, how much do you agree or disagree with the sentence ... I am always optimistic with regarding my future	NA (individual question)	0-10	Quarterly
Netherlands			NA		
New Zealand	New Zealand General Social Survey	How satisfied do you expect to be with your life in five years' time	NA (individual question)	0-10	Every 2 years
Norway	Quality of Life Survey	Overall, how happy do you think you will be with your life 5 years from now?	NA (individual question)	0-10	Annually
Poland			NA		
Portugal			NA		
Slovak Republic			NA		
Slovenia			NA		
Spain			NA		
Sweden	National Public Health Survey	Over the last two weeks ... I've been feeling optimistic about the future	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Every 2 years
Switzerland			NA		
Türkiye	Life Satisfaction Survey	Hope for the future	NA (individual question)	4-point Likert scale	Annually
United Kingdom	Opinions and Lifestyle Survey	Overall, to what extent do you feel the things you do in your life are worthwhile?	NA (individual question)	0-10	Quarterly
United States			NA		

Note: This table shows the most frequently collected indicator relating to the concepts of feeling hope or optimism, per country.
Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.14. Data on self-determination, autonomy, self-actualisation: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Australia			NA		
Austria			NA		
Belgium			NA		
Canada			NA		
Chile			NA		
Colombia			NA		
Costa Rica			NA		
Czech Republic			NA		
Denmark			NA		
Estonia			NA		
Finland	Citizens' Pulse	I can do things that I really want and value in my life	NA (individual question)	5-point Likert scale	Monthly
France			NA		
Germany	German Health Update	Over the last two weeks ... I've been able to make up my own mind about things	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	One-off, 2022
Greece			NA		
Hungary			NA		
Iceland	Public Health Watch	Over the last two weeks ... I've been able to make up my own mind about things	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Monthly since COVID
Ireland			NA		
Israel			NA		
Italy			NA		
Japan			NA		
Korea	Korea Social Integration Survey	To what extent do you feel free to make decisions about your life?	NA (individual question)	0-10	Annually
Latvia			NA		
Lithuania			NA		
Luxembourg			NA		
Mexico	BIARE Básico	On a scale of 0 to 10, how much do you agree or disagree with the sentence ... I am free to decide my own life	NA (individual question)	0-10	Quarterly
Netherlands			NA		
New Zealand	New Zealand General Social Survey	Feel it is easy to be yourself in New Zealand	NA (individual question)	5-point Likert scale	Every 2 years
Norway	Quality of Life Survey	I have little control over what happens to me	Set of five questions	5-point scale	Annually
Poland			NA		
Portugal			NA		
Slovak Republic			NA		
Slovenia	Behavioural Insights Survey on Covid-19: Slovenia (SI-PANDA)	How often in the past month did you feel ... confident to think or express your own ideas and opinions?	Mental Health Continuum Short-Form (MHC-SF)	6-point Likert scale	Irregular; 2 surveys during COVID
Spain			NA		
Sweden	National Public Health Survey	Over the last two weeks ... I've been able to make up my own mind about things	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Every 2 years

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Switzerland	Swiss Health Survey	I have little control over the things that happen to me.	Pearlin and Schooler's Mastery Scale	1 to 7 scale	Every 5 years
Türkiye			NA		
United Kingdom	Mental Health of Children and Young People Surveys	Over the last two weeks ... I've been able to make up my own mind about things	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Irregular
United States			NA		

Note: This table shows the most frequently collected indicator relating to the concepts of self-determination and autonomy, per country. Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.15. Data on ability to cope: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Australia			NA		
Austria			NA		
Belgium			NA		
Canada			NA		
Chile			NA		
Colombia			NA		
Costa Rica			NA		
Czech Republic			NA		
Denmark			NA		
Estonia			NA		
Finland	Citizens' Pulse	I can do things well and achieve the goals I have set	NA (individual question)	5-point Likert scale	Monthly
France			NA		
Germany	German Health Update	Over the last two weeks ... I've been dealing with problems well	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	One-off, 2022
Greece			NA		
Hungary			NA		
Iceland	Public Health Watch	Over the last two weeks ... I've been dealing with problems well	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Monthly since COVID
Ireland			NA		
Israel	Social Survey CBS 2021	In the last 12 months, have you felt that you are able to deal with your problems?	NA (individual question)	4-point Likert scale	Annually
Italy	Health Behaviour in School-aged Children (HBSC)	I can handle most problems on my own	General Self- Efficacy Scale (ASKU)	4-point Likert scale	Every 4 years
Japan			NA		
Korea			NA		
Latvia			NA		
Lithuania			NA		
Luxembourg			NA		
Mexico			NA		
Netherlands			NA		
New Zealand			NA		

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Norway	Quality of Life Survey	Faced with problems in my life, I often feel helpless	Set of five questions	5-point scale	Annually
Poland			NA		
Portugal			NA		
Slovak Republic			NA		
Slovenia			NA		
Spain			NA		
Sweden	National Public Health Survey	Over the last two weeks ... I've been dealing with problems well	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Every 2 years
Switzerland	Swiss Health Survey	There is really no way I can solve some of the problems I have	Pearlin and Schooler's Mastery Scale	1 to 7 scale	Every 5 years
Türkiye			NA		
United Kingdom	Mental Health of Children and Young People Surveys	Over the last two weeks ... I've been dealing with problems well	The Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)	5-point Likert scale	Irregular
United States			NA		

Note: This table shows the most frequently collected indicator relating to the concepts coping and dealing with problems, per country.

Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.

Table A.16. Data on self-esteem: Details and sourcing

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Australia			NA		
Austria			NA		
Belgium			NA		
Canada			NA		
Chile	Encuesta Nacional de Calidad de Vida (ENCAVI)	How well do you feel about yourself?	The World Health Organization Quality of Life – BREF (WHOQOL-BREF)	5-point Likert scale	Every 5-10 years
Colombia			NA		
Costa Rica	National Survey on Disability / Encuesta Nacional sobre Discapacidad (Enadis)	How satisfied are you with..... yourself?	NA (individual question)	5-point Likert scale	Every 5 years
Czech Republic			NA		
Denmark			NA		
Estonia			NA		
Finland	Finnish Institute for Health and Welfare	How satisfied are you with yourself?	WHO8-EUROHIS	5-point Likert scale	Annually
France			NA		
Germany			NA		
Greece			NA		
Hungary			NA		
Iceland			NA		
Ireland			NA		
Israel			NA		
Italy			NA		

Country	Survey	Question phrasing	From which tool	Response scale	Frequency
Japan					
Korea					
Latvia					
Lithuania					
Luxembourg					
Mexico	BIARE Básico	On a scale of 0 to 10, how much do you agree or disagree with the sentence ... In general I feel good about myself	NA (individual question)	0-10	Quarterly
Netherlands					
New Zealand					
Norway					
Poland					
Portugal					
Slovak Republic					
Slovenia	Behavioural Insights Survey on Covid-19: Slovenia (SI-PANDA)	How often in the past month did you feel ... that you liked most parts of your personality?	Mental Health Continuum Short-Form (MHC-SF)	6-point Likert scale	Irregular; 2 surveys during COVID
Spain					
Sweden					
Switzerland					
Türkiye					
United Kingdom					
United States					

Note: This table shows the most frequently collected indicator relating to the concepts of self-esteem and satisfaction with self, per country. Source: Results from OECD surveys in 2016, 2022, 2023 and supplemental research by the OECD Secretariat.