

Take-away Points from the HLEG Workshop on Multidimensional Subjective Well-being

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Ideas about new ways forward

- There could be a **role for OECD** in providing a repository for the work of statistical offices and others, and doing research and compiling data on SWB measurement particularly in terms of ongoing methodological testing. The OECD could also facilitate the development of networks among data producers and users, as well as co-ordinate efforts among NSOs to address outstanding methodological issues. Establishing methods for **regular and continued collaboration between statisticians and researchers** would be valuable. One practical task ahead is to identify the most significant gaps in existing research, and the most promising lines of future research.
- As some NSO's and governments move quickly to collect SWB data and produce national indicators, OECD should continue to set high standards and make it clear that SWB is multifaceted, and SWB data are expensive to collect. It is better for NSOs to invest appropriate resources to measure SWB as well as possible, rather than necessarily limiting their approach to collecting data by adding a small number of questions to ongoing surveys. Measuring SWB should be viewed as an investment akin to the investment in collecting National Income statistics. Nevertheless, it is important to answer the "so what?" question, to demonstrate that the benefits of SWB measures outweigh the costs of their development.
- The importance of **panel data** was emphasised repeatedly. **Long-run panel data** (e.g. cohort studies) are also important for addressing life course determinants and resilience, including links between childhood experiences and adult outcomes.
- **Big Data** (from non-survey sources, such as Google searches or Facebook posts) offer a potentially valuable source of information that could complement existing measurement approaches. Currently, most analyses are carried out by private companies for commercial use; it is important to advance methods and research to use Big Data as a **public good**. However, there are many methodological concerns about the meaning and generalizability of "big data" that demand rigorous inquiry.

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- Factors that influence people's subjective well-being are an important area of study. This should include paying closer attention to **heterogeneity of effects**. It should also go beyond standard determinants such as income to include looking at people's **resilience**, meaning the personal and social resources that people begin to develop in childhood (*e.g.* social and emotional skills) and build in adulthood (*e.g.* wealth, social networks and support, continuing skills development), but also the **public resources** that provide practical assistance to people in coping with major life events, such as disability, unemployment, entry into poverty, and other major stressors. When examining adaptation to negative life events, individual differences in both the speed and the extent of adaptation are key issues from a public policy perspective, as they may highlight the types of resources that are needed to help restore SWB and participation in work and society following life challenges.
- There is some appetite for more methodological research on the issue of *what matters to people* i.e. to explore further people's views about the importance of different well-being outcomes. This goes well beyond SWB but is relevant to discussions on combining data into composite or synthetic indices. A range of techniques is gradually evolving in this field (e.g. Benjamin et al., Bechetti et al), which have high potential value to policy. Further research on the validity of such methods and their application to policy should be a priority.
- Most research, including social experiments such as Moving to Opportunities, focuses on subjective well-being as the outcome of interest, seeing "objective" living conditions as drivers. Little is said about how quality of life and well-being at the individual level can impact on wider society, and perhaps the economy. More research on **subjective well-being as a driver of other outcomes**, or as a "leading indicator" of them, would be valuable.

Key Points from Sessions I and II: Measurement

- There has been a **lot of progress** in terms of both methodology and inclusion of SWB questions into NSO surveys: measurement is in a very different place today relative to 5 years ago, and the SSF report was a key catalyst for this progress.
- NSOs and others need to continue building the evidence base on SWB. High-quality and large-sample NSO data will push forward our knowledge of SWB and its possible policy applications, but researchers also need to be able to use these data (*e.g.* there is likely to be strong research interest in the EU-SILC data). The importance of **panel data** for better understanding covariates of SWB, direction of causality, and adaptation, was also emphasised. At the moment, the few panel surveys that include SWB data (e.g., German Socio-Economic Panel, British Household Panel Survey/Understanding Society, and US Health and Retirement Study) are extensively exploited. One message here was 'build it and they will come': high-quality data sets will attract high-quality researchers.

- Another important message was 'use it or lose it'. While NSO data has much to offer in terms of data quality and sample sizes, NSOs will be under pressure to drop measures that are not taken up or widely adopted. Policy demand and research use are major drivers for NSO activity, and governments need to invest in the necessary measurement infrastructure. So there is a need to focus on end users, and to connect measurement, research and policy to ensure support for continued data collections.
- Many data collection initiatives are underway. Whereas in the past it might have been difficult or even counterproductive to coordinate these initiatives, now is the time to seek convergence/ greater coordination among practices. This implies strengthening the conceptual framework, as well as facilitating cooperation among national statistical offices, international organisations and academics. Some methodological questions remain difficult to answer, and should be addressed as part of this process.
- **Coordinated efforts to test questions and methodologies** are especially important. The OECD should play a role in bringing together the new evidence and ensuring that results are shared widely. There are strong international networks of experts working together on design issues for household surveys, and similar networks would be valuable for SWB. Participants stressed the need to balance openness to testing new approaches and refining existing measures, on one side, with the need to preserve time-series and build up a consistent evidence base making use of existing measures, on the other. In addition to data collection methods, **data harmonisation** should be further enhanced.
- The importance of having **separate measures** for life evaluations, affect/experienced wellbeing and eudaimonia was underscored. The need to further develop theory and practice around domain-specific evaluation measures (e.g. satisfaction with public services; satisfaction with housing; etc.) was also discussed.
- Some questions remain about the **optimal set of items** used to measure each of the three high-level domains of SWB and in particular, about the set of items necessary to capture affect/experienced well-being and eudaimonia. The multidimensionality of negative affect raises important measurement consideration; **pain** was flagged as a critical element of experienced well-being currently missing from both the OECD SWB Guidelines core question module and the UK ONS approach.
- It is essential that both SWB measures and the reporting of such measures do not just focus on "happiness" alleviating **suffering and misery** are important public policy concerns. SWB measurement should focus on negative emotions as well as positive ones.

- The issue of the most appropriate survey vehicles for affect and experienced well-being • also needs to be revisited. While experience sampling represents the gold standard of affect/ experienced well-being measurement, it is not practical for NSOs. The Day Reconstruction Method offers an alternative, but it is still seen as intensive/costly, and further work is needed to develop its format for wider use. The US National Academy of Sciences report, which focused on experienced well-being, was enthusiastic about their value and recommended their inclusion in a wide variety of survey vehicles, but stopped short of recommending their use as official national statistics. The American Time Use Survey and French Time Use survey have begun to collect information on emotional experience along with time use data on an *ad hoc* basis. By contrast, the four SWB questions used by the UK Office of National Statistics in their Annual Population Survey, which include two affect/experienced well-being measures, have now moved from 'experimental' to 'official' status (following the approval of the UK Statistics Authority in August 2014). While this does not mean that the measures cannot change in future, it implies that changes will need to be made in a very controlled, systematic and evidence-based way.
- Duration is an important consideration for measurement both in terms of the duration of experienced well-being states in real-time, and in terms of the duration of states that might impact on subjective well-being (such as the duration of unemployment or poverty). Nonetheless, time-use data is collected infrequently (e.g. once every 10 years in the EU) and faces an uncertain future (e.g. the well-being module in the American Time-Use Survey).
- The impact of **culture** on responses to survey questions (on SWB and on other selfreported items more generally) needs to be better understood. There are several different potential sources of cultural effects, and it is important to make a conceptual distinction between cultural 'bias' (*e.g.* problems of translation or differences in the use of response scales which could introduce systematic measurement error) and the more substantive impacts of culture (*e.g.* cultural differences and values that could affect SWB through other drivers such as social connections, trust, freedom and religiosity). Nonetheless, these can be extremely difficult to separate in practice. Some methods for measuring SWB such as the U-index (which focuses on whether the dominant emotional experience during the day was positive or negative) can potentially circumvent issues of differential response scale use, but can also result in lost information. Instead of strongly focusing on country rankings, other approaches to international data sets include (i) examining differences in the **rate and direction of change** in SWB over time between countries, and (ii) examining the **distribution of SWB** within countries, and whether this is preserved across countries (*e.g.* provisional EU-SILC results suggest this could be interesting).

- The susceptibility of life evaluations to **context effects** (e.g. question order) remains a concern but is seen as less problematic for affect/experienced well-being items. The wider literature on context effects is mixed. While survey design can seek to minimise the impact of factors such as question order, the wider issue at stake is whether large context effects could indicate that questions are not tapping into a stable underlying construct. The process that people go through to formulate responses to life evaluation questions remains a bit of a 'black box'. Nonetheless, substantial evidence on the validity of life evaluation measures suggests that people can and do provide meaningful responses. These differing accounts are in need of reconciliation.
- Presentation and use of results is also critical, particularly in relation to methodologies for aggregating different components of well-being (objective and subjective) into a single composite index. Some novel approaches to eliciting people's preferences and their evaluations of trade-offs through survey methods are being developed (e.g. Benjamin *et al.*) although stated preference methods have been brought into question by behavioural science findings (e.g. framing effects; focusing illusion; faulty affective forecasting). Question design is key to moving forward in this area. The issue of weighting individual sub-components of SWB is also challenging (although being distinct concepts, there is overlapping variance between life evaluations, affect/experienced well-being and eudaimonia). A broader question is the appropriate weight of SWB relative to other elements of well-being overall. Single indices are more useful as communication than as policy tools, where a greater degree of granularity is needed. That said, examining tradeoffs is also a key issue for policy.
- Understanding what constitutes **meaningful change** is also important for presenting and interpreting results.
- **Big Data** offer opportunities to complement NSO-generated measures of SWB, particularly in terms of providing more timely estimates, high frequency information, local level data, and potentially early warning signals. Big Data are also multidimensional Google search queries (a form of revealed behaviour), for example, can be used to cover a wide range of experienced states, such as pain. The wealth of Big Data available means that the impact of various shocks (e.g. the impact of the financial crisis across and within US cities) can be investigated in a timely fashion. There are challenges around selection bias and noise, and disaggregating results by different population groups is challenging, because access to data on individual characteristics is rare. However, disaggregation by factors such as location (e.g. at the city level) is feasible.
- Nomenclature around SWB is still causing problems. ONS refers to SWB as "personal well-being", because focus groups indicated that SWB was difficult for the public to understand. In other areas (e.g. the Legatum Commission) the general term "well-being" is used to denote SWB in contrast to the OECD Better Life Initiative use of the word. The US National Academy of Sciences report was headlined "Subjective Well-Being" but in

fact focused on experienced well-being – which is, in turn, a broader interpretation of what the OECD Guidelines referred to as "affect". Meanwhile, the *OECD Guidelines on Measuring Subjective Well-Being* are often mistakenly assumed to cover all types of selfreported (or perception) data. When talking about SWB, we need to get into the habit of saying what kind of SWB we are talking about.

Key Points from Sessions III and IV: Correlations and Policy Uses

- Heterogeneity of effects is an important consideration, particularly when using SWB in a policy context. It is important to go beyond average effects (because 'what works on average might not work for you') and consider the possibility of different effects among different groups. In this context, it is important to identify subgroups for analysis, and develop ways to measure the effects of different policies on SWB among those subgroups. This requires large sample sizes.
- There is a growing literature focused on the personal and social resources (such as social and emotional skills) in childhood that can impact on adult outcomes (both objective and subjective) as well as on people's ability to bounce back from adversity. Nonetheless, there is also evidence suggesting that characteristics in adulthood also have impacts on adult outcomes, over and above childhood factors. Research on **children's subjective well-being** should also form part of the measurement agenda.
- Adaptation (or "getting used to the way things are") was discussed. It was suggested that adaptation to positive life events might be more consistent and complete than adaptation to some types of negative events. For example, GSEOP indicates little or no adaptation several years after entry into poverty, and there seems to be little adaptation to experiences of physical pain over time. People's **focus of attention** might also be an important factor here: a health condition involving continued pain (or a level of poverty that makes feeding your family a daily challenge) provides a continued focus of attention. So too does daily news coverage of a crisis in the markets, or falling of GDP.
- The need to **deconstruct covariates** to a greater extent was also raised e.g. moving beyond simply stating "health is a major driver" and towards a better understanding of which health conditions have the greatest impacts on SWB and why.
- Similarly, deconstructing SWB is important, as different SWB outcomes (e.g. life evaluation and experienced well-being) can have different correlates.
- On the other hand, analysis is often **too fragmented** to have immediate policy relevance. A greater focus in the literature (e.g. on policy-amenable drivers of SWB) could help.

- Shared method variance hampers the ability to examine relationships between SWB and other variables that are typically self-reported. Repeated measures studies (panel data, experience sampling, the day reconstruction method) enable controlling for individual fixed effects: analyses can focus on within-persons variation rather than between-persons variation, which can circumvent concerns around differential use of response scale, personality effects *etc*. These are powerful methods for examining SWB.
- Establishing **direction of causality** is very challenging, as there are reciprocal effects between SWB and several of its drivers (income, health, social connections). Natural or quasi-**experiments** are useful in this regard (e.g. *Moving to Opportunities* and the Oregon health insurance lottery study) as well **cohort studies** (e.g. non-cognitive skills in childhood impacting adult outcomes) but again heterogeneity of effects should be considered: it is not safe to assume that what works for one group of people in one set of circumstances will necessarily work elsewhere or be scalable on a nationwide level. There can also be data mining issues in experimental work: where large numbers of outcomes are investigated, the risk of errors necessarily increases.
- The current list of correlates of SWB is huge and some of these might be spurious. Much of the existing work in this area is weak from an econometric perspective. **Complex interrelationships** among the drivers of SWB mean that we can expect to see lots of mediated, moderated and suppressed effects. Furthermore, there are issues around interpretation: when expected relationships are observed this is interpreted as "validation"; when they are not, it is sometimes interpreted as "SWB telling us something we didn't know before". This looks like trying to have it both ways. It is therefore difficult to reach strong conclusions about correlates based on the work that is currently available. This relates to the importance of developing testable theories in SWB as opposed to simply exploratory and hypothesis-generating studies.
- Given the complex interrelationships among variables, and the long causal chains involved in SWB, simple correlations can be misleading and greater consideration should be given to selection and sorting effects essentially: how people arrive at the situation they are in (e.g. choices about having children, which neighbourhoods to live in, etc.). Airport noise is one example: people live near airports for a reason, typically because of lower housing prices, and well-meaning policy (e.g. to reduce traffic at night) could actually make them worse off. While "deshrouding" (i.e. providing better information to the public about the covariates of SWB) is one alternative to more paternalistic policies, there are risks in making complex relationships look more simple than they are and the 'curse of the average' also comes into play here. There is a need to give more guidance to policy-makers on the use of subjective well-being measures. Nevertheless, issues of selection and sorting effects are widespread in policy analysis, and not unique to SWB.
- Despite the caution expressed around policy uses of SWB, several **practical examples** were shared (e.g. OECD, UK, Legatum Commission, cost-benefit analysis). Most of these

examples point to **evolution rather than revolution**, in terms of impact. Including SWB measures in policy analysis and evaluation is far from being a widespread the practice. In most cases, SWB is used to add information to other indicators: there is no sign of policy being organised around maximising SWB or a single life evaluation measure (as is sometimes alleged).

- Some evidence suggests that SWB might have value as a **leading indicator**: SWB could potentially change more quickly than some very long-run outcomes, such as health. This should be explored further.
- Several concerns raised about the policy uses of SWB are relevant to almost any type of policy analysis. Most social outcomes of interest to governments (including health, crime, unemployment and poverty) involve complex causal pathways at the population level, with no grounds for believing that heterogeneity of effects can be overlooked, or that the results of single analyses or experiments can be generalised. Again, there is a risk that SWB evidence is held to a higher standard than other evidence already commonly used in policy analysis. So going forwards, it would be helpful to **clearly articulate the challenges that are specific to SWB** (*e.g.* adaptation) as compared to those that are common to many self-report variables (e.g. shared method variance, sensitivity to survey methodology, high levels of measurement error) and those that relate more broadly to the use of almost any social science evidence in policy (*e.g.* heterogeneity of effects, complexities of causal pathways, selection and sorting, and the challenges of clearly isolating cause from effect).
- It is possible that one of the reasons why SWB is held to such a high standard is that some economists are using SWB as a **proxy for utility**. This raises the stakes substantially, because it elevates SWB to being 'the' final outcome of interest to government rather than one of several outcomes of interest (where the weaknesses of SWB can be compensated by the strengths of other objective measures, and vice-versa). Using SWB measures to represent the single end-goal in this way places very rigorous demands on data quality, measurement error, and the robustness of analysis demands that are very hard to meet in present circumstances.
- In the case of **valuing non-market factors for cost-benefit analysis**, current methods used have serious limitations; thus complementing existing methods with SWB-based valuations could help to develop a more rounded picture counterbalancing the flaws of current tools with a different set of weaknesses.
- It is clear that *none* of the well-being measures currently used is, by itself, an adequate measure of human well-being. This means continuing to rely on dashboards of measures for which we lack good navigation systems and from which people will continue to pick their favourites.

• Given the cautiousness around policy uses, it may be valuable to steer at least some of the analytical effort away from focusing on SWB as (the) outcome of interest, and towards looking at SWB as a **driver of other outcomes**, as a **leading indicator**, and/or as a **tool to determine weights and valuations** for objective components of well-being where these lack market prices. In some instances (*e.g.* migration decisions, economic decisions, health, social and political unrest) SWB information could help to **predict behaviours**, over and above what suggested by conventional economic, social and environmental statistics.