



Incorporating Culture into Measurements of Well-Being:

Conceptual and Methodological Challenges and its Importance for Policy

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I hereby certify that I formulated the research question and performed the literature review used in this report, developed and implemented the study design, analyzed the data, and interpreted the results. I also confirm that the project presented reflects my own work, that the report was written using my own ideas and words, and that I am the only person held responsible for its content. All sources of information, printed or electronic, reported by others are indicated in the list of references in accordance with international guidelines.

Supervisor: Rachel Irwin

Abstract

In 1948, the World Health Organisation adopted the definition of health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. Despite this, health has mainly been measured in terms of disease, disability and death. However, subjective well-being (SWB) has received increasing attention in recent years, and has even been proposed as a complementary measure to GDP for tracking social progress. Nevertheless, as the understanding and experience of disease is intertwined with cultural factors, so is the concept of being well. In a recent report, the Lancet Commission on Culture and Health stated that the role of culture has been systematically neglected in medical science in the past, and that this neglect is the single biggest barrier to advancement of the highest attainable standard of health worldwide. However, adapting indicators to each culture would undermine methodological consistency and make international comparisons useless. On the other hand, seeing that culture affects both the idea of a life well lived and reporting of the same, cross-cultural comparability of SWB measures is already questionable.

The main aim of this thesis is to explore conceptual and methodological challenges in quantifying largely qualitative concepts such as culture and subjective well-being in surveys, and to investigate whether cultural determinants of subjective well-being can inform future public policy. For investigation, a literature review of challenges was conducted, alongside three case studies of existing surveys measuring SWB across Europe. Semi-structured interviews with experts within the field of SWB complemented the data collection.

Results show that current challenges for cross-cultural research on SWB are more conceptual than methodological in nature. The reification of ‘culture’ and ‘subjective well-being’ into variables can rather hamper understanding than expand it, and there is a major role for qualitative approaches to play in expanding knowledge. Expert interviews revealed both advantages and disadvantages in incorporating culture into policy for health and well-being, and the responsibility for improving well-being was raised as a major concern. However, seeing that health improvement is already dependent on development within the wider society, adding a cultural lens will not only improve understanding, but also add depth to existing models. Thinking of health, SWB and culture as three interlinked dimensions will allow for more complex, but also more accurate analyses of how to improve people’s lives.

Key words: subjective well-being, culture, cultural determinants, public policy

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List of abbreviations and glossary

Abbreviations, in order of appearance:

WHO	World Health Organization
OWB	Objective well-being
SWB	Subjective well-being
UNESCO	United Nations Educational, Scientific and Cultural Organization
GDP	Gross Domestic Product
OECD	The Organization for Economic Cooperation and Development
SDSN	Sustainable Development Solutions Network
DALY	Disability Adjusted Life Year
EQLS	European Quality of Life Survey
WVS	World Values Survey
WVSA	World Values Survey Association

Glossary

Hedonic	An approach focusing on an outcome of life, i.e. happiness or pleasant (or unpleasant) sensations.
Eudaimonic	An approach focusing on the process of living well, e.g. the purpose or meaning of life, rather than the outcome itself.
Conceptual	Being derived from, or characterized by, an abstract or general idea or its formation.
Methodological	Relating to, or characterized by analysis of principles and procedures of inquiry in a particular discipline.

Introduction

“The care of human life and happiness, and not their destruction, is the first and only object of good government.”

~ Thomas Jefferson, third president of the United States of America

What is well-being?

In 1948, the World Health Organization (WHO) adopted the definition of health as a “state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (1). This was an historical acknowledgement of a more holistic view of health, which was further reinforced by the emergence of the so called “New Public Health” in the 1970s, and later by the health promotion strand within public health, which acknowledged the role of wider social influences as being more important, and less costly, for health improvement than high-tech medicine (2).

Despite the emergence of a more comprehensive view on health and well-being, progress in health has until recently predominantly been measured in terms of morbidity, mortality, and disability. Indicators measuring the positive side of health have historically been lacking (3), and what makes a good life has rather been a question for philosophers than for epidemiologists or policy makers. However, the science of well-being has grown tremendously in the last two decades (4), and as a result, several theoretical frameworks have evolved. Although a universally accepted definition of well-being is still lacking (5-6), most scholars would agree that the concept encompasses two dimensions; an objective and a subjective one (3, 7-8).

The objective dimension of well-being (OWB) includes determinants of well-being that can be objectively observed, such as income, health, or educational status. Some researchers also include people’s opportunities to realize their potential; opportunities that should be equitably distributed among all people and without discrimination on any basis (3, 9).

The subjective dimension of well-being (SWB) relies on people reporting on the experience of their own lives (3, 9). This dimension, due to its subjective nature, is more debated, and different scholars include different elements within the concept. Two main streams can be distinguished in literature; the hedonic school, where the goal of living is to maximize happiness and reduce pain, and the eudaimonic school, which stresses that life should be

guided by pursuing meaning and purpose (5-6). Some also argue for the need to include positive mental health into the framework (10).

Today, most would agree that SWB is a multi-dimensional construct that necessitates measurement by several indicators, tapping into different elements of the concept (5), and SWB is usually assessed by responses to questions about overall life satisfaction and positive and negative emotions. Studies have shown that the standard indicators used, summarised in Table 1, provide reliable and valid results (7), however, whether they can be validly compared across cultures remains uncertain (11-12).

Table 1. Summary of measurement items on SWB.

Element of SWB	Measure	Item content, example
Hedonic, evaluative well-being	Self-rated life satisfaction (LS) Cantril's ladder	All things considered, how satisfied are you with your life as a whole these days? (from 0-10) Please imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. 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. On which step of the ladder would you say you personally feel you stand at this time?
	Self-rated happiness	Taking all things together, how would you say things are these days – would you say you are very happy, fairly happy or not too happy these days?
Hedonic, experienced well-being	Positive affect	Respondents report whether they experienced specified positive feelings a lot yesterday, e.g. enjoyment, love, or if they smiled and laughed a lot.
	Negative affect	Respondents report whether they experienced specified negative feelings a lot yesterday, e.g. worry, sadness, depression or anger.
Good mental functioning	WHO-5 well-being index	Respondents report how they have been feeling over the last two weeks, e.g. cheerful and in good spirits, calm and relaxed or active and vigorous.
Eudaimonic well-being	Feelings of purpose and meaning	Eudaimonic measures are less common in international and national surveys. Item examples are for instance "I am optimistic about the future" or "I generally feel that what I do in life is worthwhile". Respondents can reply that they either strongly agree, agree, neither agree or disagree, strongly disagree or don't know.

The role of culture in subjective well-being

Since the 1960s, researchers have tried to reveal the determinants of SWB (11, 13). Unsurprisingly, favourable life circumstances such as good health, strong social relations and a healthy national economy have been found beneficial (14). However, after controlling for income and other life circumstances' affect on SWB, a certain amount of residual variance between regions remains unexplained, and culture has been put forth as one possible explanatory factor (7). As an example, a recent study by Senik (12) compares affluent

countries with similar life conditions in Europe, and the French, Germans and Britons were found to have lower mean levels of SWB than their European neighbours. Senik explains that French natives are significantly less happy than other Europeans, regardless if they live in France or outside. Furthermore, immigrants living in France experience a lowering of their SWB levels the longer they live in the country. This indicates that even though people share the same external circumstances, their perceptions of these circumstances might differ. Senik attributes this difference to the cultural context, which she argues has a real impact on the happiness of populations.

In order to explore the relationship between culture and SWB, one inevitably has to approach the concept of culture. Culture is a complex, multi-level construct, which like SWB has no universally accepted definition. Most scholars recognize that culture contains basic assumptions and values, practices, symbols and artifacts; that culture is not the same as country or nationality; that culture is shared among individuals belonging to a group or society; and that it is formed over long periods of time. However, this is where agreement ends (15). When it comes to measurements, disaggregation of the concept into variables is difficult, which can lead to over-simplistic operationalisations. Despite the agreement on culture as something more than nationality, most international surveys use country of origin, ethnicity or current nationality as a proxy for culture, overlooking within-country differences as well as similarities across geographical borders (13).

To get an initial understanding of culture, United Nations Educational, Scientific and Cultural Organization's (UNESCO) definition of cultural diversity will be used. In its 2001 Universal Declaration on Cultural Diversity (16), UNESCO stated that culture should be regarded as:

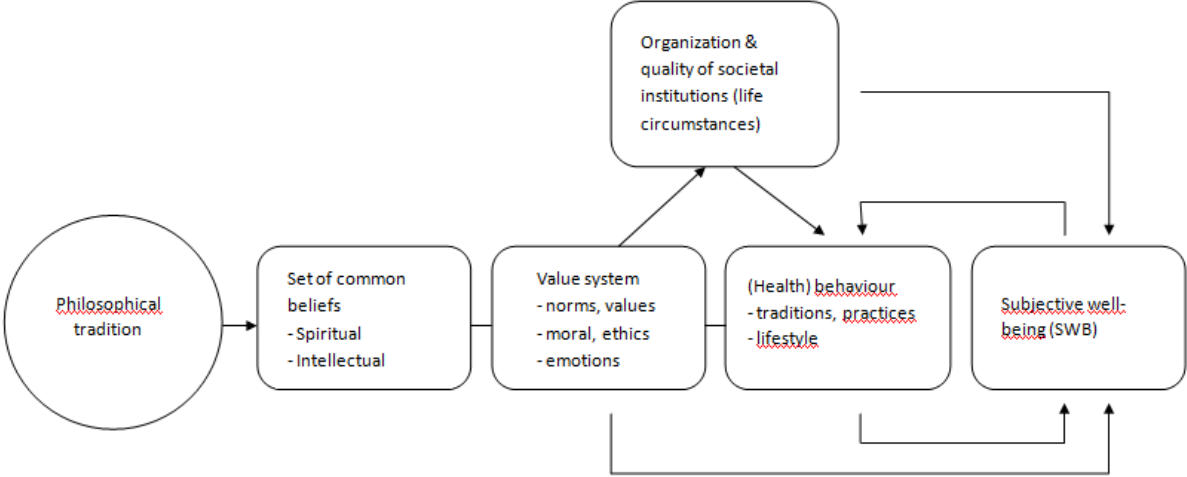
“the set of distinctive spiritual, material, intellectual and emotional features of society or a social group, that encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs”.

Conceptual and methodological challenges

The study of culture and SWB is a relatively young scientific field, but has produced a considerable amount of studies in the last decade. Evidence suggests that culture affects subjective well-being on several different levels; cognitively, through self-identity (17) and the understanding of what constitutes a life well-lived (18); socially, through implicit rules about how SWB is valued, achieved and expressed in society (13, 19); through behaviour, practices and habits that support or suppress well-being (20-22); and through the organization

of our societies and the quality of institutions (23). For an emerging framework on culture and SWB, see Figure 1.

Figure 1. An emerging framework on culture and subjective well-being.



This complexity makes for both conceptual and methodological challenges in measurement and analysis of the relationship between culture and subjective well-being, and to date, the methodological approach for investigation has been mainly quantitative (24-25). Consequently, frameworks used in international surveys have to assume that questions on well-being are seen and answered the same way across language groups, and that the different variables used in surveys do an equally good or bad job in capturing the main features of happy lives across cultures. These assumptions are, according to Helliwell and Wang (26) unrealistic, and evidence suggests that they might lead to underestimation of SWB levels in some cultures, and to overestimation in others.

As the understanding and experience of disease is inextricably intertwined with cultural factors, so is the concept of being well. The ideas about health and well-being differ substantially between societies, which in some ways contradicts the standardized approach to measurement and the objectivity of science (27). Cultural values and norms are often implicit, and are therefore not visible until they are questioned or challenged. Moreover, as most surveys rely on closed-ended questions with fixed, mutually exclusive response categories, possibilities to investigate different aspects of culture are limited (28). Furthermore, using standardised survey items might in some cultural contexts impose meanings of what well-being is, rather than discover it (28-29). Hence, even though quantitative methodologies have

well-known strengths, their ability to aid understanding on culture and SWB can be questioned (28-30).

Background

Well-being as a pathway to better health outcomes

A considerable amount of studies have explored the relationship between health and SWB, and recent literature suggests that it is both strong and reciprocal (31). For instance, prospective longitudinal studies show that a high level of happiness (i.e. positive emotions) make people healthier and live longer even after controlling for health and socioeconomic status at baseline (32). People that are happy and satisfied with their life also exhibit more risk-avoiding behaviour (22), lower levels of overweight and obesity (33), healthier cardiovascular systems and stronger immune functioning (32, 34). The relationship between mental health and SWB is particularly strong, with SWB ultimately prolonging life through a lower incidence of suicide, but also through lower levels of pain and a greater pain tolerance in persons with a higher level of SWB (3).

In 2012, the WHO Regional Office for Europe adopted Health 2020, a policy framework and strategy for health and well-being (35). Health 2020 argues that the exponential growth of chronic disease and mental disorders, a lack of social cohesion, environmental threats and financial uncertainty has made improving health even more difficult, and in order to manage shifting global patterns of disease, new approaches are needed. Given that the enhancement of well-being at a population level might also improve health outcomes, the WHO Regional Office for Europe argues that well-being could serve as a potential entry point for action in improving future health in the European Region (3).

However, the WHO European Region is the largest of the six WHO regions, with a great diversity of cultures, including countries from the Mediterranean, Scandinavia, Central Asia and the Russian Federation (36). Therefore, incorporating culture into the equation of well-being and health is necessary. In November 2014, the Lancet Commission on Culture and Health (27) released a report stating that the effect of culture on health outcomes is significant, and that ideas about well-being have been systematically neglected within the biomedical paradigm in the past. In the report, the authors make the case that culture not only determines health, but also defines it through different cultural groups' understandings of what it means to be well. The authors even go as far as saying that the neglect of culture and

well-being in medical sciences is the single biggest barrier to advancement of the highest attainable standard of health worldwide.

The role of policy making for subjective well-being

As the need for a more comprehensive measure of human welfare has grown, subjective well-being has been put forth as a complement to traditional measurements such as Gross Domestic Product (GDP), and hence also generated considerable interest from policy makers (9). Many global organizations have taken on this challenge; well-being became a central part of the European Commission's agenda in 2007 when they launched their "Beyond GDP" initiative (37); in 2009, the Commission on the Measurement of Economic Performance and Social Progress, headed by the Nobel prize-winning economist Joseph Stiglitz, recommended in its final report that national statistical agencies collect and publish measures of subjective well-being (9); in 2011, the Organization for Economic Co-operation and Development (OECD) launched their "Better Life Initiative", stating that what really matters is the wellbeing of people (38); and in 2012, the UN hosted their first High Level meeting on Happiness and Well-being (39). Furthermore, the third World Happiness Report was released on April 23, 2015, edited by leading experts within the field of well-being and published by the UN Sustainable Development Solutions Network (SDSN) (40).

However, acknowledging SWB as an important policy outcome makes the responsibility for improving it not only an issue for the Department of Health, but for the whole of society. Furthermore, recognising that both health and SWB are interlinked with cultural factors makes comparing data on SWB across global regions such as the WHO European Region particularly challenging. Therefore, questions regarding how to best explore the relationship between culture and SWB, and whether this information can be used to inform policy, still remain.

Research question

How far can quantitative approaches take us in establishing the effect of culture in relation to subjective well-being, and how can knowledge on culture and SWB meaningfully inform policy?

Aim and specific objectives

The main aim of this thesis is to explore conceptual and methodological challenges in quantifying largely qualitative concepts such as culture and subjective well-being in surveys, and to investigate whether ‘cultural determinants of subjective well-being’ can inform future public policy.

Specific objectives

1. To identify conceptual and methodological challenges to measuring culture and subjective well-being in surveys.
2. To explore how these challenges are met in three international population based surveys, how they are perceived to affect the validity of findings and the ability to compare findings across cultures.
3. To investigate possible advantages and disadvantages of incorporating culture and SWB into future public policy for the WHO European Region.

Methodology

Study design

To study the process of cross-cultural measurement of SWB and the incorporation of culture and SWB into policy, a mixed qualitative design was chosen (41-42). This included a literature review specifically looking at theory and methodology in measurements of subjective well-being, three case studies analysing selected international surveys measuring SWB, and semi-structured expert interviews with respondents working in the field within the WHO European Region.

Study setting

Well-being research is conducted in all parts of the world, and assessments of conceptual and methodological challenges in measuring SWB have global relevance. However, considering policy relevance, the WHO European Region was chosen as a study setting, as there is extensive ongoing policy and research work on the topic in this region.



The WHO European Region consist of 53 countries with GDPs (PPP-adjusted) ranging from 90,789 - 2,511 US\$ per capita (43). The total population of the 53 countries reached nearly 900 million in 2010, an increase of 5 percent since 1990. The population is ageing rapidly. Today, approximately 15 percent are 65 years or over, a number that is projected to be more than 25 percent by 2050 (3). Non-communicable diseases (NCDs) account for the largest proportion of mortality in the Region, with cardiovascular disease being the most common cause of death. Mental disorders are at 19 percent the second largest contributor to the loss of disability adjusted life-years (DALYs), and the most important cause of disability (35).

In terms of well-being, Europe¹ shows large inequalities. Eurofound (37) maps average life satisfaction which ranges from 8.4 in Denmark to 5.5 in Bulgaria on a scale of 1-10. GDP per capita explains a lot of this variation with richer countries having some of the highest levels of life satisfaction, and the poorest having the lowest. However, this is not true in all cases, and GDP cannot explain the entire variance. When clustering countries by welfare regime (44), the Scandinavian countries come out on top and the post-socialist countries of the former Soviet Union, along with some of the southern European countries have significantly lower levels of life satisfaction. A few countries even score much lower than expected compared to their GDP – Greece, Hungary and Bulgaria.

Sample selection

Literature review

For the literature review, searches were conducted via Karolinska Institutet's library webpage, which utilises fourteen medical databases such as PubMed and Web of Science, ten psychology/behavioural science databases such as AnthroSource and PsycInfo, and five public health/epidemiology databases such as Global health and OECD Social Expenditure Statistics, among others. Complementary searches were also made on Google Scholar, as it picks up "grey literature" and policy documents that might not have been peer reviewed or published in a scientific journal. Search terms used were:

- measuring AND culture OR subjective well-being;
- methodology AND culture OR subjective well-being;
- conceptual AND challenge AND culture OR subjective well-being;
- methodological AND challenge AND culture OR subjective well-being;

¹ Eurofound measured the EU27 countries, which means that not all countries that are included in the WHO European Region are a part of this analysis.

- assessing AND culture OR subjective well-being;
- impact of culture AND subjective well-being;
- culture AND life satisfaction OR happiness OR mental functioning OR eudaimonia.

Furthermore, reference lists of studies found, plus the “related articles” function in databases were used to expand the search, and fourteen studies were included in total before saturation was reached and findings started to repeat and overlap (41). The final selection of articles was based on the following criteria:

- Studies should explore challenges in theory and/or methodology regarding quantifying the concepts of culture or SWB, focusing on survey methodology, or challenges in assessing international and/or cultural differences in SWB.
- Studies should discuss cultural response bias and/or cultural impact on study results and/or the effect of these phenomena on cross-cultural comparability.
- Studies should not discuss participation in/consumption of cultural activities exclusively, but can be accepted if they also discuss cultural bias and/or cultural impact.

Case studies

For the case studies, three international surveys collecting data on SWB used in the WHO European Region were selected; the European Quality of Life Survey (EQLS); the Gallup World Poll; and the World Values Survey (WVS). The Gallup World Poll and the WVS were selected as they are currently the two largest datasets with comparable measures of SWB. The EQLS was selected because it contains the largest set of questions on SWB (7). National surveys were not selected as the case studies intended to analyse international surveys. Furthermore, the OECD Better Life Index was also discarded as it collects data from visitors to the OECD Better Life webpage, which can create certain biases in the data. For instance, people visiting the webpage might already have an interest or knowledge in the field of SWB, or the percentage of young people answering might be higher than that of older people, as young people are generally more used to looking for information online (45). Several other surveys exist that collect data on SWB in Europe, such as the European Social Survey, the Eurobarometer survey and the EU-SILC survey, but due to space limitations, the total number of case studies was set to three.

Expert interviews

To select respondents for the expert interviews, purposive sampling was used (42), and respondents were selected for their expertise regarding culture, subjective well-being and policy. The following criteria were used to guide the selection of respondents:

1. Firstly, the organisations responsible for the chosen surveys in the case study, in this case Eurofound, the Gallup Organisation and the World Values Survey Association (WVSA) were contacted.
2. Secondly, participants lists from WHO meetings on well-being from 2012-2015 were used as a sampling frame, resulting in a list of 50 people in total. To select respondents with the most current and relevant knowledge, the following criteria were used:
 - a. Persons should have participated in at least two meetings on well-being since 2013.
 - b. Persons are working, or were working for an organisation or institution in the WHO European Region at the time of the meeting, excluding persons from outside the Region.
3. Thirdly, representatives from the WHO Regional Office for Europe involved in the ongoing project on culture and well-being were contacted.
4. Lastly, the final sample of respondents was controlled for geographical representativeness of the WHO European Region and for containing a gender balance.

For each of the organisations mentioned in step 1, two people were contacted. If none replied, an additional person was contacted, along with reminders for the initial two. All eligible persons from the WHO participants lists were contacted via e-mail, along with two persons responsible for the work on well-being from the WHO Regional Office for Europe. As the final sampling pool was considerably skewed towards Western Europe, three additional persons from Romania and Poland were contacted. These persons were found via the webpage of the Quality of Life: a Challenge for Social Policy conference held in Bucharest in April 2015 (46).

After the inclusion and selection process, the total number of eligible respondents added up to 24. Respondents were contacted via e-mail and sent the abstract of the study with aim and research questions clearly stated. Fifteen of the contacted respondents chose to participate on first contact, however, one cancelled twice due to sickness and an over-booked schedule, and another failed to confirm a date for the interview despite reminders. Three respondents

declined upfront due to retirement, maternity leave and a change in working responsibilities respectively, and the other six did not respond to the invitation. This resulted in a total of 13 interviews.

Data collection and analyses

Literature review

As mentioned above, a literature review specifically focusing on conceptual and methodological challenges in measuring culture and SWB was conducted. Although prior research exists on this topic, it is partly incomplete and can benefit from further description. Furthermore, a literature review allows for a directed approach to content analysis of the data (47), i.e. validating or extending an existing theoretical framework on culture and SWB, and using the results from the literature review to guide the initial coding scheme. The findings from the literature review were synthesised into a matrix (see Annex I), and laid a foundation for the case studies as well as for the expert interviews.

Case studies

Next, three international surveys used to collect data on SWB in the WHO European Region were studied in depth. This was done in order to explore how the identified conceptual and methodological challenges were tackled in practice, and to assess the surveys' ability to look at the relationship between culture and SWB. For the latter purpose, one needs to know what is meant by the concept of "culture". To get a broad understanding, UNESCO's definition of cultural diversity, also mentioned in the Introduction section of this report, was used as a framework. Again, a directed approach to content analysis was used (47), allowing the previously identified challenges from the literature review, as well as UNESCO's definition of culture, to guide the analysis of the case studies.

Expert interviews

In order to explore perceptions on the quantification of culture and SWB, cross-cultural comparability of results, and policy relevance of culture and SWB, semi-structured expert interviews were conducted. The interview guide was organised around a set of predetermined open-ended questions, with follow-up questions and probes emerging during the conversation (48). Thus, the researcher set the agenda in terms of the topics covered, but the interviewee's responses determined the information produced about those topics, and the relative importance of each of them (41).

The interview guide was pilot tested and modified according to the feedback received. Moreover, questions that were frequently misunderstood or in need of clarifications during interviews were re-phrased, taken out or replaced by others. New insights acquired during the interview process lead to modifications of follow-up and probing questions (49). However, the alterations were minor and are not considered to have affected the consistency of data collection. A synthesised version of the interview guide can be found in Annex III.

Due to limited resources for travel, interviews were conducted via Skype or telephone. The interviews were recorded with the respondents' permission and transcribed verbatim. The transcripts were then analysed using a directed, or theory-driven, approach to content analysis, i.e. deducing understanding from a predetermined theory or body of knowledge (50).

To get a sense of the whole, and to get familiar with the data, the interview transcripts were read through several times. As the interview respondents were experts, interpreting the data and looking for "hidden meanings" was not found to be useful. Instead, the transcripts were organised into a category matrix (see Table 2), with main and generic categories based on the results of the literature review and case studies, as well as the research question and specific objectives of this study (50). However, predetermined codes, or subcategories, were not used as the researcher wanted to be sure to capture all relevant text without biasing the identification of it (47). Therefore, the subcategories rather emerged during the coding process (50).

Table 2. Category matrix for analysis of interview transcripts.

Category matrix		
Main categories	Generic categories	Sub-categories
Methodological challenges	Translation Cultural bias Item functioning Self-report measures	Effect on validity Effect on cross-cultural comparability
Conceptual challenges	Definition versus indicator Researcher bias	
Suggested ways forward	Collaboration across disciplines and "new" evidence	Mixed methodologies Interdisciplinary research teams
Policy relevance	Advantages	Policy formulation Intervention design/policy implementation Policy communication Policy evaluation

	Disadvantages (1) and suggested solutions (2)	(1) The diffuseness of culture Political sensitivity Stigma/equity Stereotyping Whose responsibility is well-being?	(2) Definition and measurement Participation and dialogue Longitudinal data Intersectoral collaboration
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Ethical considerations

Regarding the literature review and case studies, data is publicly available and did not pose problems in terms of ethics. For the expert interviews, informed consent was acquired orally at the start of the interview. On first contact, a detailed e-mail was sent to all respondents including a presentation of the researcher, the background for the study, and the study aim and research question attached. The e-mail explained how they had been selected to participate and details about how the interview was to be conducted, should they agree to participate. The Oxford University Best Practice Guide for elite interviewing (51) states that written consent might not be appropriate in elite interviewing as the respondent generally understands the situation he or she is in, and what it implies. It argues that granting to participate in an interview should be seen as informed consent, however, the researcher cannot assume this is the case without properly informing about the purpose and aim of the study, who is doing it and why, and also repeat this information in the beginning of the interview and record the acceptance of this by the respondent. If these steps are carried out, a written informed consent is not necessary when interviewing elites.

However, issues relating to confidentiality and anonymity are important to consider in all elite interviewing, as these issues can sometimes be limited by the very nature of participants' professional roles (52). The sampling procedure as described above could also indicate which respondents that were asked to participate, but the final sample of respondents is only known to the author of this report and the individual respondents themselves. The respondents' names are not used in the final report and the confidentiality agreement, which included for instance permission to use quotes and that quotes would be anonymous, was discussed in the start of each interview. Furthermore, respondents that wanted to pre-approve quotes before the finalisation of this report had the selected quotes, including the context in which the quotes were to be put, sent to them via e-mail. Adjustments to, or the removal of quotes were done in understanding between researcher and respondent.

Results

When mapping conceptual and methodological challenges in the literature review, several issues that could interfere with survey results, and hence make international comparisons difficult, emerged (see Annex I). The implications of dealing with these challenges in practice were analysed in three case studies of international surveys currently measuring SWB (see Annex II). A selection of conceptual and methodological challenges is presented here, along with their perceived effect on validity of results and on cross-cultural comparability, as expressed by experts. These challenges are translation, cultural response bias, item functioning, validity of self-report measures, definition versus indicator, and researcher bias. Lastly, perceived advantages and disadvantages of incorporating knowledge on culture and SWB in policy are presented. A short summary of interview respondents' characteristics can be found in Table 3.

Table 3. Summary of characteristics of interview respondents.

Category	Number
Male	8*
Female	6*
Scientific background	4 Psychology 2 Epidemiology 2 Sociology 1 Social policy research 1 Health policy 1 Medical humanities 1 Physician 1 Statistics 1 Health economy
Current organizational affiliation	9 Governmental organization 4 Research 1 Other
Current Location	2 Ireland 2 United Kingdom 2 Spain 2 The Netherlands 2 Denmark 1 Luxembourg 1 France 1 Romania 1 Finland

** As the reader may notice, the total number of respondents adds up to 14. This is because one interview was done with two respondents on request. However, this interview counts as one study case in analysis.*

Methodological challenges

Translation

When measuring SWB across countries, translation was reported in interviews as challenging. The challenge was related not only to the translation of the concept of subjective well-being as such, but also to the translation of the different elements of it, such as emotions:

In my own language [...] it's difficult to define what well-being is. We have one word which is the same for well-being and welfare, and there have been some funny confusions when people talk about one and others speak about the other (interview 11).

Something as silly as happiness, which in English is straight-forward, everybody understands that, nobody would have to think twice about how to answer a question like that, is quite difficult in other languages because that very same concept doesn't exist in that form (interview 7).

However, when asked about the effect translation had on the validity of measurements, and the possibility to compare results across countries, most seemed confident that their rigorous translation and back-translation routines were robust and that the instruments were actually measuring the same thing across countries:

It's important [...] to define these concepts quite well so that people can use the functional equivalent, so it's not literally translating a word so that it has the same sort of literal meaning, but making sure that you're measuring the same concept (interview 11).

At this point we have already also dealt with that challenge, but that took considerable effort (interview 7).

Cultural bias

Next methodological challenge to receive major attention from the respondents was the issue of cultural response bias. Cultural response bias occurs when people from different cultures systematically responds differently to the same questions (7). According to respondents, this challenge is not unique to SWB research, and it cannot be attributed to the instruments used. However, whether cultural bias affects cross-cultural comparability of results was a matter of more concern. Even though a few respondents mentioned techniques used to overcome this

problem, such as anchoring vignettes², many were uncertain as to whether global comparisons of results were even possible as people seem to be reporting so differently on the same questions:

There is sufficient evidence out there that these measures are valid in the sense that they do measure what they are supposed to be measuring. But the relative validity across cultures is not quite clear yet (interview 7).

This is an area we are very keen to get a better handle on, a better grip on. Because, I think we need to be able to answer this question of whether there is bias in the data, and if so how much? What size of impact can we expect bias to have when comparing subjective well-being levels across countries? And what does that mean for how we should report the data? (interview 2).

However, one respondent argued that when narrowing the scope from the world to a European context, the issue of cultural bias was less of a problem. This was arguably due to the fact that people in Europe are more familiar with the concept of SWB, the use of scales and more exposed to survey research in general:

So you have those small differences in terms of cultural differences and possible cultural biases within Europe. But I don't think they are major enough to be worried about in cross-cultural comparability (interview 7).

Item functioning

Another challenge mentioned by experts was the issue of item functioning. Item functioning refers to the fact that different survey questions can function differently in different cultures (18). Again, differing item functioning did not make experts question the validity of the measures themselves, but the ability to compare responses across cultures was more uncertain, and as an example, several respondents talked about the Cantril's ladder (see Table 1):

I tried the Cantril's ladder in Malawi, and they didn't even know what a ladder was, because they didn't have, there are no ladders. 'Cause if you live in a hut, like in a village, you have one floor, you don't need any ladder (interview 13).

² Vignettes are short descriptions or stories of fictional scenarios that are rated by respondents. The ratings are then used to identify differences in how respondents e.g. interpret and report on scales, which can help researchers weight the responses more accurately when comparing different countries (7).

This particular example might not apply to the WHO European Region, however, several respondents could still see challenges with using the Cantril's ladder in the European context, in addition to certain affect measures:

Can there be disadvantages in using the Cantril's ladder? Certainly when you use them without pilot testing [...]. These kind of cognitive field trials should go before widespread use of them throughout the EU Region (interview 10).

At least from what I know there's no study on this in Kazakhstan, so we don't know which emotions they understand, if they understand happy in the way we understand it, or if there are terms in their language to refer to happiness, relaxed or if there is not a word for that (interview 5).

Self-report measures

Survey results of SWB rely on self-reported evaluations of people's lives. As they are products of cognitive processes, they are subjective and personal, and might therefore be affected by various biases and errors (29). However, they might also reflect actual experiences of people's lives (7). Experts appeared torn in this matter during interviews, and in several cases, doubts were expressed regarding the overall validity of self-report measures. Some respondents underlined the need to compare subjective measures with objective life circumstances to get a more "true" and accurate picture of the SWB of a population. Other respondents were more inclined to trust the subjective data, and at the same time confirmed that there was a certain divide between scientific disciplines:

[...] one of the big tensions seemed to be around subjectivity, so for the psychologist it seems perfectly reasonable that if you want to find out about someone's well-being you would ask them. And you would get their view of their own sense of well-being and that obviously [...] has an inherently subjective nature. The [...] comfort levels with that were clearly much, much lower [...] from the economist side (interview 6).

This is not a precise measure, something that you can put your hand on, it's not directly observable. This is [...] the most important challenge here, to make people understand that you can measure something that you do not observe, directly. It's like what physics are doing with the dark matter or with the big bang, you cannot see it but they try to measure it (interview 9).

In sum, most of the methodological challenges that were discussed in interviews were not perceived to affect the validity of the measures themselves, and the fact that standard indicators of SWB used in population surveys have been rigorously tested in psychometric studies and deemed both reliable and valid was underlined. Nevertheless, the question whether one can compare self-reported evaluations of well-being across cultures, considering that the idea of what a good life is varies, was considered crucial by experts, but not at all resolved.

Conceptual challenges

Definition versus indicator

The culturally differing concepts of what constitutes a good life have been described in many publications, and the classical example is the “eastern” or “Confucian” idea of well-being as a state of harmony and balance, versus the “western” idea of well-being as happiness, excitement or self-realization (18). As the conceptual definition of the phenomenon under study underpins the entire study design, it will also affect the choice of indicators used to measure that phenomenon. One respondent gave an excellent example:

In Bhutan, which has this concept of Gross Domestic Well-Being rather than product, in a set of key questions they ask for example “do you do regular meditation” [...]. This is what we don’t ask in [Europe]. Maybe we should, I don’t know (interview 11).

Several respondents commented on this fundamental relationship between conceptual definition and indicator. Some argued that the most common measurement items, such as the Cantril’s ladder for instance, in fact works well across cultures just because of its functional detachment from the actual definition of SWB:

So something like life satisfaction, or the overall evaluation of life, so the best-worst type question... that of course allows someone to interpret it within their own contextual framework, within their own value system. So, I’m satisfied with my life to the extent that my life fulfills... what I want from my life (interview 2).

Other respondents were not as certain that cross-cultural comparisons could be made in a meaningful way using those same survey questions:

As any definition of well-being is going to be country specific, or even community and locally specific, reporting on well-being becomes very complex. If we understand and agree that not everyone is working to the same definition of well-being then how do we actually say anything meaningful on well-being across an entire Region? (interview 3).

Despite this, most respondents agreed that they would not change or adapt measurement items according to the culture that is being surveyed, as the comparability of survey questions then would be lost:

... if you want to get comparable responses, you have to ask comparable questions (interview 2).

Moreover, one respondent went as far as to separate entirely the conceptual definition of a phenomenon from the measurement of the same:

Well, these are two different things. We've been measuring intelligence for the last 30 years, and even within the discipline of psychology, we still have no commonly shared understanding of what intelligence actually is. It hasn't stopped us measuring it, and it hasn't stopped a very widespread discussion about intelligence and the role it plays (interview 6).

Researcher bias

Another challenge mentioned by experts was the issue of researcher bias. Researcher bias occurs when there is a flaw in a survey's research design (53), and in this case, it pertains to the design of survey questions being based on a so called "western" idea of what SWB is. One respondent presented this in an enlightening way:

The science seems to be fixated, or focused on subjective life evaluations, experienced well-being [and] eudaimonia... now all those three forms of well-being are rather Western, and when you go to a different historical or philosophical context, those models may or may not work at all (interview 7).

I think by using an instrument that was designed for a Western culture, we may miss what's really relevant for cultures that have a really different set of cultural cues and cultural backgrounds [...]. We know little about how they would construct their own

theory of well-being, and how they would construct their own instrument if they were to design a research program like ours (interview 7).

In sum, whether differing conceptual ideas about SWB make comparisons of results from common items invalid across cultures is an unresolved matter, and opinions among experts differ. Moreover, non-comparability of results might also be a consequence of researcher bias, where researchers design surveys around typically “Western” ideas about a life well lived, leading to a poor fit with other cultures.

Meeting challenges in practice: results from case studies

In order to explore how the conceptual and methodological challenges found in the literature review were met in practice, the Gallup World Poll, the European Quality of Life Survey (EQLS) and the World Values Survey (WVS) were analyzed as case studies. All three surveys adopt a quantitative approach with data on SWB being collected through questionnaire-based interviews, either via telephone or face-to-face. The samples are nationally representative and comparisons are done by country.

The case studies show that rigorous translation routines and validation processes are implemented to ensure conceptual equivalence of key terms, and different statistical techniques are used in tackling cultural response bias. However, challenges such as differing item functioning across cultures cannot be met by using a survey design, as survey questions need to be consistent in order to be comparable. A summary of results from the case studies is presented in Table 4. For a more detailed description, see Annex II.

Table 4. A summary of results from case studies.

Challenge	Gallup World Poll (global)	EQLS (EU)	World Values Survey (global)
Translation	Rigorous translation and back-translation routine used to ensure conceptual equivalence of key words. Translated into 140 languages.	Rigorous validation process used to ensure conceptual equivalence of key words. Translated into 32 languages.	The questionnaire is translated into the national languages. Independent back-translations and pre-testing of questionnaire used.
Cultural response bias	Anchoring vignettes are used to prevent cultural response bias.	Patterns of response categories starting to emerge after three waves. Cognitive interviews were used in pre-test of survey questionnaire.	How the challenge was met could not be assessed as no WWSA expert participated in interviews.

Item functioning	Hedonic items used, evaluative and experienced. No items for eudaimonic SWB used. Only validated SWB items.	A large number of both hedonic and eudaimonic items used. Only validated SWB items.	Hedonic items used, evaluative and experienced. No items for eudaimonic SWB used. Only validated SWB items.
Validity of self-report measures	SWB items are valued against objective indicators such as economy to assess whether they are above or below what they objectively “should” be.	EQLS acknowledges that self-reports are as valid as objective measurements, however, comparisons of subjective and objective measures can complement each other.	Access to data from the WVS is open, which means SWB items have been used in innumerable studies, both with objective variables and on its own.
Definition vs indicator	Survey not designed to measure cultural differences in concepts of SWB, no correlations between culture and SWB done. Research ongoing at Gallup.	Survey not designed to measure cultural differences in concepts of SWB. No correlations between culture and SWB done.	Specifically measures “cultural values” and uses variables for e.g. religion and tolerance, and correlates these with SWB.
Researcher bias	Not mentioned in documents, but in interviews.	Not mentioned in documents or interviews.	Not mentioned in documents. No interviews conducted with WVSA.

Exploring culture and SWB: suggested ways forward

Collaboration across disciplines and “new” evidence

During expert interviews, reasoning around challenges naturally led to discussions on how to best approach the overall relationship between two seemingly ephemeral concepts. Several respondents highlighted the limitations of quantitative methodology as a source of understanding in this context:

We need to think about evidence for the 21st century. We are no longer in a world we're we can afford to only measure quantitatively when we talk about health and well-being [...]. That's not new but has not been taken forward consistently; it means looking at historical accounts, narratives that give us explanations and background and context rather than only a number³ (interview 8).

In order to come at the genuine subjectivity of well-being, we probably need to do more than just collect data from surveys and polls (interview 3).

A number of respondents talked about the lack of interdisciplinary research teams in SWB research as a possible explanation for the prevailing focus on quantitative measurement, and

³ Interviewee's emphasis.

proposed a widely expanded cross-disciplinary collaboration effort, as well as looking at “new” evidence for health and well-being:

We need more interdisciplinary work; we need health professionals, public health researchers and epidemiologists to work together with other researchers like anthropologists, sociologists and ethnographers... (interview 5).

What we think needs to be done is to move away from what is strictly measurable to other forms of evidence that we have never seriously considered before in public health. These are anthropological records, historical narratives, things which we as epidemiologists have largely dismissed – that’s a mistake (interview 8).

However, respondents were not ready to abandon quantitative survey methodologies, and could see several advantages with using them, especially the possibility for large, representative samples and making correlations between SWB and other variables. Nevertheless, the need for more cognitive and qualitative research alongside surveys, in order to make survey designs more culturally relevant was mentioned on several occasions:

We need to do more cognitive research, before we do surveys. And [...], we need to do more qualitative research, in order to understand what people understand [about SWB], and not take it for granted (interview 5).

Incorporating cultural determinants of SWB into public policy

Advantages

As subjective experiences such as SWB are formed and expressed within a cultural context, whether this information can be used to inform policy making for a global region such as the WHO European Region is up for discussion. However, interviewed experts could see several advantages in including SWB indicators in a policy framework, and a majority highlighted a better understanding of the relationship between culture and SWB as a crucial component in future policy making for health and well-being. Advantages were discussed mainly in relation to four main stages of the policy process; policy formulation, intervention design and policy implementation, policy communication and policy evaluation. Findings are presented according to these categories.

Policy formulation

For policy formulation, a better cultural understanding was seen as necessary in creating policies that are more in tune with each country's specific needs. Many experts underlined that if you want to have an impact on the well-being of a community, you have to have an understanding about that community's values. Examples were given where a WHO regional policy for Europe would be general, and country specific recommendations should be adapted to each cultural context:

a specific either group of people, for instance migrants, or a group of people linked to a geographical location like a city, might have specific needs. And if you target your policies to these specific needs, you might be more effective than a very general policy for a whole country (interview 1).

The policies could be general, and maybe we can suggest that everyone engage more in socializing activities, but then we have to adapt that to every country, every culture because the way of socializing is not the same (interview 5).

Policy implementation

For policy implementation and intervention design, the need for cultural sensitivity was mentioned by almost all respondents. A greater cultural awareness was said to increase chances of intervening in a culturally appropriate way, making policies more effective on the ground, to create better understanding about the socio-cultural context of health care delivery and its outcomes, to help understand which outcomes are valued in different cultures, and to create better tools for applying that knowledge, for instance in disaster relief:

I think if we look at the Ebola crisis for instance... had we had a better, culture centred model for how we can sensitively provide disaster recovery relief, we probably could have had a better outcome. Clearly, some of the issues with resistant communities in West Africa were cultural, you know? And some health care workers that came into those communities had no idea how to deal with those kinds of issues (interview 3).

That might in a way maximize the impact of a given intervention, if you know that a health intervention, a public health campaign or some other type of collaboration with the government will be more culturally relevant in a given country than in another (interview 7).

Policy communication

When it comes to policy communication, respondents saw that cultural awareness could improve communication on policy and make it more tangible for people. Also, cultural behaviours that promote health and well-being could be used as good examples:

If we find that there are certain cultural tendencies that improve resilience, and consequently improves well-being, then it might be worth highlighting and celebrating those (interview 3).

However, good examples from one culture was not necessarily seen as transferrable to another, but had to be adapted to the context in which it was to be communicated. Two examples that were given were the role of the church for social cohesion, and cultural food practices:

I don't think you can take on the role of the Roman Catholic church in the UK for example, but what you could do is say well ok, the church isn't going to play that kind of role [for social cohesion] in our society, are there other organizations that might? (interview 6).

If it's actually scientifically substantiated, [...] it's a good thing to highlight. But it would be futile to argue that we should all have a particular diet. Food is a fundamentally embedded cultural phenomenon (interview 3).

Policy evaluation

Lastly, respondents saw great advantages in using SWB measures for evaluating policy outcomes, and adding a cultural lens to that evaluation was suggested to improve the analysis of why certain public health interventions work and others do not:

Well-being indicators allow us to see the actual health and well-being benefits of a policy (interview 12).

Because it will allow us to get closer to the explanation of why we do not succeed in introducing prevention measures... behaviour changes also require normative changes (interview 4).

In sum, several advantages in incorporating a cultural dimension into SWB policy were expressed by the experts, and one respondent summarized the entirety in a way that depicts how disadvantages and advantages could be weighted:

I think [adding culture] would give a more complete picture of subjective well-being across countries. It would make the process even more difficult, but I think it makes the picture more complete (interview 10).

Disadvantages and suggested solutions

Despite the fact that most experts viewed an increased cultural understanding as beneficial to policy making for health and well-being, several doubts or disadvantages also emerged. Disadvantages mentioned by experts revolved around the concept of culture, political sensitivity, potential stigmatization, ideals and stereotypes, and the responsibility for improving well-being of populations. In this section, I will present these doubts together with suggestions from the interviews on how to overcome them.

The concept of culture

Firstly, the concept of culture itself was discussed, and several experts described it as slightly diffuse – some even thought it was too broad to bring into policy making:

Culture is one of these concepts that are so fuzzy that people are a little bit worried about dealing with it. It can mean anything to everyone, you know? (interview 3).

The whole well-being research area is currently still pretty diffuse. And [adding] culture will increase that diffuseness at first (interview 4).

Some mentioned the UNESCO definition of cultural diversity (16), but found it impractical as a conceptual definition as it was seen as too broad. Firstly, experts wanted a definition that could be disaggregated into variables, and as a second step, many went on to describe how a possible effect of culture on SWB would have to be established before it could become a priority for policy making. However, step two of that process differed in character depending on the methodological approach of the expert – should culture firstly be measured, or understood?

We first need to know through the surveys if there is indeed effect of culture on well-being, and if there is an effect we should take that effect into account in establishing a policy (interview 1).

...let's move away from trying to cluster and measure and let's try to first really understand what the different effects are that these elements have on each other. That we have never explored and yet we want to move in the direction of "oh, let's

measure, let's cluster and let's describe". There we have missed steps [...] let's try to understand the beginning and use other things to really understand, and don't think first about how and whether we can measure (interview 8).

Political sensitivity

Another disadvantage mentioned in interviews was that both SWB and culture could be interpreted as politically sensitive topics, especially when used in international comparisons. The multi-faceted nature of SWB and its amorphous definition could make the topic delicate for certain governments and a lack of understanding about the importance of SWB could lead to public criticism:

The Prime Minister has been pushing for a happier nation, but he is being quite cautious as well. [...] the media is quite harsh, saying that the economy is going down, and now we are focusing on being happy because that's the only thing we can do, just being happy and poor basically (interview 13).

Moreover, incorporating cultural differences into that could make the equation even harder to handle according to respondents:

Some definitions of well-being also include things like civil rights, freedoms of expression... and if you include things like that there will be of course resistance in countries where they have different norms and values regarding these issues, so... Say like, [certain countries] will not start doing well-being measures at this time... unless they can manipulate them (interview 4).

Culture is a difficult subject for policy makers. If we find that one culture, or one value is particularly good for well-being, does that mean that governments should promote it? This is really, really difficult territory (interview 2).

In sum, when considering SWB and cultural differences, several experts underlined the importance of politics. To meet this challenge, participatory approaches and dialogue were suggested, as presented in the next section.

Potential stigmatisation

The issue of potential stigmatisation of certain cultural groups was a concern for experts, and the difficulty of meeting specific needs as well as treating everyone equally was mentioned as a disadvantage:

The problematic issue is when you study certain population groups, that the results that you get are not used against that group... you have to be careful when you give these messages and results, so that they aren't misinterpreted (interview 12).

You don't want to have a situation where you adopt one policy in one area, and another policy in another area. You want to be even-handed and make sure that if policy support is provided, it's provided to everybody (interview 2).

On the topics of political sensitivity and potential stigmatization, suggested ways forward were for instance helping countries understand the importance of well-being to their population, and supporting them with adequate tools to define it in their own cultural context. Furthermore, equal opportunity for participation for the general population and dialogue were highlighted as crucial:

Anything policy makers do that is touching on things like culture, has to be done in dialogue. And has to be done in collaboration with people throughout the country or area depending on what sort of level of analysis you're looking at. I think one of the important components of public policy for many people is that you treat everyone equally (interview 2).

Creating meaning for well-being is something that is inherently participatory; it's something that the population needs to feel empowered to be part of (interview 3).

Ideals and stereotypes

Next disadvantage mentioned on culture and SWB was related to the measurements used, especially country averages and the message they send out about populations. Furthermore, not having multi-dimensional measures, e.g. only using one indicator such as the Cantril's ladder, could end up creating stereotypes and/or ideals that are not representative:

An unfortunate by-product of this attention on subjective well-being surveys, is that you always get the same countries at the top, like Denmark or Switzerland. I think that's problematic, because people end up looking to these places for the answer to improving well-being globally (interview 3).

It makes you think that Finland is like that and Sweden is like that, you could fairly quickly end up with stereotypes that aren't true, and especially when you look at a

single value that tells you that Denmark is the happiest country in the world (interview 12).

In order to avoid this, experts suggest that longitudinal data that tells us about changes in SWB in a certain setting should be more important for informing policy than comparing one particular indicator across countries:

When these indicators are being put to good use by policy makers, is when it comes to the local level and to the longitudinal analysis, to track well-being over time, to see whether we seem to be doing better or worse than a few years ago. Some policies might be better suited to get us out of this problem than others and I think some governments are quite smart about that (interview 7).

Whose responsibility is well-being?

Lastly, introducing SWB and culture into a policy context was seen as a considerable challenge by several experts. The main concern was related to responsibility – which governmental department should be responsible for improving the subjective well-being of their population?

I think all governments think that well-being is important but there are ministries of health that feel that this is not their mandate. They're saying "we deal with health, well-being is something for the whole of government", or perhaps for the social sector or whatever (interview 8).

...but, it's still a difficult message to sell to our ministry of health (interview 4).

However, a few experts highlighted the fact that health is not separated from well-being, from culture or from the rest of society, and that solutions for health improvement will lie in looking for partnerships with other departments and actors:

From what we hear we can imagine that the quality of life of the Greek people is not the best and that this is not only because of employment and income, but also because of many other aspects. So I think all the different elements [of SWB] should be high on the agenda of policy makers, which at the moment is not the case (interview 1).

I think no government can afford anymore just to see health as health and social policy as social policy, that's gone, that's gone! We need to have the whole of

government involved in health, 'cause health affects everything and everything affects health (interview 8).

Human beings are complex, and how human beings interact with their environment is complex, it's true, but [...] breaking down life into certain brackets has never helped us, and I think moving away from that is⁴ gonna help us (interview 8).

In summary, interviewed experts could see both advantages and disadvantages in incorporating a cultural dimension into SWB policy, and most also provided possible ways forward in this field. The complexity of the concepts themselves and the fact that SWB is a relatively new policy domain makes the future of well-being policy in cross-cultural context hard to predict, but no less important. One expert expressed this particularly eloquently:

People say "oh yeah life, God and universe is all so big", well yeah, you know, that big thinking separates us from the animals, we actually think about these big issues [...] human beings are programmed to think big or else we would still be sitting in the jungle throwing coconuts at each other (interview 8).

Discussion

Main findings

The first part of the study aim was to explore conceptual and methodological challenges in quantifying largely qualitative concepts such as culture and subjective well-being in surveys, and several challenges were found that could interfere with survey results and make cross-cultural comparisons difficult (see Annex I). However, most of these challenges were not perceived to affect the validity of the measures themselves by experts. Cross-cultural comparability of results on the other hand, was seen as more of an unresolved matter.

It is well known that if a measurement item is to be used across cultures, not only must translation be excellent, but one must also ensure that the content validity is maintained at a conceptual level (54). Previous research has shown that the underlying idea of what it means to be well inevitably reflects in how one reports on one's well-being (11, 18), and even though clever statistical techniques have been developed in survey methodology to meet the accompanying challenges, a recent review showed that most measurement scales are never evaluated in cross-cultural contexts (6). Therefore, many of the conceptual challenges in

⁴ Interviewee's emphasis.

survey methodology, related to how people understand, interpret and value their lives across cultures, still remain.

When analysing the case studies, it became evident that when collecting data through surveys, there has to be a trade-off between measurement consistency and adaptation to the specific culture's definition of subjective well-being. Information on the underlying conceptual frameworks for the analysed surveys was hard to find, which could indicate a lack of theoretical basis for the survey, or that it is simply not made explicit. This is not uncommon, and during the last decade, authors within cross-cultural value research have called for a greater emphasis on the assumptions that underlie the theories and concepts used in surveys (29).

Furthermore, as most surveys are not designed to measure cultural differences, the concept of culture is not defined or operationalised into variables, which makes it difficult to look at correlations between cultural factors and SWB. The World Values Survey (WVS) is the exception, which measures differences in values between "national cultures", and cluster countries on a so called "culture map" (55). However, the relationship between values and other constructs are not easily addressed using survey methodology, as it is important to understand where they fit in a broader social structure if they are to be useful (29). Moreover, although country is a convenient lens through which you can look at culture, it is not the only lens, and the definition of culture becomes important here. Lastly, using the WVS will only allow us to make inferences about the values that are included in their framework, which might not be exhaustive in different cultural contexts.

In sum, my results show that measuring SWB in surveys might not take us all the way in terms of understanding, and survey methodology does not fully help us meet the challenges relating to different conceptual ideas about SWB that exist in different parts of the world. The "implicit reification" (56) of both 'culture' and 'subjective well-being' in surveys into something supposedly unitary, or even into a variable, rather impairs or hampers our understanding. Several factors can influence people's perceptions around well-being, for instance the reference group someone uses for appraising their own life, the political and economic situation in their country, or cultural or historical roots. These factors have a substantive impact on people's experiences, and my results support the argument that they should rather be taken into account when comparing SWB across cultures, than simply being corrected for (7).

This leads us to the issue of methodologies. In all research, the methodology should reflect the purpose of the research. However, in many cases the methods rather reflect the scientific tradition within which the research takes place (24). If the main objective is to understand conceptual ideas about subjective well-being, how it is valued in different cultures, and how culture and well-being interact, qualitative methodologies play an important role (29-30). Instead of merely measuring and comparing “amounts” of SWB, qualitative methods could help in making measuring items and frameworks of SWB more relevant to, and more aligned with people’s understanding of a life well lived, and consequently help avoid an ethnocentric researcher bias. The almost exclusively Western cultural background of theories and instruments used in SWB research makes cross-cultural comparisons of well-being questionable. Therefore, the future of the science of SWB relies on researchers acknowledging their own cultural (and disciplinary) biases and assumptions before commencing a study (29), in order to improve the development of measuring instruments used (29), and increase understanding of what well-being means in different contexts.

The second part of the study aim was to investigate the possibility for ‘cultural determinants of SWB’ to inform policy. The reason why the generic term “policy” has been used consistently throughout this thesis, and not health policy, is due to the very nature of the two concepts under study – ‘culture’ and ‘subjective well-being’. Acknowledging subjective well-being as an important policy outcome, and agreeing that both health and SWB are largely intertwined with culture makes the responsibility for improving SWB an issue for not only Departments of Health, but for the whole of government. My results show that incorporating culture and improving cultural understanding in policy making for health and well-being can make it more relevant to each country’s specific needs, improve public health interventions and disaster response initiatives, facilitate culturally appropriate policy communication, and increase understanding in policy evaluation, i.e. assessing why certain interventions work and others do not.

Nevertheless, some obstacles still remain. Experts had concerns regarding potential stigmatisation of certain cultural groups, and creating false ideals or stereotypes when comparing single-item SWB measures across countries. Culture was seen as a “fuzzy” concept and the UNESCO definition was deemed too broad to be practical. Both culture and SWB were seen as politically sensitive topics, and the question relating to whose responsibility it is to improve well-being was perceived as complicated. For instance, if an indicator focuses only on health, it will not reflect other factors affecting well-being, and if it

ranges widely beyond health, it may be difficult to motivate why it should be a specific concern of the Department of Health (57).

However, as NCDs, mental conditions and diseases of an ageing population increase, new approaches to public health are needed (3), which was also recognised by experts. Health is already a part of the global context, and a part of the wider society; migration, environmental threats, poverty and disasters have major impacts on health, but also on well-being outcomes. Furthermore, life circumstances and life events are inevitably affected by the cultural context in which people exist; therefore, meeting these challenges will require a wider interdisciplinary collaboration, the use of qualitative evidence in health, broad participation from both governments and societies, and maybe even the courage to move away from international comparisons of a single measure, towards tracking broader development of SWB over time in each relevant national or cultural setting.

Strengths and limitations of the study

The term “reliability” refers to the trustworthiness of the research, and concerns the extent to which the results can be replicated by another researcher using the same research strategy (7, 49). To improve reliability and to avoid inconsistency during data collection, the data collection period was relatively short. The expert interviews were recorded, and notes made during the interviews were compared to the recordings before analysis (41). Furthermore, the sampling process, data collection and analyses have been described in detail in the Methodology section, enabling the study to be repeated in the future.

The term “validity” refers to confidence in how well data and process of analysis address the intended focus of the study, and assessing validity includes e.g. decisions about study focus, selection of context, approach to data collection and selection of participants (49). To strengthen validity, data collection strategies were triangulated through the use of a literature review, case studies and expert interviews. Respondent validation or member checks were done with participants to clarify ambiguous meanings on unclear information (58). Furthermore, the access to participants’ lists from WHO meetings on well-being strengthened the relevance of data collected, and ensuring that the sampled participants had differing scientific backgrounds and various experiences in the field of SWB increased the possibility of investigating the research question from a variety of perspectives (49).

However, there are two main limitations of the study; a lack of geographical representativeness of the WHO European Region, and the fact that the final analysis and

organisation of results have been done by the researcher alone. For the former limitation, as the participants lists from WHO Europe were used as a sampling frame, the geographical skewness of the interview sample mirrors that of those meetings – out of all participants (n=50) at the WHO expert meetings on well-being from 2012-2015, 66 percent were from Western Europe⁵, 20 percent from Mediterranean countries⁶, 8 percent from outside of Europe⁷ and only 6 percent from Eastern Europe⁸. As described in the Sample selection section of this report, an attempt was made to balance this out by reaching out to additional respondents from eastern Europe, however, this did not succeed entirely and only one interview respondent was from the Eastern part of the Region. For the latter limitation, having a research team or another research colleague with differing and complementary experience could have strengthened the validity of results even further.

Interviews were conducted via telephone or Skype due to a lack of resources for travelling. In qualitative research, telephone interviewing is sometimes perceived as inferior to face-to-face interviewing, as you lose the possibility to interpret body language, visual cues and other non-verbal data. Moreover, telephone interviewing has been thought to compromise rapport and probing, hence making interpretations more difficult. However, there has been little confirmation in research literature for these concerns, and telephone interviews have rather been found to relax respondents, and in some cases make them more inclined to talk freely (59). In addition, as expert respondents might be hard-to-reach people with a tight schedule (41), telephone interviewing can make it possible to obtain data from expert or elites that are hard to access in person (60).

Suggestions for further research

As previously suggested, there are still “black boxes” of knowledge around SWB and culture to be discovered, and additional research is needed to improve understanding. In particular, conceptual research on the meaning of SWB and its elements across and within countries in the WHO European Region would make it easier to identify the most suitable measurement items for monitoring and reporting. Longitudinal studies that monitor changes over time in each country are preferable to single item measures of average level SWB of a whole population. This will require additional investments, but add richer data. Furthermore, an

⁵ United Kingdom, France, Belgium, the Netherlands, Luxembourg, Austria, Germany, Finland, Sweden and Switzerland.

⁶ Spain, Italy and Portugal.

⁷ USA, Australia and Singapore.

⁸ Poland and the Russian Federation.

increased understanding of the cultural drivers of subjective well-being will strengthen the ability of the WHO and other global organizations to support countries in policy decisions for improving well-being of their populations.

However, the issue of how to define culture is important for future work in this research area. The UNESCO definition of culture (16) encompasses almost everything surrounding a person, and cannot be practically incorporated into either a survey or a specific policy framework. Many surveys use ethnic background as a proxy for culture, but not all countries in Europe collect data on ethnicity as it might be considered “sensitive data” and is therefore banned (61). However, whether survey data should be collected at all to explore the relationship between culture, health and SWB is questionable. Introducing more qualitative research methods into this field should be a priority for the future.

Lastly, as the relationship between SWB and mental health is particularly strong, and as mental health is an important contributor to the loss of healthy life years in the WHO European Region, the effect of SWB on mental health outcomes can benefit from further exploration. Furthermore, an analysis of culture’s role in mental health could help shed light upon issues such as how mental health is perceived and accepted, how it is affected by gender inequalities and ideas about honour and stigmatisation.

Global health relevance

The science of subjective well-being has taken tremendous leaps forward in recent years, strongly supported by the UN, who hosted their first High Level meeting on Happiness and Well-being in 2012. Since then, the well-being of populations has become a proper measure of social progress and SWB is included in both national and regional policies (40).

However, the issue regarding whether SWB should be a priority for low-income countries, seeing that they have other issues that might be more urgent, have come up both in literature and in comments by peers during the writing of this thesis. This claim is partly true, as an improvement in material living conditions has a great impact on impoverished societies (62). However, even as material and financial security is important for lifting people out of poverty, when people rise from deprivation the society does not become happier as it becomes richer,

and there is little correlation between per-capita GDP and experienced happiness⁹ after a certain level (63).

Using SWB to complement GDP enables more comprehensive analyses of progress as it encompasses a wider range of things that are important for people's lives, and allows policy makers to assess their impacts. For instance, building an airport might be positive for economic development, but it also contributes to a lowering of the well-being level of people living close to it due to pollution and noise (63). Moreover, considering the positive health effects of an increase in SWB (32), a better understanding of what makes people happy and content can indeed be a good investment for both low-middle and high income countries.

Conclusions and recommendations

In sum, the short answer to the question of how far quantitative approaches can take us in establishing the effect of culture on SWB is - not as far as is preferable. This is not only due to the fact that most existing surveys do not aim to measure cultural differences, but also because the conceptual challenges on determining the meaning of culture and subjective well-being for people across the WHO European Region require complementary methodological approaches. However, depending on the research question, there is still a place for surveys, but incorporating complementary qualitative methods may assist in discovering additional concepts that are not captured by quantitative survey instruments.

Incorporating measures of SWB into policy making for health gives us a more complete picture of people's lives, and ultimately brings us back to the original intention of WHO:s definition of health; a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Adding a cultural lens to that entity can add complexity, but will improve understanding, and add depth to existing models. Thinking of health, SWB and culture as three interlinked dimensions will make for more complex, but quite possibly also more accurate, analyses of how to improve people's lives.

Recommendations:

- Further qualitative research on cultural conceptions of subjective well-being is needed. This knowledge can inform a more relevant theoretical framework on SWB for the

⁹ However, a high level of happiness in a low income country can also be a coping strategy, and should not be used as an excuse to ignore poor living conditions (63).

WHO European Region, making sure that a larger number of relevant dimensions of SWB are covered in measurement instruments.

- The relationship between the different elements of culture and SWB should be explored further, as well as the relationship between culture, SWB and mental health.
- Data collection on SWB should include multiple measuring items that tap into different elements of SWB. This will require additional investments for both the WHO and their member countries, which is a draw-back. However, it would allow for more accurate analyses of well-being outcomes, and could help predict health development in the European Region.

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Annex I. Results from literature review

Conceptual challenges	Comment
Conceptions of SWB vary across societies	When assessing SWB across cultures, it is important to understand that ideas about SWB differ. Two common, but somewhat contradictory understandings of SWB are “the fulfillment of one’s desires” and “good luck, fortune”. These different understandings of SWB may lead to a) that SWB is more desirable in some societies than in others, b) different expressions of happiness (if happiness reflects personal accomplishments, it is acceptable to express it, but if it reflects luck and fortune, it is not as desirable to express it in public) and c) difficulties in making international comparisons. For example, asking questions on how often you smile might not be appropriate everywhere (5). Since notions of a good life vary across time and cultures, subjective well-being is seen as culturally relative. A life that is seen as perfect in one culture might be seen as a failure in another (6).
No consensus on conceptual definition of SWB	There is a lack of agreement regarding what subjective well-being is, what dimensions it consists of and which is the best method to use for measurement. As the judgment about one’s life is related to the person’s aspirations, which can change over time and across cultures, interpretation of data is difficult. The challenge is to define SWB in a way that enables it to be measured, and validly compared across countries, in order to undertake a fair and valid assessment of SWB levels worldwide (1-4).
No consensus on conceptual definition of culture	Culture is a highly complex and multi-dimensional construct with several layers to take into account. A single numeric index or a few dimension scores in a survey cannot provide a comprehensive description. Therefore, it is important to specifically define which elements of culture is the focus of a model (8).
Causes and correlates of SWB	<p>When people make judgments about their well-being, the information that they base their judgment on might differ across cultures as people make judgments on information that is relevant to them. Some things are passing influences, others stable life conditions, and depending on how many stable factors that underpin the assessment of SWB, the more stable the judgment (1-2).</p> <p>The patterning of SWB, i.e. what circumstances or events that make you happy/content, may vary between cultures, making comparisons difficult. Some life conditions can be considered as universal and relevant to all, e.g. health, but even if societies can be compared on longevity, the patterns of illness differ across cultures. Furthermore, different life conditions’ relative importance will differ between both individuals and countries (1, 7).</p>
Valuing and comparing cultures	The theory of cultural relativity makes the important point that although values and practices vary across cultures, this does not mean that one culture is necessarily better than others. However, certain values and practices in a culture can be regressive, or even harmful, and can certainly have an effect on subjective well-being. Diener (1) argues that SWB can be a criterion for assessing the success of a culture, as a society functions poorly when a majority of its people are discontent or depressed.

Measuring something that it implicit	<p>Cultural values and norms, as well as experiences of well-being are often implicit, and might not be visible until they are questioned or challenged. As most surveys rely on closed-ended questions with fixed, mutually exclusive responses, the ability to tap into multidimensional aspects of culture is limited. Some scholars even suggest that the use of standardized survey items might impose meanings of what well-being is, rather than discover it (9).</p> <p>However, if certain cultural aspects or practices are observed as having widespread significance, sample surveys are an indispensable tool for understanding prevalence and distribution across different groups of people (9).</p>
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Methodological challenges	Comment
Cross-sectional survey designs	<p>Cross-sectional study designs cannot capture causal direction. For instance, married people might be happier because the married state makes people happy, or because people who marry tend to be dispositionally happier than never-married or divorced individuals. Hence, there is a possibility that many correlations may be due to selection of individuals into the condition rather than to the condition itself (10). Thus, longitudinal designs are valuable in SWB research, and cross-sectional findings must be interpreted cautiously (11).</p>
Choosing a measuring item	<p>Three types of single-item measures have dominated large-scale international surveys on well-being (5, 11):</p> <ul style="list-style-type: none"> ○ A general life-satisfaction item (e.g., “All things considered, how satisfied are you with your life as a whole these days?”) ○ A Cantril’s Ladder item (“On a ladder from 0-10, where on the ladder would you say you personally stand at the present time?”) ○ A happiness item (e.g., “Taking all things together, would you say you are 1 = very happy, 2 = quite happy, 3 = not very happy, 4 = not at all happy?”) <p>In their 2013 Guidelines for subjective well-being, the OECD also included an experimental eudaimonic measure (11). The nearly exclusive use of the above three types of measures can mask important issues when looking at differences across cultures, such as conceptual equivalence or differing response styles (5). For instance, the Cantril’s ladder scale have been criticized for being issues of cross-cultural comparability, and might require some explanation of the ‘ladder’ concept for the interviewed person, which can lead to increased measurement error (11).</p> <p>Traditionally, international surveys have used one item to measure SWB despite the fact that the reliability of single-item measures is typically lower than that of multiple-item measures. However, although more recent measures include more items in order to tap into different dimensions in SWB and get a broader coverage, more evidence would be helpful in order to manage the trade-off between survey length and data quality (4, 8).</p>

Item functioning	<p>Different items, or survey questions, might function differently in different cultures. For instance, responses to questions about satisfaction and happiness are likely to be more open in cultures where expressing your emotions is acknowledged, than in cultures where it is not (4-5). Furthermore, affect measures have been shown to relate to SWB more strongly in individualistic cultures than in collectivistic ones, which indicate that affect measures might not be suitable in the latter. In collectivistic cultures where social relations and family are valued more strongly than individual emotions, eudaimonic measures that emphasize adaptation, virtue and doing what is right might be more suitable (4-5).</p>
Translation issues	<p>It has been shown that words like ‘happiness’ and ‘satisfaction’ can have different connotations in different languages, which can lead to the same measurement item measuring different things (6). Also, many words for positive and negative affect that are assumed to be universal can have different meanings for respondents. For instance, the words enthusiastic, strong, proud and scared were discarded in a study, as evidence gathered from twelve different nationalities suggested they had ambiguous meaning (11). Furthermore, poor translations can alter the intended meaning of SWB measures, which might lead to spurious cultural differences (1).</p> <p>However, if translations of key terms would affect the outcomes in cross-national surveys, ratings of life satisfaction would be assumed to be similar across the same language groups, and across nations that share the same language. Several studies have shown that to be untrue and that translation is not enough to explain the observed cultural variations (6, 13).</p>
Cultural response bias	<p>Cultural response bias occurs when people from different cultures systematically reply differently to the same well-being questions (11). For instance, studies has shown that Hispanics prefer more extreme response categories on a 1-10 scale than non-Hispanics in USA, and it has been suggested that Asian Confucian cultures are more likely to favour more moderate response categories (1).</p> <p>Differing response styles are generally assumed to contribute to error in the data, such as a reduced accuracy or validity. However, the OECD argues that there is little evidence in SWB literature to support this – a higher or lower level of life satisfaction might rather be due to an actual difference in how people feel about their lives (11), or the liveability of each culture (6). Furthermore, although number use can be a concern, it often seems to produce small differences, and techniques have been developed to analyze and correct for it (14).</p>
Using country as a proxy for culture	<p>Culture is not necessarily confined to geopolitical boundaries. By equating country and culture in a survey, differences within nations as well as similarities across borders might be overlooked (1, 8).</p> <p>However, country-comparisons are not meaningless. A country is likely to have shared experiences, common histories and a common language, which are important factors for creating common culture. Looking at nations or regions allow us to generalize culture, but at the sacrifice of specificity (1).</p>

Social desirability	<p>In cultures where happiness and life satisfaction are valued, people may have a tendency to report more happiness and life satisfaction (6). This has been tested using informant reports, i.e. having a family member rate the SWB of the first person, and then compare it to his/her self-report. Studies show that self-reports and non-self-reports are similar, suggesting that differences between countries are real, and not due to modest reporting or cultural bias (1, 5).</p> <p>Social desirability can also be related to the survey mode used, i.e. if the survey is conducted face-to-face, via telephone or via computer. However, the evidence on this is still unclear (11).</p>
Positivity/negativity bias	<p>In some cultures, for instance Latin America, a so called “positivity bias” has been observed. This means that despite the fact that people are dissatisfied with specific things such as text books in schools or professors, they are generally satisfied when asked about things “as a whole”, e.g. education (1).</p> <p>Similarly, negativity bias has been found in other cultures, especially in East Asia, where people are generally satisfied with e.g. text books and schedules, but more dissatisfied when asked about education “as a whole” (1).</p>
Memory bias	<p>A so called “memory bias” can affect answers to survey questions on SWB across countries. One group of people may pay more attention to positive events that has happened to them than negative, and therefore give a more positive view on satisfaction with life. For instance, in a study on average daily satisfaction, Asian Americans and European Americans reported similar results. However, when asked about the week as a whole, European Americans rated the satisfaction much more positively than the Asian Americans (5).</p>
Familiarity with concepts, or the use of numbers and scales	<p>In some settings, respondents might not be familiar with the key concepts, or the use of numbers or scales in surveys. In a study conducted in the slums of Calcutta, a seven point scale had to be replaced by smiling and frowning faces, but as some of the respondents were still puzzled by the task, they also reduced their scale from seven points to three (1, 5).</p> <p>Differences in how measurement scales are interpreted have also been shown – where Dutch students saw “very happy” as being at least 9.03 on a ten point scale, English students rated it at 8.6 on average (11).</p> <p>In another study, Greenlanders and Norwegians were about equally satisfied with their lives, although the former were much poorer. However, when item-response-theory corrections were applied to the data in order to correct for differences in scale use, the Greenlanders were significantly less satisfied (14).</p>
Availability of data	<p>Most data on SWB is from western, industrialized nations, and data from the poorest nations of the world are often lacking, or are unsatisfactory. This can affect the ability to validly compare SWB results between countries (1, 11).</p>
Using quantitative approaches to subjective phenomena	<p>The standard process (quantitative) for developing and selecting questions to be included in a research instrument may miss dimensions of importance for further qualitative analysis. I. e., surveys generally do not allow for the complex and sometimes contradictory interpretations of culture and subjective well-being that occur in the natural social setting (9).</p>

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Annex II. Case studies

European Quality of Life Survey, Eurofound

The European Quality of Life Survey (EQLS) is carried out every four years and measures a range of issues, such as employment, income, education, housing, family, health and work-life balance. It also looks at subjective topics, such as people's levels of happiness, how satisfied they are with their lives, and how they perceive the quality of their societies (1). The latest wave was completed in 2011-2012.

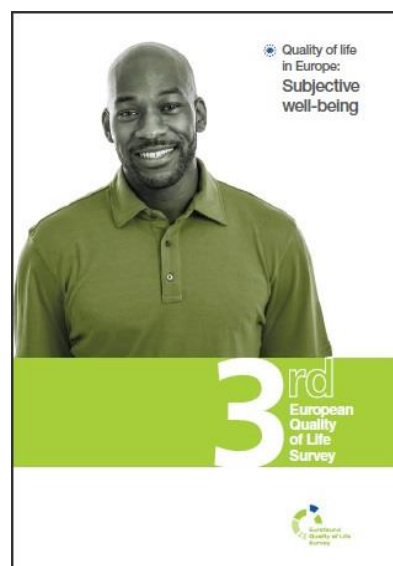
Methodology: Quantitative approach, questionnaire-based interviews (face-to-face).

Study design: Cross-sectional.

Coverage: 27 EU member states + 7 non-EU countries (Croatia, Iceland, Kosovo, the Former Yugoslav Republic of Macedonia, Montenegro, Serbia, Turkey).

Sampling: Multi-stage, stratified, random sample.

Sample size: The minimum sample size in the latest wave was 1 000, up to 3 000 in the most populous countries (2). Upon completion of the fieldwork, the total number of interviews was 43 636.



Conceptual and methodological challenges tackled in EQLS 2011-2012

Conceptual definition of SWB	<p>Eurofound acknowledges that culture might have an impact on people's subjective assessments of their lives, and that these differences can present as different types of response bias that can make international comparisons difficult (3). To avoid this, Eurofound try to use validated measurement items and as the survey has been conducted in three waves, they have now started to see patterns in responses, and can take that into consideration in their analysis of the results (interview). However, the same measurement items are being used across Europe for the purpose of comparability.</p> <p>As for survey preparation, cognitive interviews were used in the pre-test of the questionnaire in two EU countries (Belgium and the UK) and six of the non-EU countries. However, the sampling for the interviews was done by convenience, with quotas for gender, age and education. It did not take cultural or ethnic background into consideration (4).</p>
SWB item	<p>The EQLS uses both hedonic (evaluative as well as experienced) and eudaimonic SWB items, hence having a better chance of covering cultural differences in concepts and expressions of well-being (2).</p>

Translation	The EQLS questionnaire is translated into 32 languages across Europe. A rigorous validation process was undertaken to ensure conceptual equivalence of subjective well-being terms and key words (4).
Cultural response bias	In the report on subjective well-being from the latest wave of the EQLS, response bias is considered in relation to satisfaction with life domains, but only at an individual level (e.g. personalities affecting responses), not as a culturally systematic bias in the data (2).
Sampling and sample size	Sampling is made nationally, since the EQLS is designed for country comparisons. A sample size of 1000 is considered sufficient for national representativeness, but limits comparisons across population sub-groups and over time (5). For stratified sampling, the possibility for adequate representation of minority subgroups would be possible, providing that the sample from each stratum is big enough.
Other comments	<p>The EQLS is a cross-sectional design, which means that causality between “cultural” variables and SWB variables cannot be established. Nevertheless, this is not the main aim of the survey. Time series of the survey are available since 2003 (2).</p> <p>In the report on SWB from the latest EQLS, differences supposedly due to culture is mentioned in one instance (2, p. 29), when discussing the variable ‘perceived social exclusion’. The inconsistent results regarding this variable across clusters yields the authors to suggest that “the clues for these differences may lie in the policies, politics and culture specific to each of these sets of neighboring countries”.</p>
Can the EQLS be used to establish the role of culture in relation to SWB?	The survey compares countries, but groups similar countries into clusters by welfare regime; social democratic, corporatist, liberal, southern European, post-socialist liberal and accession countries. The clustering system performs well in terms of capturing country-level variation in quality of life across most dimensions (6), however, as the clustering is not based on cultural characteristics, it does not help in exploring the relationship between culture and subjective well-being.

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Gallup World Poll, The Gallup Organization

The Gallup World Poll is carried out annually since 2006. The survey includes a broad set of questions on socio-economic background, civil engagement, and life satisfaction among other domains.



Methodology: Quantitative approach, questionnaire-based interviews, generally face-to-face interviews in developing countries and telephone surveys in countries where telephone coverage is at least 80 % of the population.

Study design: Cross-sectional.

Coverage: More than 160 countries.

Sampling: Multi-stage, stratified, random sample.

Sample size: Sample sizes are generally limited to around 1,000 respondents in each country (with a few exceptions, e.g. 2,000 for India and China). 138 countries participated in the latest poll in 2013.

Conceptual and methodological challenges tackled in Gallup World Poll 2013

Conceptual definition of SWB	The survey itself does not address the issue of differing concepts of subjective well-being across countries or cultures, and the same measurement items are being used across the world for the purpose of comparability. However, they are aware of the problem and research is ongoing at the Gallup Organisation regarding how to tackle this (1).
SWB item	The Gallup World Poll uses items that measure hedonic well-being, both evaluative and experienced. The eudaimonic perspective, i.e. a sense of purpose or meaning in life, is not covered by the survey (2).
Translation	The questionnaire is translated into the major languages of each country, more than 140 languages globally. Gallup has a translation and back-translation routine, and independent parlor translations that enable comparisons of the translations between different translators. In case of differences, Gallup collaborates with linguistic and cultural experts in any given country to make sure that the appropriate translation and equivalent for a given term is used (1).
Cultural response bias	To minimize cultural bias in the data, Gallup is exploring the vignette technique. Furthermore, to tap into different dimensions of SWB across cultures, Gallup has a comprehensive analysis model that takes into consideration more than a hundred variables that are important to people's lives. However, as the model is based on a specific idea of what constitutes a good life, there might still be variables that are omitted from the model, that are important for people in other parts of the world, so called omitted-variable bias (1).
Sampling and sample size	Sampling is made nationally, since the World Poll is designed for country comparisons. A sample size of 1000 is considered sufficient for national representativeness, but limits comparisons across population sub-groups and

	<p>over time (1). For stratified sampling, the possibility for adequate representation of minority subgroups would be possible, providing that the sample from each stratum is big enough.</p>
Other comments	<p>The World Poll has a cross-sectional design, which means that causality between “cultural” variables and SWB variables cannot be established. Nevertheless, this is not the main aim of the survey.</p>
Can the Gallup World Poll be used to assess cultural impact on SWB?	<p>The survey compares countries, and includes one question about ethnicity. Respondents are asked how they would identify themselves, and a range of choices are available, not only country of origin e.g. Polish, French, but also by religious affiliation, skin color or tribal group (3). This allows for disaggregation of data by certain “cultural” variables in an ad-hoc analysis, supposing the sample size is large enough.</p>

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World Value Survey (WVS), the World Values Survey Association (WVSA)

The World Value Survey (WVS) studies changing values and their impact on social and political life. The WVS has been executed in five waves, the latest one in 2010-2014, and measures changing values concerning for instance religion, gender roles, good governance, social capital, tolerance of other groups and subjective well-being.



Methodology: Quantitative approach, questionnaire-based face-to-face interviews conducted by a local field organization and supervised by academic researchers.

Study design: Cross-sectional.

Coverage: 97 countries on all six continents.

Sampling: Stratified random samples are aimed for where possible. Internal consistency checks are made between the sampling design and the outcome, and all samples are nationally representative.

Sample size: The minimum sample is 1000 (1). The latest wave covered 61 countries.

Conceptual and methodological challenges tackled in World Values Survey 2010-2014

Conceptual definition of SWB	No documents were found that addresses the issue of differing concepts of subjective well-being across cultures, and the same measurement items are being used across the world for the purpose of comparability.
SWB item	The World Value Survey uses items that measure hedonic SWB; evaluative and experienced. The eudaimonic perspective, i.e. a sense of purpose or meaning in life, is not covered by the survey (2).
Translation	The master questionnaire is translated into the various national languages, and in many cases independently translated back to English to check the accuracy of the translation. In most countries, the translated questionnaire is pre-tested to help identify questions for which the translation is problematic. In some cases certain problematic questions are omitted from the national questionnaire (3).
Cultural response bias	As no respondent from the WVSA participated in this study, no information has been found on the presence of cultural response bias in WVS data, and the management of it could not be assessed.
Sample size	Sampling is made nationally, since the WVS is designed for country comparisons. A sample size of 1000 is considered sufficient for national representativeness, but limits comparisons across population sub-groups and over time. For stratified sampling, the possibility for adequate representation of minority subgroups would be possible, providing that the sample from each stratum is big enough.

Other comments	The WVS has a cross-sectional design, which means that causality between “cultural” variables and SWB variables cannot be established. However, as the WVS specifically measures cultural values, correlations between these values and SWB can be made.
Can the World Values Survey used to assess cultural impact on SWB?	<p>The World Values Survey specifically measures values and attitudes in national cultures. The data is based on country comparisons, but the most famous depiction of these results, Inglehart’s “culture map”, presents countries in clusters such as “Confucian”, “Protestant Europe” and “Latin America”. Countries are plotted along four dimensions; tradition/secular-rational and survival/self-expression values (4).</p> <p>Studies based on WVS data suggest that since 1981, more and more countries have risen from extreme poverty, making the individual’s fight for survival a thing of the past. Consequently, self-expression values have become more widespread, contributing to democratization and rising levels of happiness (5).</p> <p>In this way, WVS can tell us something about how national cultural values can produce higher levels of subjective well-being, and the culture map can help us understand how countries are different and similar regarding survival vs. self-expression and traditional vs. secular values. However, although country is a convenient lens through which you can look at culture, it is not the only lens, and the definition of culture needs to be appropriate for the level of aggregation of your data, i.e. the level of grouping you want to make inferences about (individual, society, sub-national region etc).</p>

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Annex III. Interview guide

Introduction to the interview

In the introduction to each interview, the following issues were raised with the respondents:

- Quick resume of study aim and research questions.
- Presumed length of the interview (45-60 min).
- Whether it is ok to record the interview and what happens after (transcription, disaggregation, content analysis).
- The use of anonymous quotes and whether the respondent wants to be contacted beforehand in case I use one from the current interview.
- How the data will be stored and which persons will have access (researcher and supervisor).
- That all transcripts and recordings will be destroyed after the study is finished.

Opening question

Firstly, could you tell me a little about your background and how you have been involved in the area of well-being up until today?

Category 1: Conceptual and methodological challenges in measuring SWB

- There are many different definitions of SWB being used when studying well-being of populations. How does that affect the measuring and reporting on SWB in Europe?
- There are also several methodological challenges in measuring and reporting on SWB across Europe. Can you tell me about them? Would you say that this affects the validity of study results? Which challenge would you say is the most important, or most urgent to deal with?
- There are a few measuring items that are frequently used in surveys, such as the Cantril's ladder and the Satisfaction With Life Scale, along with some items on affect. Can you tell me about them? How do they cover the different conceptions of well-being across the European Region?
- Some would say that SWB is an inherently subjective concept that cannot be quantified and measured in surveys. What are your thoughts on that? Can there be advantages of using survey designs? Disadvantages?
- As the surveys used to collect data on SWB in Europe are mostly cross-sectional, it is not possible to talk about causality. What are your thoughts on that? Is it necessary?
- In your opinion, how can SWB play a role for the improvement of health in the European Region?

Category 2: Culture and SWB

- Another important issue is what SWB means for people in general. Thinking of the WHO European Region, how does that idea differ across cultures? How can you take that into consideration when comparing results across countries?
- In your opinion, can culture be a determinant of SWB? Can differences in cultures lead to different well-being outcomes? How so?
- How can we capture this relationship between cultural value systems and subjective well-being in research? Which study design would be the most appropriate?
- Can culture be quantified?
- Looking at cross-cultural research on SWB, the terms “societies”, “cultures” and “countries” are used interchangeably. In what way can we distinguish them and their affect on SWB levels?

Category 3: Policy relevance

- In the meeting notes from one of the WHO expert meetings it is mentioned that WHO wants to encourage countries to formulate well-being policies. Do you think countries should formulate well-being policies? How come?
- To your knowledge, is subjective well-being considered a priority for governments throughout WHO European Region? Should it be? In countries where it is not a priority, why do you think that is?
- If we find evidence that one culture leads to better outcomes in terms of subjective well-being than another, how do you think we should use that information in policy?
- Can you see any advantages in incorporating our knowledge on culture and well-being in policy? Can you see any disadvantages?
- The main aim for the WHO is of course to improve well-being in Europe. How will the incorporation of culture as a factor affect that aim, do you think?

Conclusion of interview

To close each interview, the following things were mentioned:

- The respondent was asked if there was anything we had not talked about in the interview that he/she wanted to add.
- Short summary of the rest of the thesis progress.
- An offer to send the final report to the respondent, and an encouragement to get in touch if he/she had any additional questions after the interview.
- Thanked the respondent for taking time to participate.