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Measuring subjective well-being for policy purposes: The example of well-being indicators in the WHO “Health 2020” framework

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Abstract

Aims: This article discusses the rationale for measuring national well-being, and examines the use of subjectively oriented well-being measures in the context of public policy. Recent years have witnessed growing attention towards the concept and measurement of well-being, both within academic disciplines, intergovernmental organizations such as the World Health Organization (WHO), as well as in many governments across Europe including the Nordic countries. Economic indicators have commonly been regarded as proxies of societal progress of nations, but indicators of well-being have increasingly been applied in order to complement or replace these measures.

Methods: Well-being indicators of the WHO “Health 2020” framework are critically examined with particular attention toward subjective aspects of well-being. Literature discussing the rationale for subjective indicators is reviewed. As a background, central theoretical and measurement perspectives on well-being are outlined, including hedonic, eudaimonic and objective list approaches.

Results: The WHO refers to well-being in definitions of health and mental health, but has primarily reported on disease. The “Health 2020” framework marked a shift in this concern. One of the main targets of “Health 2020” concerns well-being, involving six core indicators. Only one indicator refers to well-being as subjective experience. Literature supports more extensive use of subjective indicators in combination with objective measures.

Conclusions: Although consensus on definitions and instruments is lacking, subjective and objective measures of national well-being may jointly contribute to a more comprehensive understanding of societal progress, as well as a broader conception of health. Further research is required particularly with regard to eudaimonic indicators.

Introduction

Most national governments define and measure societal progress in terms of economic indicators such as Gross Domestic Product (GDP). However, during recent decades, governments have been increasingly interested in monitoring well-being among citizens^{1,2}. In this article we will examine the indicators chosen to assess well-being in the “Health 2020” WHO European policy framework³, and discuss more generally how subjectively oriented measures of well-being can contribute to policymaking.

In the early history of industrialized countries, when basic human needs for food, shelter and clothes were not yet sufficiently met, improving economic conditions in order to enhance quality of life was clearly a primary concern^{4,5}. Following the Second World War, confidence in the ability of economic growth to solve a wide range of problems increased⁶. As a result, GDP and other macroeconomic indicators were assigned key roles, also in the Nordic countries. Economic measures represented overarching policy goals and were assumed to directly reflect the well-being of citizens. Limited attention was paid to monitoring subjectively experienced well-being and mental health for policy purposes.

During the 1960s, when drawbacks and limitations of economic growth became more evident, a search for alternative policy goals and indicators of societal progress was initiated, known as “the social indicators movement”⁶. In an often-cited speech in 1968, U. S. presidential candidate Robert F. Kennedy addressed these limitations as a main concern for public policy. The speech concluded that: “The Gross National Product (...) measures everything in short, except that which makes life worthwhile”^{7(para. 22)}. Originating from a 1974 study, the Easterlin paradox (also named the happiness-income paradox) clearly emphasized that there is more to human happiness or well-being than wealth⁸. Empirical data showed that over time, average happiness had not increased in accordance with rising national income in a number of countries⁹. Lately, nuances of the Easterlin paradox have been

challenged¹⁰, in part related to the effect of social inequalities¹¹. Nevertheless, it is now generally recognized that financial prosperity is an inexact proxy of well-being, particularly in industrialized countries⁴.

Recent years have seen a growing interest for using measures of well-being to complement or replace economic measures¹. This trend is evident in research as well as among intergovernmental organizations such as the Organization for Economic Co-operation and Development (OECD), the United Nations (UN), and the World Health Organization (WHO). Several new measurement instruments have been suggested, aiming to either adjust GDP, complement it, or replace it altogether. Examples include the Human Development Index (HDI), the Better Life Index, and the Happy Planet Index^{12, 13}.

Similarly, national policies have increasingly emphasized the importance of well-being measures. Examples include the United Kingdom's "Measuring National Well-Being Programme"¹⁴ and the recommendations developed by the French Commission on the Measurement of Economic Performance and Social Progress (the "Stiglitz report")¹⁵. During recent years, the Nordic countries have also seen initiatives to measure national well-being. However, the countries differ regarding the extent to which they have conducted national well-being surveys as well as how well-being is comprehended and measured.

In light of these developments, considering the conceptual background of well-being measures is useful - what exactly *is* well-being? How should well-being be defined and operationalized in the public policy context? We now turn to central theoretical perspectives on well-being, including hedonic and eudaimonic approaches and objective list theories.

Theoretical perspectives on well-being

The complex question of what constitutes a good life, or what a life well-lived amounts to, has intrigued human beings at all times. Indeed, it is one of the ancient, yet still controversial

questions in philosophy^{16, 17}. The academic interest in well-being is growing, and shared by many disciplines beside philosophy, including psychology, sociology, and economics¹⁸⁻²⁰. This paper focuses mainly on the subjective aspects of well-being, drawing particularly on theoretical accounts of well-being as found in psychology. In this discipline, researchers have primarily investigated well-being from two distinctive philosophical positions: the hedonic and the eudaimonic²¹⁻²³. However, well-being in a psychological sense is closely related to the contexts in which people live their lives. Therefore, we will additionally describe a tradition emphasizing objective circumstances as important constituents of well-being.

The Hedonic Perspective

The hedonic view holds that what is good for a person is the presence of pleasure and the absence of pain²⁴. It stems from a conceptualization of happiness offered by Aristippus of Cyrene in the fourth century B.C.²², and corresponds to the “greatest happiness principle” as developed in utilitarianism²⁵. In contemporary psychology, the hedonic view is often conceptualized as subjective well-being (SWB), which is taken to consist of two main components – an affective component and an evaluative or cognitive component. The affective component is typically associated with the amount of positive emotions experienced by a person, or the balance between positive and negative emotions. The cognitive component consists of evaluative judgments of how one’s life is going, usually in terms of life satisfaction^{26, 27}.

The Eudaimonic Perspective

The eudaimonic perspective of well-being stems from Aristotle’s concept of eudaimonia^{28, 29}. According to the Aristotelian tradition, eudaimonia refers to functioning well in life, rather than positive feelings or evaluations of satisfaction^{28, 30}. Living well entails a striving towards

realizing one's highest human potential, as well as committing to activities that are purposive, and in accordance with virtue ²¹.

The study of eudaimonia in psychology has encompassed several different constructs and a multiplicity of conceptual and operational definitions ^{21,28,31}. Engagement in meaningful endeavors, actualization of potentials and being fully functional are all characteristics often used to describe eudaimonia ²⁸. Some accounts further emphasize that through fulfilling one's potential within the community, individuals can contribute to the welfare of others ³². A frequently cited model ³³ suggests that eudaimonia consists of six dimensions: self-acceptance, positive relationships with others, personal growth, purpose in life, environmental mastery and autonomy. In a similar vein, self-determination theory views eudaimonic living as characterized by pursuing intrinsic goals and values, being mindfully self-regulated and behaving in ways that satisfy basic psychological needs for autonomy, relatedness and competence ²⁸.

Questions have been raised about the fruitfulness of drawing a sharp line between the examination of hedonic versus eudaimonic well-being ³⁴. Evidence suggests that well-being, understood as a psychological phenomenon, is better viewed as a multidimensional construct that consists of both hedonic and eudaimonic aspects ²². Several integrated frameworks have been developed during the recent years, including models of human flourishing ^{30,35,36}. One such model conceptualizes flourishing as composed of three dimensions, named emotional, psychological and social well-being ³⁰. This integrative model encompasses both affect and satisfaction as well as positive functioning and evaluations of the wider social context.

Objective List Theories

Objective list theories of well-being are constituted by sets of elements that are considered to have objective value for persons, independently of whether those elements are seen as

satisfying or desired by the individual²³. One such theory is known as the capabilities approach. Here, a person's life is understood in light of capabilities, which refer to the actual (objectively existing) opportunities the person enjoys to achieve what he or she wants to do or be^{37,38}. In other words, capabilities refer to the freedom to choose between different ways of life. While the capability approach is often presented as an overarching framework, Nussbaum^{39,40} has suggested specific components for a list of capabilities, encompassing life, bodily health and integrity, sense/imagination/thought, emotions, practical reason, affiliation, living in relation with other species, play, and control over one's environment.

Again, the boundary lines between the traditions are not absolute. Eudaimonic components, although typically viewed by psychologists as subjective phenomena, can also be understood as objective elements. Phenomena such as mastery, relatedness or autonomy can be comprehended either as subjective experiences or as objectively existing features of a person.

Measuring well-being

Hedonic and eudaimonic well-being

The affective component of hedonic well-being is commonly assessed by experience sampling data or surveys of the extent to which people experience positive and negative emotions. The cognitive component is typically measured by surveys of self-rated judgments of satisfaction²⁶. The eudaimonic approach to well-being has been empirically studied for a shorter period of time and less extensively investigated compared to the hedonic approach^{20,29}. Furthermore, the diversity of conceptual definitions applied to eudaimonia is greater than to hedonia^{21,28}. Consequently, there is less consensus regarding measurement of eudaimonic

well-being than for hedonic well-being²⁰, although a number of eudaimonic questionnaire instruments have been developed⁴¹.

In general, it has become more legitimate to investigate subjective states in order to measure well-being in both psychology and other social sciences such as economics. This development is in part enabled by the reported psychometric robustness of modern measures, particularly within the hedonic tradition⁴².

Social indicators

In principle, the social indicators approach is based on the assumption that it is possible to construct an adequate list of necessary characteristics of good lives and good societies¹. Following this understanding, social indicators are reflective of objective list theories. Social indicators may concern the immediate living conditions of individuals as well as the wider societal context⁴³. Examples of classical social indicators include poverty, unemployment, life expectancy and length of education⁴⁴. Social indicators are also known as key national indicators or quality of life indicators¹. It is worth noting that although the term ‘social indicators’ traditionally has referred to objective factors, it is also used to encompass subjective aspects of well-being⁴³⁻⁴⁵.

The Health 2020 indicators

As is evident from the preceding discussion, the concept of well-being can be defined in rather different ways. How one decides to measure well-being will depend on how well-being is conceptualized in the first place⁴⁶. The lacking conceptual clarity is not purely an academic concern. It is reflected in public policy documents, since different countries and intergovernmental organizations use various conceptualizations as well as operationalizations of well-being.

The World Health Organization (WHO) has placed well-being on the agenda as a marker of social progress^{3,47}. The WHO views health and well-being as indispensable resources for societies and human development, contributing to economic and social stability³. Well-being is included in the WHO definition of health, which dates back to 1948. Here, health is described “not merely as the absence of disease or infirmity” but as “physical, mental and social well-being”^{47(p. 19)}. Mental health is an essential part of this definition. Despite the long history of referring to well-being, WHO has primarily reported on death, disease and disability⁴⁷. However, in 2013, the European strategy “Health 2020. A European policy framework and strategy for the 21st century” (hereafter referred to as “Health 2020”) was launched. This strategy marked a shift of the WHO toward a more holistic approach to health and well-being.

“Health 2020” contains six main targets, one of them being: “Enhance the well-being of the European Region population”^{3(p. 16)}. The strategy proposes indicators to measure the progress toward each target across the European member states. The core indicators of well-being include one subjective and five objective indicators: 1) Life satisfaction, 2) Availability of social support, 3) Percentage of population with improved sanitation facilities, 4) GINI coefficient (income distribution), 5) Unemployment rate, 6) Proportion of children of official primary school age not enrolled^{48(p. 10)}. In addition to the six core indicators, three optional objective indicators comprise the proportion of elderly people living alone, total household consumption and educational attainment as defined by completed secondary education⁴⁸.

The WHO indicators discussed in light of theoretical perspectives on well-being

The six indicators in “Health 2020” draw differentially on the theoretical perspectives presented above. The first item concerning life satisfaction measures the cognitive component

of subjective well-being (SWB), captured by a single question on overall life satisfaction⁴⁸, as will be discussed below.

The second item pertains to social support. Positive relationships are recognized as significant to well-being by a wide range of scholars^{2, 18, 28, 33, 35}. However, the WHO indicator refers to the narrower concept of social support, by asking respondents: “If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?”^{48 (p. 37)}. This indicator measures the availability of social support, rather than subjectively perceived support expressing evaluations of the quality or level of support. Thus, the WHO has classified this question as objective⁴⁸. The remaining four core indicators are clearly objective, concerning sanitation facilities, income distribution, unemployment rate, and school enrolment. The same is true for the three optional indicators. In sum, all indicators except the first one reflect the objective list tradition. It is worth noting that the WHO has described an ambition to develop additional subjective indicators reflecting either eudaimonia, affect, or satisfaction within different life domains, although data sources are yet to be established^{48(annex 1)}.

The only subjective measure among the existing WHO well-being indicators is the item referring to life satisfaction. Methodological and conceptual doubts have been expressed on whether a person’s satisfaction with life can be fully captured using only one single question². To obtain a more complete picture, life satisfaction can be measured by somewhat more comprehensive instruments such as Diener et. al.’s Satisfaction with Life Scale²⁶. Furthermore, it has been questioned whether measuring life satisfaction at all can provide enough information about a person’s well-being. As The New Economics Foundation (nef) has stated: “Conceptually, though, the generality of life satisfaction is a serious limitation on our ability to understand well-being”^{49(p. 56)}. To expand the measurement of subjective well-being (as conceptualized in psychology), measures of the affective components and measures

of life satisfaction in more specific life domains could be added. From a public health point of view, which focuses on the broad determinants of health and well-being, it may be useful to expand the view of well-being even beyond traditional measures of subjective well-being (SWB) understood as affect and life satisfaction. Ryan et al. have highlighted the consequences for health assessments and policymaking of using either hedonic or eudaimonic indicators, stating that “the kind of good life we are targeting makes a difference”^{28(p. 142)}. According to some authors, hedonic outcomes may be less suitable as goals for policy since they are so variously produced and tied to individualistic values²⁸.

To take on a broader comprehension of well-being as subjective experience, one may therefore consider the contributions of the eudaimonic perspective, which emphasizes good functioning rather than good feelings³¹. The many aspects of positive functioning related to issues such as meaning, relatedness, actualizations of potentials, autonomy and self-acceptance, contribute to a broader understanding of well-being that may be helpful when developing policies. For example, policies can promote structures that allow people to feel psychological freedom and strong relationships with others²⁸. Eudaimonic indicators capture important elements of mental health and are of clear relevance viewed from a public health perspective. Of note, the WHO has defined mental health as “a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community”^{50(p. XVIII)}. This definition clearly points towards functioning and thus corresponds to a eudaimonic outlook.

With the possible exception of the social support item, no subjective eudaimonic aspects are encompassed by the WHO core indicators. The eudaimonic approach is generally less frequently reflected in national and international surveys, as compared to the hedonic perspective. However, some recent initiatives, including the OECD’s “Better Life index” and

the measures of national well-being by the Office for National Statistics (ONS) in the UK have introduced eudaimonic components, such as measures of meaningfulness and purpose and a measure of how worthwhile the things people do are perceived, respectively⁵¹. It is possible that the lacking consensus on conceptions and measurements of eudaimonic well-being is partly to blame for the current scarcity of eudaimonic elements in national and international well-being surveys (e.g., 21, 34). The hedonic approach benefits from a longer research history, resulting in more agreement on concepts as well as measurement methods²⁹.

Whether the more holistic ambition in the “Health 2020” strategy is sufficiently reflected by the current set of indicators can be questioned. However, the WHO aims to develop a comprehensive conceptualization as well as more multidimensional measures of well-being, including eudaimonic elements^{3, 47, 48}. The current choice of indicators in “Health 2020” is pragmatic, building on the statistics and measures available to the member states at this point of time.

Subjective indicators in a public policy context

It is commonly assumed that an important purpose of public policymaking is to enable good lives and enhance the well-being of citizens⁴². WHO has argued that “Improving – or at least maintaining – well-being is part of the social contract between the governments and the people they represent”^{47(p. 20)}. As we have presented in the previous sections, well-being can be seen to exist in both subjective and objective forms. What roles can subjective indicators play in measuring national well-being? Several arguments supporting the use of subjective measures for this purpose have been put forth, including proposals of how and when such indicators can be useful to policymaking.

First, a general rationale for using subjective indicators can be derived from the so-called Thomas theorem: “If men [*sic*] define situations as real, they are real in their

consequences”^{45(p. 4)}. Humans do not act mechanically in response to an objectively existing social world, but rather according to their subjective interpretation of it. Objective indicators alone therefore cannot sufficiently cover the diverse concept of well-being^{43, 45}. In order to understand human action it is fundamental to gain knowledge about subjective interpretations, most straightforwardly by asking people directly about their emotions, perceptions and evaluations⁴³. A similar view has been expressed by Campbell and Converse^{52(p. 442)}: “Ultimately, the quality of life must be in the eye of the beholder.” see also⁴⁵.

Second, it has been argued that subjective indicators can give policy makers valuable information about public preferences and give citizens a voice⁴³. Such information can be useful for guiding the selection of policy goals⁵³, as well as weighting different objective indicators against each other in terms of their relative importance¹. Furthermore, both broader and narrower subjective measures may be applied. For example, a general measure of life satisfaction can be useful for policy questions concerning inequality because large satisfaction discrepancies⁵⁴ between social classes might increase the risk of social instability. Narrower measures, for example relating to the well-being of workers at various ages can provide more specific information that can guide the choice between policy alternatives in these areas⁵.

Third, evidence suggests that different forms of subjectively experienced well-being can predict positive outcomes for individuals as well as societies⁵. For example, subjective well-being can influence objective outcomes such as health and job success^{42, 55}. The existence of causal paths from subjective well-being to objective outcomes is empirically supported by longitudinal and experimental studies. Individuals high in well-being tend to perform better at work and have better social relationships⁴. People experiencing lasting positive emotions have a higher tendency of trusting others in their community and being involved in volunteer work⁵. Studies further indicate that high subjective well-being can cause better health and longevity⁵⁶. Similarly, evidence has illustrated how eudaimonic well-

being can promote length of life and reduce risk of disease ⁵⁷. It has also been suggested that people characterized by high eudaimonic well-being tend to behave more prosocially, thus benefiting society in addition to themselves ²⁸.

Finally, subjective indicators are valuable not only in their own right or as predictors, but also because they can be interpreted in combination with objective measures. A typology of four “welfare positions” ⁴⁵, has proved useful to shed light on the contribution of subjective indicators. This model cross-tabulates objective living conditions (good or bad) with subjective well-being (good or bad), resulting in the categories “well-being” (good objective conditions as well as good subjective well-being), “dissonance” (good objective conditions, but bad subjective well-being), “adaptation” (bad objective conditions, but good subjective well-being), and “deprivation” (bad objective conditions and bad subjective conditions) ^{see also 43, 58}. The two categories “adaptation” and “dissonance” are particularly interesting from a measurement perspective, since the assessments based on objective and subjective information diverge. By illustrating how subjective and objective indicators provide different information for capturing the well-being of individuals, this typology highlights the need for using both kinds of measures.

Relatedly, Dolan and White ⁴² have argued that the distribution of subjective well-being across society should be analyzed together with objective well-being indicators. In this way, it is possible to identify how subjective and objective well-being levels correspond or diverge. By a similar token, Barstad ⁴⁴ has emphasized the importance of considering the components of well-being in a holistic way. Regarding policies aiming to reduce social inequality, such investigation may be important since disadvantageous objective circumstances tend to accumulate in certain groups. It is an empirical question whether such accumulation is associated with reduced subjective well-being. The development of fits or discrepancies between subjective and objective well-being levels can be systematically

studied across time, and thereby contribute to a richer understanding of well-being in changing societies.

Studies of the associations between objective circumstances and subjective well-being have largely made use of the hedonic perspective, primarily measuring affect and satisfaction levels. The association between eudaimonic well-being and objective circumstances is little investigated and deserves further attention⁴⁴.

Despite numerous arguments for the usefulness of subjective indicators, there are also qualms about the role of these measures in guiding policy^{42, 43, 45, 53}. Among the criticisms are not only claims of measurement problems, but also doubts concerning whether maximising well-being, subjectively understood, should be an aim for governments. Questions have also been raised about governments' actual abilities to raise the experienced well-being of citizens^{14, 53}. The existence of adaptation processes is one of the most critical problems faced by policy makers in this regard^{45, 59}. Adaptation processes refer to the inclinations for persons to habituate to changes in objective circumstances such as living conditions, income and health⁴². Such adaptation processes can occur in a downward as well as upward fashion. The downward and upward adaptation processes correspond to the previously mentioned welfare positions named "adaptation" and "dissonance" respectively⁴⁵. The fact that subjective assessments and objective conditions can diverge, and furthermore that subjective reports might depend on comparisons and aspirations, have led some scholars to conclude that subjective indicators are not credible and useful for policymaking^{cf. 6, 43}. However, it has been explicitly argued that these divergences and "biases" are strengths rather than shortcomings, adding additional insights to what is already known from objective indicators⁴³.

In general, despite the disagreements on conceptualizations as well as measurement methods, there is increasing support in the literature for the claim that well-being is a

multidimensional concept that should be assessed using both subjective and objective measures^{2, 4, 15}.

Conclusion

The present article has illustrated how well-being is not a clearly defined concept, and that several ways to measure well-being exist¹⁶. Despite lacking consensus on definitions and instruments, measures of national well-being can contribute to a more comprehensive understanding of societal progress and welfare, as well as a broader conception of health.

The systematic and comprehensive measurement of subjective and objective well-being has the potential to constructively guide policy choices. As Stiglitz has stated; “what you measure affects what you do”^{60(p. 72)}. Further cross-disciplinary research on well-being concepts and measurements and the use of well-being indicators in policymaking contexts are likely to bring new insights to the field. More research on eudaimonic indicators is required. Both the OECD and the WHO, as expressed in the “Health 2020” strategy, have underscored the importance of further developing eudaimonic measures. Moreover, research efforts should include the joint analysis of subjective and objective indicators.

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