



REGENERATIVE
SOCIETY
FOUNDATION

WHITE PAPER

Well-being

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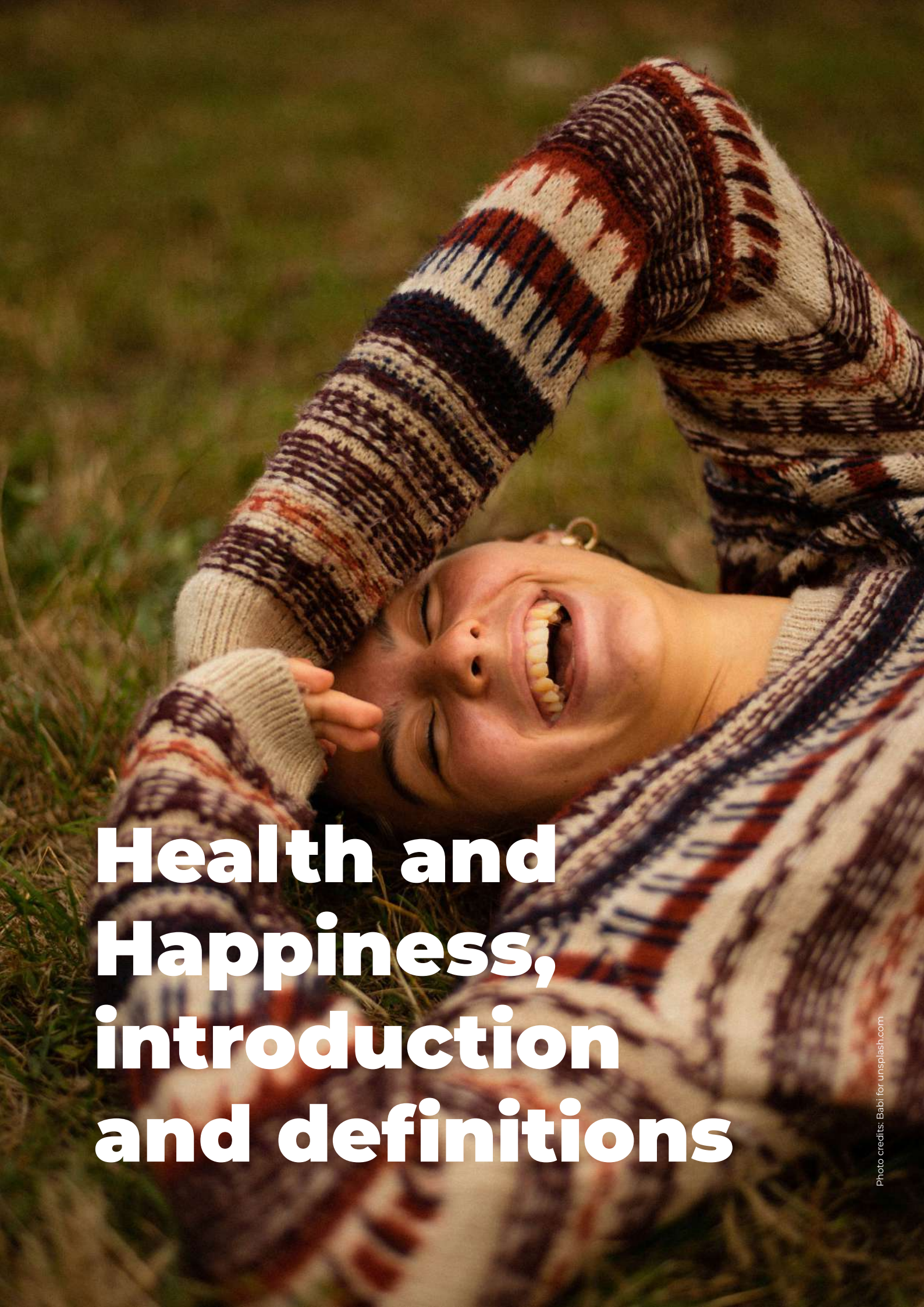
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A close-up photograph of a woman lying on her back on a grassy field, laughing heartily. She is wearing a thick, patterned knit sweater with red, blue, and white stripes. Her eyes are closed, and her mouth is wide open, showing her teeth. Her hands are raised near her head. The background is a soft-focus green field.

Health and Happiness, introduction and definitions

Health and Happiness, introduction and definitions

I Introduction

The concepts of happiness and well-being are philosophical in nature and closely related to everyone's personal definition of what a "good life" is [1]. It is therefore extremely difficult to define them, and this is especially true when attempting to provide a universally accepted definition, as cultural components are central in determining what a person perceives as well-being [2]. Confusion arises from the fact that happiness and well-being are used in an interchangeable way. Here, we will define "happiness" to mean a state of mind, like being satisfied with one's life or having a positive emotional condition. Instead, "well-being" is used to denote a more general set of values, including "flourishing", "thriving" and "welfare". *Eudaimonia* was the ancient Greek term for well-being, used particularly by Aristotle.

One can also say that "happiness" relies more upon a hedonistic definition, that describes happiness as the maximization of pleasure and minimization of pain; while the *eudaimonic* definition – closer to "well-being", is the awareness of following a path that leads to self-realization and the fulfillment of one's potential [3]. The Aristotelian *eudaimonistic* view includes concepts such as autonomy, positive interpersonal relationships, control over one's environment, self-acceptance, life purpose, and personal growth. The Aristotelian interpretation is no longer fully consistent with the prevailing values of our societies, being a durable state embedded in a stable human nature. Today a more psychological and materialistic interpretation ("feeling well") is the norm. Rather than the original Aristotelian interpretation, the "Theory of Capabilities" as put forward by Martha Nussbaum and Amartya Sen (in fact, both neo-Aristotelians) is more useful for us [4-5]. This is a theoretical framework that claims that the freedom to achieve well-being is of primary moral importance and that well-being should be understood in terms of people's capabilities and functioning.

We believe that well-being is a more comprehensive term that also includes happiness, and therefore we will stick to it. Also, a prerequisite for both is generally (but not necessarily) good health. Therefore, we start with a short history of the definitions of health.

Health and Happiness, introduction and definitions

I Defining health

Based on the reasoning above, improving the well-being of a population means to promote the conditions necessary to facilitate individual's potential, promoting a sense of control over one's life, and creating the conditions to achieve personal goals. All of this is highly likely to be associated with increased biological capital and a deceleration of biological ageing, as we argue below. Biological capital is the physiological state accrued at a certain point in life and measurable with biological parameters.

From both a conceptual and practical point of view, health is not merely the absence of disease but has been defined as "a state of complete physical, mental, and social well-being". This is the first article of the World Health Organization Constitution signed in 1946 [6], but different points of view can be found [7]. In fact, the WHO's definition appears historically outdated and no longer fit for purpose. Most of the criticisms of the WHO definition focus on the absoluteness of the term "complete" in relation to well-being [7]. This definition unintentionally contributes to the medicalization of society, as the requirement for complete well-being in every sphere of life would mean that most of us should be considered sick most of the time. The advancements in screening technologies detect anomalies that often do not constitute diseases (i.e., they do not cause functional alterations), and pharmaceutical companies produce drugs for conditions that were previously not considered pathologies. The WHO definition underestimates the role of human capacity to autonomously cope with the physical, emotional, and social challenges that are part of normal life, and to feel subjectively well, even in the presence of a chronic illness or disability. The proposed alternative is to *define health as the ability to adapt and have agency to manage oneself*.

Redefining health is an ambitious and complex goal, but there is a consensus on moving away from the current static formulation towards a more dynamic one, based on resilience or the ability to cope, maintain, and restore one's integrity and balance. Which is very close to a definition of well-being.

Health and Happiness, introduction and definitions

Biological Capital

People born into disadvantaged social groups often have more complex and challenging biographical and biological life paths compared to those from less disadvantaged sectors of society. This initial disparity results in significant differences in both life expectancy and quality of life. Depending on how we categorise social differences, the difference in life expectancy between those belonging to the highest and lowest groups can exceed ten years. However, when discussing inequalities the focus is typically on biographical aspects, such as economic and social factors, and rarely embraces and evaluates biological ones. In reality, our prospects at any given point in life are determined by both biographical factors (e.g., education level, income, etc.) and the biological marks associated with our history [8].

Today, biology and medicine can identify the biological imprints left on the body by socioeconomic differences (as defined by education, professional level, or income) as well as by exposures to chemicals, nutrients, and more. The individual's history, which creates a "biological pathway," is also influenced by major historical changes, to the extent that we can speak of a double embodiment: the embodiment of exposures accumulated over an individual's lifetime and the embodiment of the social and economic history of populations [9]. For example, during the Holocene, the development of agriculture, the extraction and processing of minerals, and later industrial development, led to the accumulation of environmental and behavioural exposures typical of the epidemiological transition, such as tobacco, asbestos, alcohol, pesticides, heavy metals, processed foods, and so on.

As we are progressing from Holocene to Anthropocene, new exposures are starting to become more prevalent. Some examples can be found in the microplastics that are becoming so pervasive that they can be found in our own cells [10], or in the constant exposure to the infosphere resulting from the pervasive use of electronic devices. In addition to these new exposures connected with post-modernity, we are becoming progressively more aware of the impact of stress on health, and specifically of how the complexity arising from an interconnected but ultimately individualistic world can impact mental and physical health.

Social disadvantage from the early years of life can induce persistent biological changes, such as a state of chronic inflammation, which can lead to cardiovascular disorders, immune system diseases, and cancer [11]. Today, there are important biological indicators of the impact of the environment (in a broad sense, including stress) on our bodies, particularly on ageing. DNA methylation, for example, is a good epigenetic measure of biological ageing and is associated with individuals' social class [12]. The more disadvantaged the social condition, the more accelerated the biological ageing process. For this reason, biological clocks, like those based on DNA methylation, are also a good measure of the biological capital each person possesses at a certain stage in life.

Health and Happiness, introduction and definitions

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Measuring happiness

Measuring happiness

Introduction

For all these reasons, it is not surprising that measuring health, happiness, and well-being is a complex and sensitive subject. Measurement in these areas touches on intimate and confidential aspects of people's lives, and investigating them, for example through questionnaires, requires the individuals' consent and often consulting an ethics committee. On the other hand, measurement becomes necessary, if only to monitor the effectiveness of practices aimed at improvement or even regeneration. Well-being is one of the five axes used in the RSF measurement framework in the figure below.

REGENERATION AXES AND GOALS LIST

Circularity

Efficient Use of Resources
 Progress towards Zero Waste
 Circular Design
 Industrial Symbiosis

Natural Capital

Ecosystem Protection:
Biodiversity and Natural Habitat Protection
 Promotion of Soil Health
 Sustainable Water Management
 Pollution Prevention

Climate

Energy Transition
 Net CO2 eq emissions reduction

Education

Educational Messages to Targeted Stakeholders
 Educational Impact Monitoring

Wellbeing

Employees: occupational health and happiness
 Community: Impact and engagement

Measuring happiness

There are various approaches to how measurement can be carried out [1]. The simplest approach consists in choosing to focus on a single parameter (often various types of life satisfaction questionnaires) [2,3]. It is possible to get a more informative overview of these aspects using multidimensional indices that have been developed with varying levels of complexity [4]. The advantage of the former approach is the ease of data collection and the ability to collect and analyse happiness and well-being across large numbers, though the trade-off implies less specificity in the type of data collected. Given the topics previously discussed, it is clear that adequately addressing happiness and well-being is more complex than what a single indicator can capture, and it is often better to focus on multidimensional indicators.

Measurement of happiness has been partly inspired by efforts like those carried out in Bhutan to measure activities that go beyond CSR (corporate social responsibility) [5,6]. The substitution of GDP with happiness measures has been proposed by the 4th King of Bhutan through the development of the Index of Happiness. The proposal has been then developed by economists based on the observation of the paradox that negative or harmful actions – like pollution or deforestation - can increase the GDP in the short run. The figure bellow shows the 4 pillars of happiness according to the approach followed by Bhutan.

THE FOUR PILLARS OF GROSS NATIONAL HAPPINESS

GOOD GOVERNANCE

The constitution of Bhutan, Article 9: The state shall strive to promote those conditions that will enable the pursuit of GNH

SUSTAINABLE SOCIO-ECONOMIC DEVELOPMENT

All Bhutanese to benefit from free education: secure livelihood; access to free health care and an equitable society

PRESERVATION AND PROMOTION OF CULTURE

The country's capacity to maintain and develop cultural identity, knowledge and practices

ENVIRONMENTAL CONSERVATION

Bhutan ensures the preservation of its natural resources and environment for the benefit of present and future generations

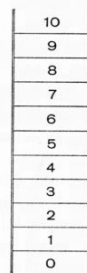
Measuring happiness

The Cantril Ladder

Currently, the main school of thought for measuring happiness and well-being is that of Jan Emmanuel De Neve and the *World Happiness Report* [7]. It is primarily based on the Gallup poll, which uses a self-administered questionnaire called "the Cantril Ladder", the same source that the OECD uses [8]. This questionnaire, with the ambition of being used to evaluate global happiness or at least that of entire nations, is one of the simplest approaches to measuring happiness, and its simplicity is precisely its strength (easily replicable, usable in very different contexts without the need for specific supporting data that may be difficult to obtain in certain environments). The "ladder" is based on a series of questions related to all the aspects of health and happiness discussed earlier, from professional career to physical and mental well-being [9]. The questionnaire asks individuals to imagine themselves on a ladder with steps going from 0 to 10, with 10 corresponding to the best possible life that one can imagine for themselves and 0 the worst possible life. Each subject answers for every question stating where they see themselves in the ladder both in their current moment and in five years, thus providing data on the present as well as on expectations and ambitions for the future.

Cantril's Ladder, as illustrated in *Pattern of Human Concerns* (Cantril 1965:22-23)

Figure III:1
LADDER DEVICE



Here is a picture of a ladder. Suppose we say that the top of the ladder (POINTING) represents the best possible life for you and the bottom (POINTING) represents the worst possible life for you.

- (C) Where on the ladder (MOVING FINGER RAPIDLY UP AND DOWN LADDER) do you feel you personally stand at the *present* time? Step number _____
- (D) Where on the ladder would you say you stood *five years ago*? Step number _____
- (E) And where do you think you will be on the ladder *five years from now*? Step number _____

Source: <https://imn.it/>

Measuring happiness

It has been observed that the results of this test strongly correlate with individuals' income, which partly explains why many of the wealthiest countries often rank as happier according to the World Happiness Report's definition.

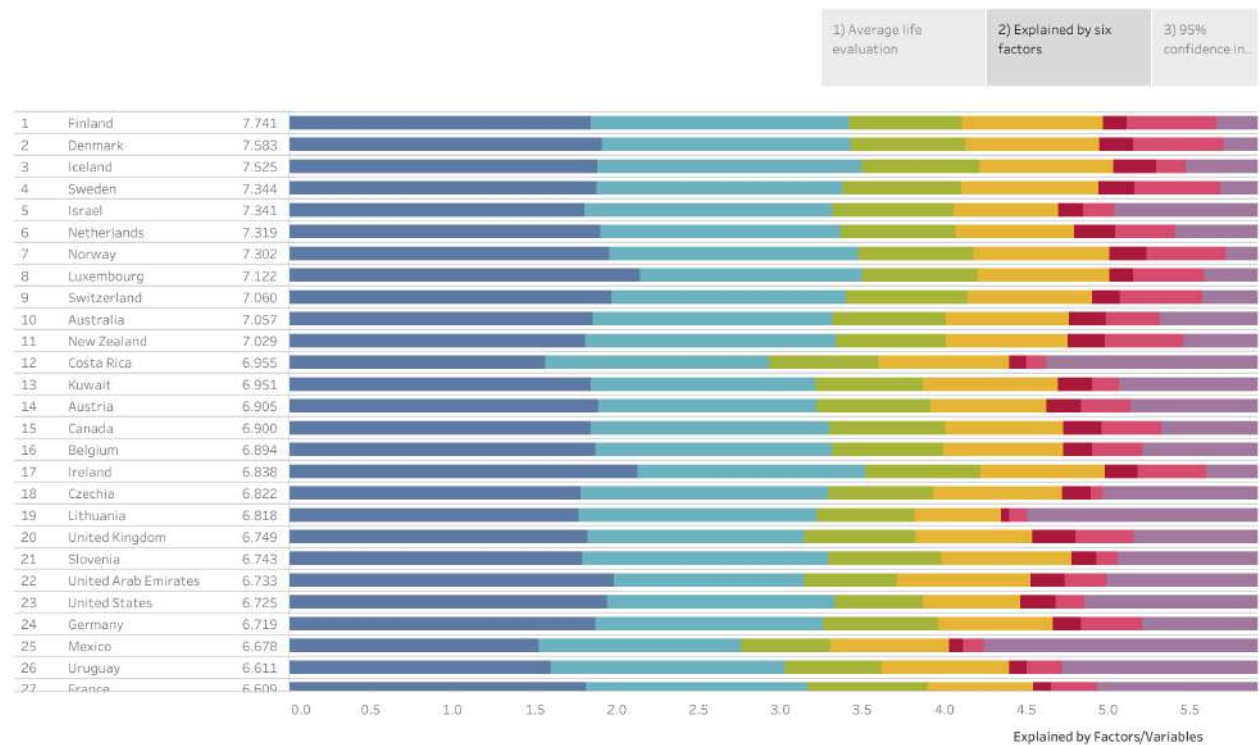
World Happiness Report 2024

Figure 2.1: Country Rankings by Life Evaluations in 2021-2023

Notes

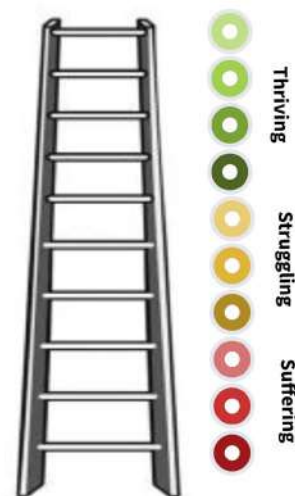
Tab 1 & 2: The 95% confidence interval is shown in the grey-shaded area at the end of each life evaluation bar.

Tab 2: The sub-bars have no impact on the total score reported for each country. Instead, they are a way of explaining the implications of the model estimated in Table 2.1. The few countries still have their overall scores, though, which are based entirely on survey responses, and are independent of our efforts to explore the underlying support factors of happiness.



Source: World Happiness Report 2024

An important aspect of using this tool is that it uses the individual as the reference unit, eliminating various types of bias and allowing for the grouping of subjects into three large categories, built on questionnaires filled by hundreds of thousands of individuals: **Thriving** (people with a very positive view of their life situation and who see progress in the next five years), **Struggling** (people whose well-being is uncertain or moderate, either because they have a pessimistic view of their future or report a suboptimal present), and **Suffering** (people whose well-being is considered at risk, with a difficult current life situation and an unpromising view of the future).



Assume this ladder is a way of picturing your life. The top of the ladder represents the best possible life for you. The bottom rung of the ladder represents the worst possible life for you.

Measuring happiness

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Measuring happiness and well-being in a company or a project

Measuring happiness and well-being in a company or a project

Introduction

In the case of RSF and its measurement framework, evaluations are conducted on a smaller scale – compared to the World Happiness Report - with a more specific approach. The idea of incorporating happiness in new measures of GDP is clearly consistent with the RSF mission but requires tools that are more specific for the business context. A multidimensional approach has therefore been chosen, focused both on the target population of the projects being evaluated and on those implementing the project itself (the workers).

Who is our target population

The proposal is to consider indicators of the health and well-being of a target population before and after the implementation of a regenerative project, aiming for a positive final balance. This measurement is conducted alongside the other four axes of the measurement framework and the final goal is to promote synergy between the axes: an increase in the well-being of a population involved in the project cannot occur at the expense of environmental improvement indicators. This approach can result in a practice of continuous improvement, which is monitored.

Important notice: When it comes to health and well-being, we cannot be "prescriptive," meaning we cannot impose a standard (as the definition of the WHO seems to imply). Any reference to a health or well-being standard, benchmark, or corporate goal requires frequent interactions with various stakeholders according to the principles of deliberative democracy, while respecting the principles of privacy and confidentiality.

To define more specifically how to measure well-being, we define the target populations as follows:

- **All workers** with direct and active participation in the project.
- **All individuals in local communities** where the project takes place (i.e., areas that have material or immaterial interactions with the proposed activity).
- **All consumers and beneficiaries** of the products or services associated with the project.

Exclusions: Voluntary health practices or personal well-being interventions of workers or citizens are not included in this assessment.

Measuring happiness and well-being in a company or a project

Measuring the impact on the workers

Considering the aspects previously discussed, RSF proposes focusing on the following areas:

Safety and Risk Prevention

This area focuses on identifying and mitigating workplace risks, ensuring a safe environment for all employees. Relevant aspects include active worker involvement in management and participation in voluntary protection and prevention programs that go beyond mere legal compliance.

Workplace Health Promotion and Fair Labour

In this area, the focus is on measuring and promoting both the physical and psychological health of workers. To achieve this goal companies should propose activities that aim to promote the workers well-being, ranging from healthy diets to sports activities, preventive health screenings, and measures to ensure a proper work-life balance.

Equity and Inclusion

Given the importance of a eudaimonic vision of well-being, it is essential to monitor inclusion and equity measures to prevent obstacles for specific sub-groups of workers that could hinder their path to self-realization. Indicators measured in this area assess the measures taken to protect the rights of groups subject to discrimination, with an intersectional approach and attention to hiring practices and pay equity.

Professional Growth and Training

To tie back to the philosophical definition of health and well-being, it is crucial to consider how workers can grow alongside the project, allowing them to progressively feel more self-realized.

Monitoring of Happiness and Satisfaction

Last in order but not in importance, given the various studies on monitoring happiness, we also believe it is important to include such indicators in evaluating a project's regenerative potential to adjust the project and collect feedback.

It is evident that there can be both objective and subjective tensions and conflicts in this process: workers' interests do not necessarily align with those of the ownership, and the interests of individual workers may not align with those of the broader workforce. A certain level of conflict should be seen as physiological and is not in contradiction with individuals' capacity for self-determination.

Measuring happiness and well-being in a company or a project

Measuring the Project's Impact on the Community

In terms of the project's impact on the local community, the following areas are proposed for measurement:

Donations, Initiatives, and Investments

An important aspect to consider is whether (and how) the project will have a long-term impact on the community where it is conducted. To assess local well-being promotion, it is important to measure the presence of structured community investment initiatives and the commitment to public engagements aligned with the project.

Engagement with the Local Population

Monitoring whether the project is accepted by the local community, fostering dialogue with all stakeholders to understand the community's needs, and working to achieve desired long-term impacts is essential for evaluating regeneration within the context of well-being.

Impact on Local Communities

Having plans to monitor all direct and indirect impacts of the project (including using third parties specialized in monitoring according to international standards) can help drive actions that generate the greatest local well-being.

Local Economic Impact

Lastly, relying on academic research and economic metrics to evaluate the long-term impacts of the project is another important aspect. Prioritizing actions that ensure the most significant positive impacts and publishing the results is essential for transparency and improvement.



Another dimension: meditation

Another dimension: meditation

We only mention here one other dimension that is relevant to the discussion of happiness and well-being, i.e. the inclusion of training (based for example on meditation) to increase well-being at the individual level. Two considerations are necessary. One is that such practices can be evaluated scientifically, even within randomized controlled trials. This is done for example by Maurizio Zollo's team at the Imperial College Business School, whose experiments have demonstrated not only greater happiness of the staff, but also an increase in efficiency and productivity. The second comment is that there is a physiological basis for such practices, that seem to reintegrate the homeostatic balance hampered for example by exposure to stress, that induces allostatic overload. This is the field of psychoneuro-endocrinology. Such experiences could be considered for inclusion in some of the companies within RSF.

These are the results of the paper: "Compared with 30 control subjects, the participants to meditation training showed increased grey matter density and changes in the coherence of intrinsic brain activity in two adjacent regions of the right inferior frontal gyrus encompassing the anterior component of the executive control network.

Both these measures correlated with self-reported well-being scores in the meditation group. Conclusions: The significant impact of a brief meditation training on brain regions associated with attention, self-control, and self-awareness may reflect the engagement of cognitive control skills in searching for a state of mental silence, a distinctive feature of Sahaja Yoga meditation. The manifold implications of these findings involve both managerial and rehabilitative settings concerned with well-being and emotional state in normal and pathological conditions."

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