

HUMAN WELL-BEING UNDER IMPACT OF HUMAN CARE FOR NATURE: HAPPY PLANET INDEX

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ABSTRACT: Humans are multilayered entities. Well-being as a complex construct is more than the absence of illness or pathology. Well-being has subjective and objective dimensions. It can be measured at the level of individuals, or organizations, or society and it accounts for elements of life satisfaction that cannot be defined, explained or primarily influenced by economic growth. Measures can be used for raising the awareness and resulting action of raising well-being. Many studies indicated significant life benefits for people with high subjective well-being. Thus, the interventions to increase subjective well-being are important, not only because people feel good about themselves; they have more positive work behavior and exhibit other desirable characteristics. The environmental conditions have direct impact on quality of human life and on their actual choices (where to live, work), they affect human health and wealth (through climatic variations, natural disasters). Research and measurement of environmental conditions leave some question open: are we asking the right questions, by linking quality of life measurement with the impacts of and on the environment? Shall we count the polluters (only) or also the people exposed to the pollution, the health impacts of it and consequently the impact on public spending (by assuring the basic medical treatment, general health insurance etc)? The answer is complex, but solution is closer, if we keep in mind, that there is only one interconnected story of Earth and its inhabitants and theirs well-being. Happy Planet Index can help us understand this, if it matches the Law of Requisite Holism.

Key words: humans as multilayered entities, well-being, quality of life, awareness, environmental conditions, HPI

1 HOLISM AND WHOLENESS; THE LAW OF REQUISITE HOLISM

Requisite holism belongs to preconditions of success in actions aimed at sustainability and care for nature as preconditions of human well-being. In examining the individual's holism of behavior and attributes backing it we are going to apply the views of several authors. For projecting the viewpoint the Bertalanffy's dealing with the holism/wholeness (1968) is important, and on the other hand the treating of the holism as requisite is so, too, such as studied by Mulej (2000), Treven and Mulej (2005), Mulej and Kajzer (1998a and b), Sruk (1995), Senge et al. (2005), Mautner (1995),... Mulej and co-authors (2000, 32) define the human holism as an approach making a synergy of consideration of: (i) the whole (systemic), (ii) parts (systematic), (iii) relations (dialectics, interdependence) and (iv) realism (closeness to reality, materialism), as a dialectical system: that is, all at one time and intertwined, correlated and interrelated.

»Everything starts with understanding the nature of wholes, and how parts and wholes are interrelated. Our normal way of thinking cheats us. It leads us to think of wholes as made up of many parts; in this way of thinking, the whole is assembled from the parts and depends upon them to work effectively. If a part is broken, it must be repaired or replaced. This is a very logical way of thinking about machines. But living systems are different. Unlike machines, living systems, such as your body or a tree, create themselves. They are not mere assemblages of their parts but are continually growing and changing along with their elements. « (Senge et al, 2005, 5). – The latter is superficial: holism means that all attributes from all viewpoints and all their relations and resulting synergies are considered (Mulej, et al, 2000; Mulej, 2007). This reality can of course not be captured by humans; therefore humans need Mulej/Kajzer law of requisite holism (1998). It requires combining the specialization and (dialectical) system style of thinking and acting into a capability, which is interdisciplinary, in order to exceed the boundaries of single sciences and poor link-up of sciences in interdisciplinary creative co-operation, yet not at any level but at a level of the "requisite holism" (Mulej et al, 2000, 65).

2 WELL-BEING, COMPLEXITY AND REQUISITE HOLISM OF INDIVIDUALS

Having in mind that the human is (in synergy) a physical, mental, social, spiritual and economic entity, implementing devotedly different life roles, she has to be preferably holistic – she has to consider all that is important to the highest possible level. Thus, the (requisite) holism of the individual should be established by a set of techniques, all way from the techniques enabling physical balance, the techniques of life art, and techniques of personality development, to the techniques of professional and working development. The requisite holism of individuals' e. g. as employees has a positive influence on the success of organizations,

through the successful managing of stress, work satisfaction and wellbeing. Thus, the organizations should create conditions for the implementation of such techniques for developing and strengthening of the requisite holism of individuals as employees, because they will get, what they will enable and appreciate.

Prerequisites for prevention of repetition of (financial, economic and also social) crises, as well as for their abolition, include requisitely holistic individuals. Hence the organizations should look at humans as multilayered, not only as professional entities. In synergy, not only separately, we define humans as: (i) physical, (ii) mental, (iii) social, (iv) spiritual and (v) economic entities, marked by requisitely, though not absolutely, holistic pattern of relatively permanent characteristics, due to which the individuals differ from each other, and also as specialized professionals. All these and other attributes form synergies.

In this way the behavior of individuals, who are willing to practice interdisciplinary co-operation, becomes not only socially responsible but also happier. Frey (2008, 1) argue that happiness is considered by many to be the ultimate goal in life; indeed, virtually everyone wants to be happy.

Well-being is a complex construct whose meaning remains contested and its key distinction is between: (i) hedonic and eudaimonic well-being; and (ii) objective and subjective measures (SDRN 2005, 4).

One knows also the relative well-being, which depends on one's comparison with people playing important roles in one's life (Revkin, 2005). Diener and Seligman show the following partial formula for high well-being (2004, 25; summarized after Prosenak and Mulej 2007a, 3): living in a democratic and stable society that provides material sources to meet needs, having supportive friends and family, rewarding and engaging work and an adequate income, being reasonably healthy and having treatment available in case of mental (actually: medical in general, N.B. by us) problems, having important goals related to one's values, and philosophy or religion that provides guidance, purpose and meaning to one's life. In our paper we will use subjective well-being.

2.1. Subjective well-being

Subjective wellbeing is the main subject in the context of positive psychology (Musek and Avsec 2006, 51). Diener and Seligman (2004) define the subjective well-being as the evaluation of an individual's life taking into account her positive emotions, work, life satisfaction and meaning. For Musek and Avsec (2002, 10) the subjective well-being is the main notion, which combines a series of evaluations, which refer to the individual's life, cognitive and emotional, general and more specific.

The concept of the subjective well-being covers 3 components: (i) the positive emotions and humors, (ii) the absence of negative emotions and humors, and (iii) the evaluation of life satisfaction (Musek 2005, 178). The second factor of the subjective well-being tackles the emotional aspect of well-being, which is composed of 2 independent components – positive and negative affect. A measuring device had to be built for measuring the 3 above mentioned components. Watson, Clark & Tellegen (1988: summarized after Musek 2005, 178) mention that positive and negative affection (PA and NA) is measured by numerous instruments and most of the time the PANAS questionnaire (Positive Affect Negative Affect Scale) is used.

Diener and Biswas-Diener (2000; summarized from Musek 2005, 179) claim, that the dimensions such as optimism and the feeling of fulfillment should also be considered as parts of the concept of well-being. Therefore we can speak about the emotional components of the subjective well-being, which are composed of positive and negative affects, and cognitive components, which are composed of, for instance, life satisfaction. Although the mentioned components correlate they do not have the same meaning (Diener & Biswas-Diener, 2000; summarized after Musek and Avsec 2002, 12)¹. Thus, it is not about money only.

“Diener research indicates that there is no sole determinant of subjective well-being. Some conditions seem to be necessary for high subjective well-being (e.g., mental health, positive social relationships), but they are not, in themselves, sufficient to cause happiness.” (Eid and Larsen 2008, 5).

According to Diener and Seligman (2004, 1) individual's income is becoming increasingly less relevant as far as the differences in the growth of well-being are concerned; on the other hand interpersonal relations and satisfaction at work are becoming more and more relevant. As important non-economic indicators of social well-being the social capital, democratic management and human rights are mentioned, while at work non-economic indicators have effect on both satisfaction and profitability. Diener and Seligman (2004, 1) claim that the expected (economic) results are most often the effect of well-being and not vice versa. They detected that people who are at the top of the well-being scale have more income and are more successful at work as those in the lower region of such a scale. Satisfied employees are better co-workers and therefore help their colleagues in

¹ This can be presented with a case of two people who for instance globally evaluate the subjective well-being equally, but they have different components: one person has a higher level of positive affect, the other a lower level of negative affect. One must distinguish between emotional dimensions of subjective well-being and satisfaction; for instance when we successfully finish a boring work we can feel satisfaction, although we would hardly speak of any higher level of positive affect.

various ways. Furthermore, people with a higher level of well-being have better social relations. Such people are more likely to get married, stay married, and have a successful marriage. And finally, well-being is also connected with health and longer living, but the connections between them are far from being completely understood. Therefore a high level of well-being is not precious only in the context of well-being, but it can also be economically useful. These facts show that monitoring of well-being at the organization and state levels is necessary for well-being to become the main topic for the creation of the policy of management, and that accurate measuring of well-being forms a basis of such a policy (Diener and Seligman 2004, 1). Authors suggest that for the purpose of measuring of well-being positive and negative emotions, commitment, purpose and meaning, optimism and trust as well as a wide concept of a full life be used as variables. At the same time they point out that for the measuring of well-being researches are important which refer to social conditions, income, physical health, mental disorders and social conditions. James (2007) warns about the border between well-being and the end of motivation because of the affluence combined with complacency: the border is not objective, but subjective.

It could be added that on this basis one should monitor the subjective well-being, which supports people's creative work and cooperation, which can then lead to an increased objective and personal well-being. Hornung (2006; summarized after Prosenak and Mulej, 2007b, 6) provides an interesting common denominator: happiness counts as people's constant goal and also as a comprehensive synergetic indicator of comprehensive well-being, good performance, physical, psychological and social health of a person. Hornung (2006, 334–337; summarized after Prosenak, Mulej and Snoj 2008, 6) states that for the good well-being the following needs should be met: material needs, informational and, at the level of individuals, psychological needs, security needs, needs for freedom and action, needs for adaptability, needs for efficiency, and needs for responsibility.

“In recent years, a form of well-being in addition to subjective well-being has emerged from theorists such as Deci and Ryan (e. g., Ryan and Deci, 2000, 2001) and Ryff (1989) based on the idea of universal human needs and effective functioning. These approaches are labeled “psychological well-being” and are based in part on humanistic theories of positive functioning.” (Diener et al. 2009, 251).

2.2 Psychological well-being

The literature on defining positive psychological functioning includes many perspectives. First is Maslow's (1968) conception of self-actualization, Rogers's (1961) view of the fully functioning person, Jung's (1933) formulation of individuation, and Allport's (1961) conception of maturity (Ryff 1989, 1070). “A further domain of theory for defining psychological well-being follows from life span developmental perspectives, which emphasize the differing challenges confronted at various phases of the life cycle. Included here are Erikson's (1959) psychological stage model, Buhler's basic life tendencies that work toward the fulfillment of life (Buhler, 1935) and descriptions of personality change in adulthood and old age”. (Ryff 1989, 1070). Musek (2005, 175) states that Jahoda (1958) was probably the first author, who has, researching the positive psychic health, analyzed the existing scientific literature on variables related to normal, optimal psychic activity on one side and pathologic psychic activity and emotional functioning on the other side. She was particularly interested in optimal and successful functioning in respect of content and not only as an absence of a negative behavior.

All of these are bases of a multidimensional model of well-being. Ryff and Keyes (1995, 720) mentioned that the model of well-being included six distinct components of positive psychological functioning. “In combination, these dimensions encompass a breadth of wellness that includes positive evaluations of oneself and one's past life (Self-Acceptance), a sense of continued growth and development as a person (Personal Growth), the belief that one's life is purposeful and meaningful (Purpose in Life), the possession of quality relations with others (Positive Relations With Others), the capacity to manage effectively one's life and surrounding world (Environmental Mastery), and a sense of self-determination (Autonomy).

3. NATURE: PRAISED OR ABUSED IN THE LIGHT OF WELL-BEING?

Dealing with the subjective well-being reminds us, that the world and the human lives as one of the elements or modes of existence on the Earth are complex in nature. It reminds us, that there is no single approach or solution to quest of sustainability (in economic, ecologically and social terms) discussed since Brundtland commission in 1983. The fourth pillar, institutional aspect, is still unresolved: who (the world institutions such as UN, EC, IMF, etc.) should be accountable for the state of sustainability affairs and who should do what and by when? After 27 years, shall we still rely upon them or is it time for creation of global constitution? Until then the governments will play a crucial role in shaping the framework conditions in which the potentials of living being can be unfolded (labeled either as subjective well-being or simpler as the men's life worth living).

The allocation policy of the EU-27 represented in the cohesion policy (and its funds) is still bound to the GDP. More, the policy circle, the programming exercise (and the internal logic of operational programs) and the project logics are trapped by the linear thinking of the cause-effect relationship (if...then). The one-sidedness

of approach could be overcome by the implementation of feedback processes that allow us to shape and re-shape the intended interventions and more, let us be critical to our approaches and mind narrowness when-ever we take the liberty to think in the boxes of “we” (humans) vs. environment. Let us illustrate: even choices on the policy level can (not) be one-sided: many are keen in replacing the current cars in order to reduce the CO₂ emissions. But, which impacts will it have on the environment? Shall they be replaced by the electric cars? But where does the electricity come from? Shall we only replace one source of energy with another or shall we challenge our behavior, promote the public transport or healthier lives (including walking, cycling etc.) and fresh air, or deepen the understanding that the car-sharing is a step to the socially responsible nature saving? We should avoid the trap of expecting, that the world will change on its own, that there are some magicians and leaders that will transform the nature and make environment sustainable for the next generation. Just start, each of us, with the simplest question: is the future I am living in the desired one or holistically grounded one; shall I wait or care?

The current crises, provoked by neglecting the complexity and supported by the human narrowness and greedy behavior in praise of profit (and underlined competitiveness), boosted the quest of measures that would be able to replace the GDP (the aggregated Bretton-Woods measure)². It is also true, that what we measure also counts – but on which level – global, national, regional, local, personal? From the perspective of sustainable well-being the most cherished indicator is the Happy Planet Index with the selected indicators and attempt to “measure what really counts” by two dimensions: ecological efficiency and human well-being. The ranking (either the global HPI or European HPI) does not show the happiest places in the world but “the nations that score well show that achieving long, happy lives without over-stretching the Planet’s resources is possible”. Therefore HPI “represents the efficiency with which countries convert the earth’s finite resources into well-being experienced by their citizens”.

HPI builds upon three separate indicators: ecological footprint, life-satisfaction and life expectancy. Life expectancy is measured by life expectancy at birth (data from Human Development Index report). Life satisfaction question data derive from the life satisfaction question in the 2005 Gallup World Poll and the World Values Survey. The ecological footprint, developed by ecologists Mathis Wackernagel and William Rees, and championed by a range of organizations including the [Global Footprint Network](#) and [WWF](#). The ecological footprint of an individual is a measure of the amount of land required to provide for all their resource requirements plus the amount of vegetated land required to sequester (absorb) all their CO₂ emissions and the CO₂ emissions embodied in the products they consume. This figure is expressed in units of ‘global hectares’. The advantage of this approach is that it is possible to estimate the total amount of productive hectares available on the planet. Dividing this by the world’s total population, we can calculate a global per capita figure on the basis that everyone is entitled to the same amount of the planet’s natural resources. Using the latest footprint methodology, resulting in the data in the Global Footprint Network’s [Ecological Footprint Atlas](#), the figure is 2.1 global hectares. This implies that persons using up to 2.1 global hectares are, in these terms at least, using their fair share of the world’s resources – one-planet living.

$$\text{Happy Planet Index} = \frac{\text{Happy Life Years}}{\text{Ecological Footprint} + \alpha} \times \beta$$

How happy we are?

Based on the results of HPI 2.0, published in July 2009, the highest HPI score is only 76.1, scored by Costa Rica. The lowest, and perhaps less surprising than some other results, is Zimbabwe’s at 16.6. No country achieves an overall high score and no country does well on all three indicators. Costa Rica, for example, has an ecological life expectancy at 69 years. On the global HPI, Latin America tops the Index. Nine of the top ten nations in the HPI are in Latin America. In Europe Netherlands (43), Malta (44), Germany (51), Sweden (53), Slovenia (66) have the highest HPI, and Luxembourg scores the lowest (122)

Box 1: Happy planet

»A happy planet? Perhaps not. Looking at the world’s population as a whole, mean life expectancy is just 68.3 years, life satisfaction is only 6.1 and we are overshooting our ecological limits with a mean footprint of 2.4 gha. The planet’s overall HPI score of 49 out of 100 reflects the fact that humanity as a whole has much to change if we are to live long, happy lives that do not cost the Earth.« (Nef, 2009).

A glimpse on the neighboring countries of Slovenia³ shows (see Table 1), that the life satisfaction is rather modest in Hungary (the only one under the world average of 6.1) and the highest in Austria. The latter has

² The most prominent are the two initiatives, 1st www.beyond-gdp.eu, and the 2nd Stiglitz Commission on the Measurement of Economic Performance and Social Progress, <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>.

³ In the Global HPI, report July 2009 (nef, 2009)

2.38 times higher consumption of the world resources than the “fair share” (e.g. 2.1 global hectares) using the methodology of WWF / Global Footprint Network. The figures show that all five countries are acting in a rather unsustainable manner with Croatia and Hungary being less greedy. Therefore the lowest HPI rank among all five belongs to Hungary (rank 90 among 189 states).

Table 1: HPI: Slovenia and her neighbors

country	Region	Life Sat (0-10)	Life Exp (years)	Footprint (g ha /cap)	HLY	HPI	HPI rank	GDP per capita (\$ PPP)	HDI	population
Austria	2c	7,8	79,4	5,0	61,9	47,69	57	33.700	0,948	8.233.300
Croatia	7b	6,4	75,3	3,2	48,3	47,23	60	13.042	0,850	4.443.350
Hungary	7b	5,7	72,9	3,5	41,8	38,86	90	17.887	0,874	10.087.050
Italy	2e	6,9	80,3	4,8	55,7	44,02	69	28.529	0,941	58.607.050
Slovenia	7b	7,0	77,4	4,5	54,2	44,53	66	22.273	0,917	2.000.500

Source: <http://www.happyplanetindex.org/learn/download-report.html> [25.1.2010]

In Slovenia the life expectancy (by birth) has grown since 1990 for 4.3 years, amounting to 77.4 in 2005 and “all things considered, the overall satisfaction with individual lives as whole in the time of filling in the questionnaire”, increased from 5.9 in 1990 to 7.0 in 2005 (see Table 2). The figures for sustainability in terms of ecological footprint show for 2000 less consumption and in 2005 again the increase of Gaia depletion.

Table 2: Slovenia and subjective well-being measurement in 1990, 2000 and 2005

INDEX	HPI			Life Expectancy			Life Satisfaction			Ecological Footprint		
Year	1990	2000	2005	1990	2000	2005	1990	2000	2005	1990	2000	2005
Slovenia	31,9	46,6	44,5	73,1	75,7	77,4	5,9	7,0	7,0	5,4	3,9	4,5

Source: <http://www.happyplanetindex.org/learn/download-report.html> [25.1.2010]

4. SOME CONCLUSIONS

HPI is a nice tool to raise the awareness and to re-think our daily practice, beliefs, values, ethics and norms about human well-being under impact of human behavior concerning our natural environment and our impact over it. It illustrates the subjective viewpoints that are rather changeable. It is rather holistic and exposes well-being and some of its preconditions. The humans will not survive, if they do not take into account the simple truth that we humans are a minor, but influential, part of nature (and not vice versa) and it is to be questioned, how long our behavior as invaders will enable us to survive on the Planet Earth. It is time to act: therefore, before printing this text, just think of the trees to be fallen in the sake of this printing, as well as of your eyes.

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