

# OVERALL SATISFACTION WITH LIFE

## Subjective approaches (1)

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### **ABSTRACT**

*A good society is first of all a livable society and the livability of a society manifests in the life satisfaction of its members. Therefore improving society requires an understanding of life satisfaction, in particular it requires to answer the following seven questions: 1) What is life satisfaction precisely? 2) Can life satisfaction be measured? 3) How satisfied are people presently with their life? 4) How do we assess how satisfied we are? 5) What conditions add to life-satisfaction? 6) Can life satisfaction be raised lastingly? 7) Should life-satisfaction be raised? Throughout the ages philosophers have toiled with these questions, and since the 1960's they have been subjected to empirical research. In this chapter we take stock of the progress that has been made in this field.*

### **DEFINITION**

Life-satisfaction is our subjective appreciation of our life as-a-whole. The synonyms are *happiness* and *subjective well-being*.

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## 1 HISTORICAL ROOTS

Over the ages philosophers have reflected on the good life, and although philosophers typically have been more interested in the moral value of life than on subjective enjoyment of it, they have also given thought to what makes life more or less satisfying (McMahon 2005). There is a considerable body of research devoted to advising individuals and policy makers how they lead or promote more satisfying lives, but due to a lack of data on just what constitutes a satisfying life the philosophers have not been able to check the reality value of their recommendations. Hence, our understanding of what determines life-satisfaction remained speculative.

In the last decade survey-research introduced by social science researchers has brought about a break-through in our understanding of the factors which control life satisfaction. Dependable ways to measure life-satisfaction have been developed, and we have now amassed a significant body of knowledge on this subject. In this chapter I present an account of this new field and how it continues to evolve.

### *Development of the field*

Efforts to create a better society started with attacking these most blatant evils: ignorance, illness and poverty. Consequently, historically progress has been measured using such things as literacy, control of epidemic diseases and the elimination of hunger, and social statistics developed to register this progress.

Once an advance had been made in combating ignorance, illness and poverty, policy makers and individuals began to make the effort to ensure a reasonable material standard of living for everybody. This was mostly measured by determining per capita gains in monetary income, income-security and income equality, and gave rise to an abundance of research on the wealth of nations and income distributions within nations. These are still major research topics today.

In the 1960's, a new theme began to be heard in the research-agenda, at that time, most western nations had developed into affluent societies, limits to economic growth had been recognized and post-materialistic values became a topic of interest. This called for broader conceptions of the good life and a wider set of measures that could be used to measure our satisfaction with it. Consequently, new terms were introduced, such as 'quality-of-life' and 'wellbeing', and older terms such as 'happiness' were revived. Initially these notions were used in a polemic manner, and served to denote that there is more to a good life than just material welfare. Yet soon, they were developed into more substantive concepts and became subject of empirical investigation. Life-satisfaction is a major topic in this new strand of research.

### *Plan of this chapter*

The literature on life-satisfaction can be framed within seven key-questions. 1) What is life-satisfaction precisely? 2) Can life-satisfaction be measured? 3) How satisfied are people currently with their lives? 4) How do we assess how satisfied we are with our life? 5) What conditions add to life-satisfaction? 6) Can life-satisfaction be raised lastingly? 7) Should life-satisfaction be raised?

I will first provide a definition of life-satisfaction, and thereby answer question 1. Then I will outline a set of appropriate measures of life-satisfaction, in answer to question 2. This sets the scene. I will then present research findings, on the basis of which the other questions will be answered. First how satisfied people are (question 3) and next why not everybody is equally satisfied with life (question 4 and 5). Drawing on this body of knowledge I will finally address the questions of whether life-satisfaction can be raised lastingly (question 6) and whether it is worth striving to do so (question 7).

## 2 WHAT IS LIFE-SATISFACTION'?

In this chapter the term life-satisfaction denotes *subjective enjoyment of life*. To ensure that this concept is fully understood I will first discuss the difference between subjective enjoyment of life and other notions of the good life (§ 2.1). Next I will specify what kind of subjective enjoyment of life is meant by this term (§ 2.2). Based on this, I will then provide a definition of life satisfaction (§ 2.3). Finally I discuss the differences between the overall evaluation of life (life-satisfaction) and two 'components' on which this evaluation draws (§ 2.4).

### 2.1 Life-satisfaction and other qualities of life

Life-satisfaction is about quality of life, yet not all quality-of-life is about life-satisfaction. One can have a good life but not be satisfied with that life or be satisfied with a not so good life. To help us understand the difference I distinguish between four *qualities* of life (Veenhoven 2000).

#### *Chances and outcomes*

The term 'quality-of-life' mostly denotes *chances* for a good life, such as being in full employment and having a good education. The term is also used for *outcomes* of life, such as happiness and longevity. Chances and outcomes are related, but not the same. Chances can fail to be realized, due for example to stupidity or bad luck. Conversely, people sometimes make much of their life in spite of poor opportunities.

This distinction is quite common in the field of public-health research. Pre-conditions for good health, such as adequate nutrition and professional care are seldom mixed up with the actual health of an individual or group. Much research is aimed at assessing the relationships between these phenomena, for instance by checking whether following nutritional advice really yields extra years lived in good health. The means and ends are less well distinguished in the political discourse on quality-of-life.

#### *Outer and inner qualities*

A distinction is made between *external* and *internal* qualities. In the first case the quality is in the environment, in the latter it is in the individual. Lane (1994) makes this distinction clear by distinguishing 'quality of society' from 'quality of persons'.

This distinction is also quite commonly made in public health research. External pathogens are distinguished from inner afflictions, and researchers try to identify the mechanisms by which the former produce the latter. Yet, this basic insight is lacking in many social policy discussions.

#### ***Four qualities of life***

Combining the life chances vs. life results and outer qualities vs. inner qualities yields a fourfold matrix. This classification is presented in **Scheme 1**. The distinction between chances and results is presented vertically, while the difference between outer and inner qualities horizontally.

In the upper half of the scheme, we see two variants of potential quality of life, with next to the outer opportunities in one's environment, the inner capacities to exploit these. The environmental chances can be denoted by the term *livability*, the personal capacities with the word *life-ability*. This difference is not new. In sociology, the distinction between 'social capital' and 'psychological capital' is sometimes used in this context. In the psychology of stress, the difference is labeled negatively in terms of 'burden' and 'bearing power'.

The lower half of the scheme covers quality of life with respect to its outcomes. These outcomes can be judged by their value for one's environment and their value for oneself. The external worth of a life is denoted by the term 'utility' of life. The inner valuation of this life is called 'satisfaction' with life. These matters are of course related. Knowing that one's life is useful

will typically add to one's appreciation of it. Yet not all-useful lives are happy lives and not every person living a good-for-nothing life really cares.

#### *Livability of the environment*

The left top quadrant of **scheme 1** denotes the meaning of good living conditions. This matter is also referred to as 'welfare' and 'level of living'.

'Livability' is a better word, because it does not have the limited connotation of material conditions. One could also speak of the 'habitability' of an environment, though that term is also used for the quality of housing. Elsewhere I have explored this concept of livability in more detail (Veenhoven 1996:7-9).

Ecologists see livability in the natural environment and describe it in terms of pollution, global warming and degradation of nature. Currently, they associate livability typically with environmental preservation. City planners see livability in the built environment and associate it with sewer systems, traffic jams, ghetto formation, etc. Here the good life is seen as a fruit of human intervention.

In the sociological view, society is central. Firstly, livability is associated with the quality of society as a whole. Classic concepts of the 'good society' stress material welfare and social equality, sometimes equating the concept more or less with the welfare state. Current notions emphasize close networks, strong norms and active voluntary associations. The reverse of this livability concept is 'social fragmentation'. Secondly, in the sociological perspective, livability is seen in one's position in society, for a long time, the emphasis was on 'under-class' but currently attention has shifted to 'outer-class'. The corresponding antonyms are 'deprivation' and 'exclusion'.

#### *Life-ability of the person*

The right top quadrant of **Scheme 1** denotes inner life-chances. That is: how well we are equipped to cope with the problems of life. This aspect of the good life is also known by different names. The terms 'quality of life' and 'wellbeing' are also used to denote this specific meaning of the good life. There are more names however, in biology, the phenomenon is referred to as 'adaptive potential'. In other situations, it is denoted by the medical term 'health', in the medium variant of the word<sup>1</sup>, or by psychological terms such as 'efficacy' or 'potency'. Sen (1992) calls this quality of life variant 'capability'. I prefer the simple term 'life-ability', which contrasts elegantly with 'livability'.

The most common depiction of this quality of life is an absence of functional defects. This is 'health' in the limited 'minimum' sense, sometimes referred to as 'negative health'. In this context, doctors focus on unimpaired functioning of the body, while psychologists stress the absence of mental defects. In their language, quality of life and wellbeing are often synonymous with mental health. This use of the words presupposes a 'normal' level of functioning. Good quality of life is the body and mind working as designed, and it is this meaning that is commonly used in curative care.

Next to absence of disease, one can consider excellence of function. This is referred to as 'positive health' and associated with energy and resilience. Psychological concepts of positive mental health also involve autonomy, reality control, creativity and inner synergy of traits and strivings. A new term in this context is 'emotional intelligence'. This broader definition is a favorite of the training professions.

A further step is to evaluate an individual's development and to include acquisition of new skills for living. This is commonly denoted by the term 'self-actualization'. From this point of view a middle-aged man is not 'well' if he behaves like an adolescent, even if he functions without problems at this level. Since abilities do not develop in idleness, this quality of life is close to that

of 'activity' in Aristotle's concept of eudaimonia (Ostenfelt, 1994). This quality concept is also a favorite of the training professions.

Lastly, the term 'art of living' is used to denote special life-abilities; in most contexts this quality is distinguished from mental health and is sometimes even attributed to slightly disturbed persons. The art of living is associated with having an ability to enjoy life and develop an original style of life (Veenhoven 2003).

### *Utility of life*

The left bottom quadrant of **Scheme 1** represents the notion that a good life must be good for something more than just the life itself. This presumes some higher values. There is no current generic term for these external turnouts of life. Gerson (1976: 795) refers to these kinds of outcomes as 'transcendental' conceptions of quality of life. Another appellation is 'meaning of life'. I prefer the more simple 'utility' of life, admitting that this label may also give rise to misunderstanding<sup>2</sup>. Be aware that this external utility does not require an individual to have inner awareness. A person's life may be useful from some viewpoints, without them knowing<sup>3</sup>.

When evaluating the external effects of a life, one can consider its functionality for its environment. In this context, the life of a mother with young children will be valued as higher than that of the life of a woman of the same age without children. At a higher level, quality of life is seen in contributions to society. Historians see quality in the addition an individual can make to human culture, and rate for example the lives of great inventors higher than those of anonymous peasants. Moralists see quality in preservation of moral order, and would deem the life of a saint to be better than that of a sinner.

In this vein, the quality of a life is also linked to its effects on an ecosystem. Ecologists see more quality in a life lived in a 'sustainable' manner than in the life of a polluter. In a broader view, the utility of life can be seen in its consequences for long-term evolution. As an individual's life can have many environmental effects, the number of such utilities is almost infinite.

Apart from its functional utility, life is also judged on its moral or esthetic value. Most of us would attribute more quality to the life of Florence Nightingale than to that of a drunk, even if it appeared that her good works had a negative result in the end. In classic moral philosophy this is called 'virtuous living', and is often presented as the essence of 'true happiness'.

### *Satisfaction with life*

Finally, the bottom right quadrant of **Scheme 1** represents the inner outcomes of life. That is the quality of a life in the eye of the person living that life, in other words subjective satisfaction with life. This is the subject of this chapter.

## **2.2 Four kinds of satisfaction.**

Even when we focus on subjective satisfaction, it is still difficult to pin down what is *life* satisfaction. There are different kinds of satisfaction which can also be charted in a fourfold classification. In this case, the classification is based on the following dichotomies.

### *Satisfaction with life-aspects versus life-as-a-whole*

Satisfaction with aspects of life will typically contribute to one's satisfaction with life-as-a-whole, i.e. bottom-up effect, and satisfaction with one's life-as-a-whole appears to foster satisfaction with life-aspects, i.e. top-down. These are not identical matters. One can have a satisfying marriage but still be dissatisfied with life-as-a-whole, or be satisfied with one's life-as-a-whole in spite of an unhappy marriage.

*Passing delight versus enduring satisfaction*

Satisfaction can be short lived or enduring. Once more, these matters are related but not the same. When combined, these distinctions produce the fourfold classification presented in **Scheme 2**. The difference between satisfaction with parts of life and with satisfactions with life-as-a-wholes presented vertically, and the distinction between passing satisfactions and enduring satisfaction horizontally.

The top-left quadrant represents passing enjoyments of life-aspects. Examples are the delight of a cup of tea at breakfast, fleeting satisfaction with a chore done or enjoyment of a piece of art. I refer to this category *pleasures*, Kahneman (2000) calls it ‘instant-utilities’.

The top right quadrant denotes enduring satisfaction with life-aspects, such as marriage satisfaction and job-satisfaction. This is currently referred to as *domain-satisfactions*. Although domain-satisfactions depend typically on a continuous flow of pleasures, they also have some continuity. For instance, one can remain satisfied with one's marriage even if one has not enjoyed the company of one's spouse for quite some time.

The bottom right quadrant in **Scheme 2** denotes the combination of passing experience and satisfaction with life-as-a-whole. This combination occurs typically in *peak-experiences*, which involve short-lived but quite intense feelings and the perception of wholeness.

Lastly, the bottom-right quadrant represents the combination of enduring satisfaction with life-as-a-whole. This is what I call *life-satisfaction*.

**2.3 Definition of life-satisfaction**

In this line, life-satisfaction is defined as *the degree to which a person evaluates the overall quality of his or her present life-as-a-whole positively*. In other words, how much one likes the life one leads.

*Scope of evaluation*

The concept of life-satisfaction denotes an *overall* evaluation of life. Therefore, the appraisal that life is ‘exciting’ does not mark it as ‘satisfying’. There may be too much excitement in life, and too little of other qualities. The overall evaluation of life involves all the criteria figuring in the mind of the individual: how that person feels, how well life meets their expectations, how desirable their life is deemed to be, etc. This holds also for the ‘components’ of life-satisfaction to be discussed in section 2.4.

*Temporal range*

Appraisals of life can concern different periods in time: how life has been, how it is now, and how it will probably be in the future. These evaluations do not coincide necessarily; one may be positive about one's past life, but negative about the future. The focus of this chapter is on satisfaction with *present life*.

*Variable aspects*

Evaluations of life may differ in several respects. One difference is in their certainty: some people are rather definitive about their satisfaction with life, whereas others vacillate. Another point of variation is how well considered the judgment is: some people judge rather intuitively, while others engage in elaborate contemplation. Furthermore, appraisals of life are probably not always equally appropriate. Like any perception they can be distorted in various ways, such as by mis-attribution and self-deceit. This is commonly referred to as ‘false happiness’. Distorted judgments of life are clearly less valuable as an indicator of quality of life. Nevertheless, inappropriate satisfaction is still satisfaction.



## 2.4 Components of life-satisfaction

When assessing our satisfaction with life, we use two more or less distinct sources of information: our affects and our thoughts. One can decide that one feels fine most of the time and one can also judge that life meets one's (conscious) demands. These appraisals do not necessarily coincide. One may feel fine generally, but nevertheless be aware of unrealized aspirations. Or one may have surpassed one's aspirations, but nevertheless feel miserable. Using the word 'life-satisfaction' in both these cases would result in three different kinds of life satisfaction, the overall judgment as described above and these two specific appraisals. Therefore I refer to these components as 'hedonic level of affect' and 'contentment'. To mark the difference with the encompassing judgment I will refer to life-satisfaction, the core concept, as *overall* life-satisfaction. These three variants are depicted in [scheme 3](#).

### *Hedonic level of affect*

Hedonic level of affect is the degree to which various affects that someone experiences are pleasant in character. Hedonic level of affect is not the same as 'mood'. We experience different kinds of mood: elated moods, calm moods, restless moods, moody moods, etc. Each of these moods is characterized by a special mixture of affective experience, one of which is 'hedonic tone' or 'pleasantness'. The concept of hedonic level concerns only the pleasantness experienced in affects; that is, the pleasantness in feelings, in emotions and in moods. So a high hedonic level may be based on strong but passing emotions of love, as well as on moods of steady calmness.

A person's average hedonic level of affect can be assessed over different periods of time: an hour, a week, a year, as well as over a lifetime. The focus here is on 'characteristic' hedonic level. That is to say: the average over a long time-span such as a month or a year. The concept does not presume subjective awareness of that average level.

### *Contentment*

Contentment is the degree to which an individual perceives his/her aspirations are met. The concept presupposes that the individual has developed some conscious wants and has formed an idea about their realization. The factual correctness of this idea is not at stake. The concept concerns the individual's subjective perception. This concept does assume awareness; one cannot be contented without knowing.

## 3 MEASUREMENT OF LIFE-SATISFACTION

Since life-satisfaction is something we have in mind, it can be measured using questioning. Questions on life-satisfaction can be asked in various contexts; in clinical assessments, in life-review questionnaires and in common survey interviews. The questions can be posed in different ways; directly or indirectly, and by using single or multiple items.

An overview of all questions ever used to assess life satisfaction is available in the collection of Happiness Measures (Veenhoven 2012b). To date (March 2012) the collection involves 750 questions. These questions are sorted using the conceptual distinction described above between overall life-satisfaction and its 'components'. Questions that tap overall life-satisfaction are coded 'O' (Overall), questions that address the affective component are coded 'A' (Affect) and questions about the cognitive component are coded 'C' (Contentment). Questions are also sorted by time-frame and rating scale. The collection contains links to studies in which particular questions have been used.

### 3.1 Common questions

Some common questions used to determine satisfaction with life are presented below.

#### *Single questions*

- “Taking all together, how happy would you say you are: very happy, quite happy, not very happy, not at all happy?”  
(a standard question in the World Values Surveys)
- “How satisfied are you with the life you lead? Very satisfied, fairly satisfied, not very satisfied, not at all satisfied?”  
(a standard question in Eurobarometer surveys)
- “Here is a picture of a ladder. Suppose the top of the ladder represents the best possible life for you and the bottom of the ladder the worst possible life. Where on the ladder do you feel you personally stand at the present time?” (0-10 ladder like rating scale)  
(Cantril's (1965) present life ladder rating)

#### *Multiple questions (summed)*

- Same questions are asked twice: at the beginning and at the end of an interview  
“How do you feel about your life-as-a-whole? Delighted, pleased, mostly satisfying, mixed, mostly dissatisfying, unhappy, terrible?”  
(Andrews & Withey's (1976) Life 3)
- Five questions can be used, rated on a 1-7 scale ranging from “strongly agree” to “strongly disagree”.  
(Diener's 1985 Satisfaction With Life Scale SWLS)
  - “In most ways my life is close to ideal”.
  - “The conditions of my life are excellent”.
  - “I am satisfied with my life”.
  - “So far I have gotten the important things I want in life”.
  - “If I could live my life over, I would change almost nothing”.<sup>4</sup>

### 3.2 Validity doubts

Critics have suggested that responses to questions on life-satisfaction actually measure other phenomena. Rather than indicating how much the respondent enjoys life, the answers to such questions reflect his normative notions and desires.

#### *No notion*

One of the misgivings about questions on life satisfaction is that most people have no opinion at all of how satisfied they are, they will be more aware of how satisfied they are supposed to be, and report this instead. Though this may happen incidentally, it does not appear to be the rule. Most people know quite well whether or not they enjoy life. Eight out of ten Americans think about it every week. Responses on questions about life-satisfaction tend to be prompt. Non-response on these items is low; both absolutely ( $\pm 1\%$ ) and relative to other attitudinal questions. ‘Don't know’ responses are also infrequent.

#### *Reflected appraisal*

A related assertion is that respondents mix up how satisfied they actually are, with how satisfied other people think they are, given their situation. If so, people considered to be well off would typically report to be very satisfied, and people regarded as disadvantaged should characterize



themselves as dissatisfied. That pattern is sometimes observed, but it is not general. For instance, in The Netherlands a good education is seen as a pre-requisite for a good life, but the highly educated appear to be slightly less satisfied with their lives compared to their less educated counterparts.

#### *Colored answers*

Another objection concerns the presence of systematic bias in responses. It is assumed that questions on life-satisfaction are interpreted correctly, but that the responses to such questions are often false. People who are actually dissatisfied with their life would tend to answer that they are satisfied, both ego-defense and social-desirability will cause such distortions. This bias is seen to manifest itself in over-report of life-satisfaction; most people claim to be satisfied, at least in modern nations, and most perceive themselves to be more satisfied than average. Another indication of bias is seen in the finding that psycho-somatic complaints are not uncommon among those that say they are satisfied.

Yet the above findings allow for other interpretations. Firstly, the fact that most people say they are satisfied with their life does not have to imply over-report. It is quite possible that most people are truly satisfied. Secondly, there are also good reasons why most people think that they are more satisfied than average. One such reason is that most people think like critical scientists and think that dissatisfaction is the rule. Thirdly, the occurrence of head-aches and worries among satisfied people does not prove response distortion, life can be a sore trial some times, but can still be satisfying on balance.

The proof of the pudding is in demonstrating response distortion. This has been attempted in a number of clinical studies where responses to single direct questions have been compared with ratings based on in depth interviews and projective tests. The results for such in depth interviews are generally not different from responses made to single direct questions posed by an anonymous interviewer, see for example Wessman & Ricks (1965).

### **3.3 Reliability doubts**

Though single questions on life-satisfaction seem to measure what they are supposed to measure, they measure it rather imprecisely. When the same question is asked twice in an interview, the responses are not always identical. Correlations are about +.70, while over a period of a week, test-retest reliability drops to circa +.60. Though responses seldom change from 'satisfied' to 'dissatisfied', switches from 'very' to 'fairly' are rather common<sup>5</sup>. The difference between response-options is often ambiguous and respondent's notions tend to be general, thus the choice for one answer-category or the next is sometimes haphazard when answering questions on life satisfaction

Because choice is often arbitrary, subtle differences in the interrogation environment can exert a considerable effect. Variations in the places where the interviews are held, the characteristics of the interviewer, the sequence in which the questions are asked and the precise wording of the key-item can all tip the scale to one response or another. Such effects can occur in different phases of the response process; when the question is presented, during consideration of the answer and when communicating it .

#### *Bias in appraisal*

Though most people have an idea of how much they enjoy life, responding to questions on this matter involves more than just bringing up an earlier judgment from memory. For the most part, memory only indicates a range of satisfaction. Typically, the matter is re-assessed in an instant judgment. This re-appraisal may be limited to recent change: Are there any reasons to be more or less satisfied than I used to be? But it can also involve quick re-evaluation of one's life: What are my blessings and frustrations?. In making such instant judgments, people use various

heuristics. These mental simplifications are attended with specific errors. For instance the 'availability' heuristic involves orientation on pieces of information that happen to be readily available. If the interviewer is in a wheelchair, the benefit of good health is salient. Respondents in good health will then rate their life-satisfaction somewhat higher and the correlation with health variables will be more pronounced. Several of these heuristic effects have been demonstrated by Schwarz and Strack (1991).

#### *Bias in response*

Once a respondent has formed a private judgment with respect to their life satisfaction, the next step is to communicate it. At this stage reports can also be biased in various ways. One source of bias is inherent to semantics; respondents interpret words differently and some interpretations may be emphasized by earlier questions. For example, questions on life-satisfaction are more likely to be interpreted as referring to 'contentment' when preceded by questions on success in work, rather than items on mood. Another source of response-bias is found in considerations of self-presentation and social-desirability. Reports of life-satisfaction tend to be slightly higher in personal interviews than that for anonymous questionnaires<sup>6</sup>, however, direct contact with an interviewer does not always inflate reports. If the interviewer is in a wheel-chair, modest self-presentation is encouraged.

Much of these biases are random, and balance out in large samples. So in large samples, random error does not affect the accuracy of happiness averages. Yet it does affect correlations, random error 'attenuates' correlations. Random error can be estimated using multiple-trait-multiple-method (MTMM) studies, and correlations can be corrected (disattenuated) on that basis. A first application on satisfaction measures is reported in Saris et al. (1996).

Some biases may be systematic; especially bias produced by technique of interrogation and sequence of questions. Bias of this kind does affect the reliability of distributional data, yet in principle it does not affect correlations, unless the measure of the correlate is biased in the same way, i.e. correlated error. To some extent, systematic error can also be estimated and corrected, for see also Saris et al. (1996).

### **3.4 Comparability across nations**

Average life-satisfaction differs markedly across nations. In the next section we will see that Russians currently score 5.4 on a 0-10 scale, while in Canada the average is 7.7. Does this mean that Russians really take less pleasure in life? Several claims to the contrary have been advanced. I have checked these doubts Veenhoven (1993), and the results of that inquiry are summarized below.

The first objection is that differences in *language* hinder comparison. Words like 'happiness' and 'satisfaction' do not have the same connotations in different tongues. Questions using such terms will therefore measure slightly different matters. I checked that hypothesis by comparing the rank orders produced by three kinds of questions on life-satisfaction: a question about 'happiness', a question about 'satisfaction with life' and a question that invites a rating between 'best- and worst possible life'. The rank orders appeared to be almost identical in all languages. I also compared responses to questions on happiness and satisfaction in two bi-lingual countries, and found no evidence for linguistic bias either.

A second objection is that responses are differentially distorted by *desirability-bias*. In countries where happiness ranks high in value, people will be more inclined to overstate their enjoyment of life. I inspected that claim by checking whether reports of general happiness deviate more from feelings in the past few weeks in these countries; the former measure being more vulnerable for desirability distortion than the latter. This appeared not to be the case.

A third claim is that *response-styles* distort the answers dissimilarly in different countries, for instance, a collectivistic orientation would discourage 'very' happy responses,

because modest self-presentation is more appropriate within this cultural context. I tested this hypothesis by comparing life-satisfaction in countries differing in value-collectivism, but found no effect in the predicted direction. The hypothesis also failed several other tests.

A related claim is that life-satisfaction is a typical *western concept*, unfamiliarity with it in non-western nations would lead to lower scores. If so, we can expect more 'don't know' and 'no answer' responses in non-western nations, however, that appeared not to be the case.

Many more sources of cultural measurement bias can be involved. If so, there must be little correlation between average life-satisfaction and the actual livability of nations. In section 6 we will see that this is not the case either. Using a dozen indicators of societal quality we can explain 75% of the differences in average life-satisfaction in nations, which means that measurement error can be no more than 25%. If we had more and better indicators of societal quality, we could probably explain some 90% of the variation and the error-component would then be no more than 10%. If we take into account that there is also an error component in the measures of societal quality, the estimate shrinks to some 5%.

The issue of 'cultural bias in the measurement' of happiness must be distinguished from the question of 'cultural influence on the appraisal' of life. Russians could be truly less satisfied than Canadians, because living conditions are less good in Russia. This latter matter will be discussed in the next section.

## 4 HOW SATISFIED ARE WE?

Having established that life-satisfaction can be measured, we can go on to considering how satisfied people are in the present day world and to what extent they differ in enjoyment of life.

### 4.1 Level of life-satisfaction

Throughout time, social critics have bemoaned the miseries of life. Human kind is said to be dissatisfied, and real satisfaction is projected in past paradise or future utopia. Optimists, who stressed human adaptability and social progress, have always denounced such bilious claims, but due to a lack of any empirical gauge, the discussion remained inconclusive. In the last few decades many surveys on satisfaction with life have been carried out, some drawing on world samples. All these findings are gathered in the collection 'Happiness in Nations' of the World Database of Happiness (Veenhoven 2012c), and together, they support the optimist view.

#### *Above subsistence level most people enjoy life*

The responses to a single question on life-satisfaction in Switzerland are presented in [Scheme 4](#). Most of the inhabitants of this country say they are satisfied with their life, some 70% rate 8 or higher on the 0 to 10 scale. The average score is 8.1, and it is positive findings like these that have fueled the suspicions about self-reports of life-satisfaction discussed above.

Later cross-national studies have shown that unhappiness prevails in third world nations, where a large proportion of the population lives at subsistence levels. The responses to the same question asked around the same time as in the Swiss question in another country, Zimbabwe, are presented in [Scheme 5](#). Now some 70% of the sample population scores 5 or less and the average is 3.1. This finding put to rest many of the aforementioned validity doubts.

#### *No mere resignation*

Nevertheless, some social critics are still reluctant to believe that most people enjoy life in modern society. Reported life-satisfaction is discounted as sullen adjustment. Rather than really

enjoying their life, people would just give up hope for a better one and try to adjust to the inevitable, see for example. Ipsen (1978). Various defensive strategies will be used: simple denial of one's misery, downward comparison and a tendency to see things as rosier than they actually are. Depressives will see the world more realistically. In addition to the above discussion on validity, two counter-arguments can be mentioned.

One, such resignation must be seen in a discrepancy between the results for 'adjusted' judgment of life and 'raw' affective experience. Appraisal of affect is probably less vulnerable to cognitive adaptation because it is a direct experience and thus less open to defensive distortion. It is also less threatening to admit that one has felt depressed in the last few weeks than to admit to disappointment with life. Various surveys have assessed both general happiness and last week's affect-balance. The results do not suggest that people claim to be satisfied but actually feel lousy<sup>7</sup>. Time sampling of mood-states also shows that pleasant affect dominates unpleasant affect, see for instance Bless & Schwarz (1984) for a meta-analysis of 18 studies.

Two, people are typically dissatisfied when they live in miserable conditions. As we will see dissatisfaction is the rule in poor third world countries. In western nations life-satisfaction is typically lower where adverse conditions accumulate, such as in persons who are poor, lonely and ill (Glatzer & Zapf 1984:282-397).

Together these findings suggest that people tend to enjoy their lives once conditions are tolerable, and from an adaptive-biological point of view, this does not seem strange. Nature is unlikely to have burdened us with chronic dissatisfaction. Like 'health', life-satisfaction would seem to be the normal condition.

#### *Why still so many complaints?*

The prevalence of life-satisfaction does not wash away the multitude of suffering and complaining, even the satisfied are not without their complaints. The German Welfare Survey found that half of the subjects who said they were satisfied with their life-as-a-whole reported frequent worries (Glatzer & Zapf 1984:180).

If not due to response distortion, what else can explain this pattern of worried life-satisfaction? Firstly, one can be satisfied with life-as-a-whole, but still be aware of serious deficits in one's life. In fact, both stem from a reflection on life. Secondly, worrying may contribute to life-satisfaction in the end, only through realistic acknowledgement of hurts and danger can we cope effectively with the problems of life.

## **4.2 Average life-satisfaction over time**

It is generally believed that we were happier in 'the good old days'. Yet the available time series show a rise in average life-satisfaction in most nations<sup>8</sup>. The average scores on a question on life-satisfaction in three nations are presented in **Scheme 6**. A positive trend line appears in Denmark and the Netherlands and after a dip also in Russia. Contrary to common belief, happiness has also risen in the USA since the 1970s. Data on non-western nations are less abundant, but the available findings suggest even greater increases over the last decade (Veenhoven & Hagerty 2006). This rise of happiness goes together with rising longevity, we live now longer and happier than ever before in human history (Veenhoven 2005).

## **5 HOW DO WE ASSESS HOW SATISFIED WE ARE WITH OUR LIFE?**

What goes on in our mind when we assess how much we enjoy our life? Speculation on this matter was a main issue for classical philosophy of happiness and, this issue is enjoying renewed interest today. It is not just curiosity about what is inside of the black box of our mind

that draws the attention, but rather the far-reaching consequences of different points of view with respect to creating greater happiness. This will be discussed more fully in section 8).

#### *Bottom-up calculation*

Jeremy Bentham (1897) thought of life-satisfaction as the "sum of pleasures and pains", established using a "mental calculus". This view on the evaluation process is still dominant. Life-satisfaction can be said to be assessed in a manner similar to that used by accountants to calculate profit. We would count our blessings and blights and then strike a balance. The judgment is made in a bottom-up process, in which appraisals of various aspects of life are combined to obtain an overall judgment.

In this line, Andrews & Withey (1976) suggested that satisfaction with life-as-a-whole is calculated from satisfactions with life-domains. In this view, we first evaluate domains of life, such as those of our job and marriage, comparing the reality of life with various standards of success, like 'security' and 'variation'. Next, we compute an average, weighted by our perceived importance of the domains. Andrews & Withey demonstrate high correlations between satisfaction with life-as-a-whole and life-domain appraisals, but found no evidence for the presumed weighing.

Michalos' (1985) Multiple-Discrepancy-Theory also depicts life-satisfaction as the sum of various sub-evaluations. In his thinking, sub-evaluations are assessments of the discrepancies between perceptions of how one's life 'is' with notions of how it 'should be'. The five main comparison standards are presented as: what one 'wants', what one 'had' earlier in life, what one 'expected' to have, what one thinks 'other people' have, and what one thinks is 'deserved'. Michalos provides ample evidence that small discrepancies are accompanied by high satisfaction with life-as-a-whole. Multiple regression analysis showed that life-satisfaction is primarily a function of perceived discrepancy between reality and 'wants'.

Though satisfaction with life-as-a-whole is statistically correlated with appraisals of various aspects of life, it has not been established that life-satisfaction is causally determined by these sub-evaluations. The correlation can also be due to top-down effects. For instance, when assessing his job-satisfaction a person can reason "I am generally happy, so apparently I like my job". Panel-analysis has demonstrated strong effects of this kind. The effect of life-satisfaction on our perceptions of have-want discrepancies appears to be greater than the effect of gap-size on life-satisfaction (Heady et al 1991).

#### *Inference on the basis of feeling*

A rival theory is that evaluations of life draw on cues that provide indications of our quality of life-as-a-whole. An internal cue of this kind is how well one generally feels; if pleasant affect generally dominates one's life, life cannot be too bad. An external cue is how satisfied other people think one is, i.e. reflected appraisal. The available evidence suggests that internal affective cues are far more important than external social ones. Life-satisfaction is much more related to matters of mood than to reputation.

In assessing how we generally feel, we seem to focus on the relative frequency of positive and negative affects, rather than on the remembered intensity of joy and suffering (Diener et al 1991). A typical heuristic seems to involve departing from the mood of the moment, which can be read quite vividly, and next considering how representative that mood is for general affective experience (Schwarz 1991)

Schwarz & Strack (1991) show that evaluations of life-as-a-whole draw on how one generally feels. This facilitates the judgmental task. Most people know very well how well they generally feel. The alternative of 'calculating' happiness is more difficult and time-consuming. It requires selection of standards, assessments of success and integration of the appraisals into

an overall judgment, which involves more mental operations, and entails the need to make many arbitrary decisions.

Still, people sometimes choose to follow this more difficult road. A condition that encourages calculative evaluation is uncertainty about one's typical mood. For instance, in depression it is hard to estimate how one generally feels. Another factor that invites to use of the calculative approach is the the availability of salient information that provokes comparison, such as the earlier mentioned example of a respondent being confronted with an interviewer in a wheelchair.

Evaluations of specific aspects of life can less well be derived from estimates of general affect. One can be satisfied with ones job, but still feel generally lousy, because of a bad marriage and poor health. Yet, calculating ones happiness is less difficult when specific life-domains are concerned. The field is easier to oversee and the standards are usually more evident.

#### *Link with components of happiness*

These different views on how we assess how much we like our life link up with the 'components' of happiness discerned in section 2.4. The view that we 'calculate' happiness from the plusses and minuses of life fits the cognitive component I called 'contentment'. The view that life-satisfaction is inferred from how we feel most of the time fits the affective component, which I called 'hedonic level of affect. Below I will argue that these sub-evaluations draw on different sources, that contentment is a matter of perceived realization of *wants*, while hedonic level depends on the meeting of *needs*. This theory is depicted on [scheme 7](#).

### **5.1 Hedonic level depends on gratification of universal 'needs'**

Why can we experience pleasure and pain? The biological functions of pleasure and pain are evidently to signal that things are good or bad for us. Evolution has programmed us this way. What then is the function of mood? Clearly it does not signal specific benefit or danger, unlike pleasure and pain moods are typically not related to specific stimuli and certainly not our average mood level over longer periods of time. Mood level seems to function as a meta-signal and to indicate how well we are doing on the whole. Feeling good means that all lights are on green and that we can go ahead, while feeling bad means that there is something wrong and that we should check what that is. This affective signal mechanism seems to exist in all higher animals and its neural basis is found in the evolutionary oldest parts of the human brain.

What then is 'doing well'? I assume, but cannot prove, that this means our innate 'needs' are being met. Needs are requirements that we have to function well that are so essential that evolution has safeguarded gratification of these functions by linking them to affective signals. This is pretty evident in the case if 'deficiency needs' such as hunger and thirst, but also seems to apply to 'growth needs' such as satisfying curiosity<sup>9</sup>. In this view, happiness roots in the gratification of basic needs that are part of human nature, and in that respect happiness draws on universal grounds. I have discussed this theory in more detail elsewhere (Veenhoven 1991, 2009).

### **5.2 Contentment depends on meeting culturally variable 'wants'**

Why do we have wants? Mainly so we will gratify our needs. In lower animals a set of instinctive behaviors serves to meet their needs. A human's strategy is more flexible and allows for need gratification though planned behavior: 'wants' are a part of that planning.

Why do we want what we want? Part of the answer is that we tend to adopt current standards of the good life, e.g. the standard of what material level of living is desirable and possible. These standards will vary through time and across culture, today we want to have



more material comfort than our grand-grand parents could dream of, and standards of comfort are set higher in American business circles than in Tibetan monasteries.

In this view, life-satisfaction roots in social standards and in this respect happiness is culturally relative, for a recent statement see Chambers (1999).

### 5.3 Affective experience dominates in the overall evaluation of life

Which of these two ways of appraising life is the most important? I have considered this question in earlier publications (Veenhoven 1991, 2009) and concluded that affective experience dominates our overall evaluation of life. I will summarize the main arguments, and present some more of the supporting evidence for this conclusion.

#### *Theoretical plausibility*

From an evolutionary point of view it is not plausible that cognitive contentment dominates our overall satisfaction with life. Cognition is a much later evolutionary development and serves as an addition to affective appraisal rather than a substitute. Reason helps us to explain why we feel good or bad and allows us to detect false affective signals, although it is difficult to ignore these as depressives can tell. Affective appraisal tends to precede making a cognitive decision (Zajonc 1984) and without affective appraisal we cannot come to a decision, as has been demonstrated for people with certain kinds of brain damage (Damasio 1994). In this perspective it is also unlikely that humans orient on variable cultural standards in the first place, rather than on needs that root in their biological evolution.

The limited role of cognitive comparison in determining one's life satisfaction is also illustrated by the fact little children do not display it, they have no idea, as yet, what they want from life. Still it is clear that children can be happy or unhappy and there is typically no great change in their levels of life-satisfaction when they develop wants.

#### *Empirical indications*

Since we cannot (yet) look into people's heads, there is no direct empirical evidence of the relative strength of both ways of appraising life: yet there are several indirect indications that can be used to gain an understanding of how we appraise our lives.

*Life-satisfaction more correlated to affect than contentment:* If affective experience dominates the overall appraisal of life, this must appear as a sizable correlation with overall life-satisfaction that is more sizable than the correlations to contentment with life satisfaction. Unfortunately there are no reports of studies involving measures of all three of these variants of life satisfaction, so we must do with studies that correlated either life satisfaction with affect or life satisfaction with contentment. The findings of such studies are stored in the collection 'Correlational Findings' of the World Database of Happiness <sup>10</sup>.

Eight studies link self ratings of life-satisfaction and average affect and find an average correlation of +.70 <sup>11</sup>. Another thirteen studies relate responses to single questions on life-satisfaction and contentment and find an average correlation of +.46 <sup>12</sup>. Likewise, the average correlation between life-satisfaction and affect balance in seventy studies is about +.50 <sup>13</sup>. Not surprisingly, the correlation between hedonic level and contentment is weaker. The average in three studies is +.40 <sup>14</sup>. An even lower correlation was observed in the recent Gallup World Poll, the correlation between Best-Worst possible life and Yesterday's Affect being around +.20 (Harter & Arora 2009).

*Satisfied with unfulfilled aspirations:* If life-satisfaction depends on seeing one's wants met, people must be dissatisfied when they have unfulfilled aspirations and the more dissatisfied they will be the more unfulfilled aspirations they have. Yet people with unfulfilled aspirations

appear to be more satisfied than people without any, and more so the more unfulfilled aspirations they have (Wessman 1965: 210)<sup>15</sup>. This finding fits better with the theory that we have an innate need to use our potentials, and unfulfilled aspirations encourage to do so while striving to achieve them.

*Satisfied in spite of value-reality gap in nation:* If contentment drives life-satisfaction in the first place, we can expect that people are more satisfied in nations where the values endorsed in that nation are perceived to be met, than in nations where a gap between value and reality is perceived to exist. This is not always the case, for instance it is not met with ‘gender equality’ and ‘human orientation’ as measured in the Globe study in 62 societies (House et. al. 2004). Average life-satisfaction is higher in nations where the widest gaps between ideal and reality are perceived to exist on these issues, probably because this marks a more human friendly social climate.

*Life-satisfaction drives contentment rather than reversely:* The right arrow in [scheme 7](#) denotes a ‘bottom-up’ effect of contentment on overall happiness. Above I have interpreted the observed correlations in this way. Yet causality can also be ‘top-down’, satisfaction with life affecting the perception of the gap between what one wants and what one has. Analysis of a panel study has shown that causality typically works this way. In this study, discrepancies (gaps) were assessed between how respondents rated their present life on a 20 step scale and ratings of what they wanted from life, i.e. expectations, aspirations, entitlements, on the same ladder scale. Comparison over time showed a significant top-down effect, but no bottom up effect (Headey & Veenhoven (1989: 117). So it seems that contentment is largely driven by life-satisfaction rather than reversely. If we feel good, we infer that we have most of the things we want, and if we feel bad we start looking for what we might miss.

Though affect seems to dominate the overall appraisal of life, it does not dominate equally much everywhere. Correlations between life-satisfaction and affect balance tend to be stronger in individualistic nations than in collectivistic ones (Suh et al. 1998). Likewise, the relative weight of positive and negative affect differs somewhat across cultures. Negative affect is more strongly correlated to life-satisfaction in individualistic nations than in collectivistic nations, while positive affect correlates more with life-satisfaction in nations where self-expression values are endorsed than in nations where the focus is more on survival (Kuppens et. al. 2008).

## 6 CONDITIONS FOR LIFE SATISFACTION

The degree to which needs and wants are met depends on various conditions. These conditions can be charted using the same scheme I use to distinguish four qualities of life. In [scheme 1](#) life-satisfaction was positioned in the right-bottom quadrant as an inner *outcome* of life. Outcomes depend on pre-conditions represented by the two top quadrants, external preconditions in the top-left quadrant named *livability* and inner preconditions in the top-right quadrant called *life-ability*. The effects of these conditions on life-satisfaction will often be linked. How satisfied you are in a given environment depends to a great extent on your ability to deal with the challenges of that environment. Some people manage to enjoy life in rather poor conditions because of their living skills, while there are also people who mess up everything and would be dissatisfied even in heaven. This view on conditions for life-satisfaction is presented in [scheme 8](#).

This way of looking at life-satisfaction is similar to how biologists account for the survival of organisms. In the thinking of biologists the top-left quadrant, livability of environment, is the suitability of a *biotope* for a species. Biologists denote the top-right quadrant, life-ability of

individual *fitness*, *that is* that not all abilities add to survival chances, but only those abilities that fit environmental demands will promote survival.

**Scheme 8** illustrates that the effects of outer conditions and inner abilities should be considered in conjunction. Yet research on their interactions is still in its infancy, for the time being we must make do with findings determined on these things separately. Below I will first discuss the available findings on the relation between living conditions and life-satisfaction (6.1) and then summarize the findings on life-abilities and life-satisfaction. (6.2). Next will discuss the relative weight of these determinants (6.3)

## 6.1 Livability of the environment

Most research on environmental conditions for life-satisfaction concern the *social* environment<sup>16</sup>. As yet there has been little research on the effects of the *physical* environment<sup>17</sup>.

### 6.1.1 Social conditions

Environmental conditions for life-satisfaction are studied at the *macro* level of nations, the *meso* level of organizations and the *micro*-level of individuals.

#### *Macro: Livability of nations*

Average happiness differs greatly across nations and much of the difference goes together with the livability of the society. Many strong correlations between average happiness and societal qualities are presented in **Scheme 9**.

Most of these correlates are part of the 'modernity' syndrome. Hence, similar patterns emerge if we consider further indicators of modernity, such as industrialization, informatisation and individualization. The more modern the country, the happier its citizens are. This finding will be a surprise to prophets of doom, who associate modernity with anomie and alienation. Though modernization may involve problems, its benefits are clearly greater (Veenhoven 2005).

#### *Meso: Livability of organizations*

We spend much of our life in organizations, such as schools, work-places and retirement homes and it would be worth knowing what kind of organizations are the most livable. There is a lot of research on the relation between organizational characteristics and satisfaction with the organization, such as a school, but there has been little research on the effects of organizational characteristics on satisfaction with life. This is particularly surprising in the case of retirement homes, the main product of which is to make the last years of our lives more satisfying.

One of the reasons for this lack of research is that organizations are more interested in satisfaction with their product than on their products impact on wider life-satisfaction of those using the product. A related reason is that managers are more interested in satisfaction with details they can change, i.e. How satisfied are you with the coffee? than with looking at the joint impact of organizational conditions which they may be unable to effect. Another reason is probably that the effect of making such changes on life-satisfaction will often be marginal because life-satisfaction is typically determined by many more things than just organizational conditions.

The few available data on the school environment show no effect of social status or the ethnic homogeneity of a high school on the life-satisfaction of pupils<sup>18</sup>. Nor was there a difference in life-satisfaction for students and staff at big and small schools, public or private schools and traditional schools or 'alternative' schools, i.e. Dalton, Montessori, etc. Yet in secondary education there is some difference in life-satisfaction between average life-satisfaction in high level and low level schools.

The scant data on work-places suggest that there is no difference in life satisfaction for workers in small or large work-places or between public and private sector. There are strong correlations between life-satisfaction and a worker's perception of autonomy at work, but no good data about actual self-direction<sup>19</sup>.

One thing is sure however, prisons are not very livable places, prisoners being even unhappier than institutionalized psychiatric patients<sup>20</sup>.

#### *Micro: Individual position in society*

Numerous studies from all over the world have considered differences in life-satisfaction within countries, and because most of these studies have been inspired by egalitarian social policy, the emphasis is often on social differences, such as in income, education and employment. Contrary to expectation these positional differences bear little relationship to life-satisfaction, at least not in a modern affluent society, where positional variables mostly explain no more than 10% of the variance. Somewhat stronger correlations have been observed in developing nations.

- *Social status*

Many studies have assessed links with social status variables. The guiding assumption is typically that people in advantaged social positions will take more pleasure in life.

Differences are mostly in the expected direction, but small.

- *Age*<sup>21</sup>: Old and young are about equally satisfied in most countries. Contrary to common opinion life appears to be quite satisfying in old age, even in very old age. The often observed shallow U curve seems to be a cohort effect.
- *Gender*<sup>22</sup>: The life-satisfaction of males and females do not differ very much either. In some countries males are slightly more satisfied, in others females. At this point, it still has not been established why. Young women tend to enjoy life more than young men do, but after mid-life that pattern reverses, partly as a result of marriage chances.
- *Income*<sup>23</sup>: Another commonly investigated issue is the relationship of life-satisfaction with earnings. Studies in affluent welfare states typically find only small correlations, but quite substantial differences are observed in other countries. The poorer the nation, the higher the correlations tend to be. This pattern does not fit the theory that life-satisfaction derives from social comparison. This implication will be discussed in more detail in section 7 of this chapter.
- *Education*<sup>24</sup>: The pattern of correlation with schooling is similar. Again there are high correlations in poor nations and low correlations in rich ones. Recent studies in rich nations have shown even slightly negative correlations with level of school-education. In rich nations there is no correlation between IQ and life-satisfaction (Veenhoven & Choi 2012). This suggests that education as such does not contribute to a more satisfying life and this counter-intuitive implication calls for more research.

Despite the above, average life-satisfaction is higher in the most educated countries and this means that education does affect life-satisfaction indirectly. A high level of education is required for the functioning of modern society and life in modern society appears to be more satisfying than in traditional societies. So education is a case of different effects being found at the macro and the micro level.

- *Occupation*<sup>25</sup>: There is more correlation with vocation. All over the world, professionals and managers tend to be most satisfied with life. It is not clear as to what extent this difference results from the rewards of work-tasks, related advantages or differential selection.

- *Social ties*

Next to social-status matters, social-relations have been considered, both our primary ties in our private sphere of life and secondary relations in public life. Together, these variables explain another 10% of the observed variation in life-satisfaction.

- *Intimate ties*: Life-satisfaction is quite consistently related to presence and quality of private relations. However, not all kinds of ties are equally related to life-satisfaction in all countries. In western nations, the tie with a 'spouse' is more important than contacts with 'friends' and 'relatives'<sup>26</sup>. Studies in western nations showed that 'children' do not add to the life-satisfaction of married persons<sup>27</sup>, however, among those who have children, life-satisfaction is closely related to the quality of their contacts with their children<sup>28</sup>.
- *Social participation*: Life-satisfaction tends to be higher among persons who have 'paid work'<sup>29</sup>, however, 'home wives' are not less satisfied, neither does 'retirement' make life less satisfying<sup>30</sup>. Life-satisfaction is more consistently related to participation in 'voluntary organizations'<sup>31</sup>.

The main findings are summarized in **scheme 10**.

### 6.1.2 Physical environment

Research on the relation between life-satisfaction and physical environment is less abundant. Still the following findings stand out:

#### *Climate:*

Though we tend to associate life-satisfaction with sunshine, average life-satisfaction appears to be highest in the moderate climate zones. The closer to the equator, the less satisfied people tend to be. This difference is partly due to the above discussed societal qualities, but there is still an independent negative effect of sunshine and temperature<sup>32</sup>.

#### *Pollution:*

Cross-national studies on the relation between life-satisfaction and environmental pollution, show surprisingly little effect, even if economic development is controlled, only for the case of air-quality did a small negative effect appear<sup>33</sup>.

#### *Urban/rural:*

Though cities are often depicted as a pool of misery, city-dwellers appear to be no less satisfied with life than country dwellers. In developing nations they are even happier than their rural compatriots and this is one of the reasons why so many people move from the country to cities<sup>34</sup>.

#### *Local facilities:*

There is a surprising lack of research on the effect of local facilities on life-satisfaction. Although there is quite some research on the relation between life satisfaction and *satisfaction* with local facilities, there is little research into the effects of actual facilities, such as streets, public transportation, schools and health care. This reflects the fact that research is often aimed at what voters want than determining what actually adds significantly to their life-satisfaction<sup>35</sup>.

## 6.2 Life-ability of the person

The strongest correlations observed are those concerning individual capabilities; satisfied people are typically better endowed with life skills than the dissatisfied. The variance explained by such variables tends to be around 50%. Some main findings are summarized in **scheme 11**. Many of these findings boil down to a difference in *ability to control ones environment* and this pattern seems to be universal.

*Health*: Life-satisfaction tends to be higher among persons who are in good 'physical shape' and who have a lot of 'energy'. The satisfied also share characteristics of good 'mental health' and 'psychological resilience'<sup>36</sup>.



*Mental proficiencies:*

Curiously, life-satisfaction tends to be unrelated to 'intelligence'; at least to school-intelligence as measured by current IQ-tests<sup>37</sup>, however, 'social skills' do differentiate between happy and unhappy. Life-satisfaction is typically accompanied by social assertiveness and good empathy attributes.

*Personality:*

With respect to personality, the satisfied tend to be socially 'extravert' and 'open' to experience. There is a notable tendency towards 'internal control' beliefs, whereas people who are dissatisfied with their life tend to feel they are a toy of fate<sup>38</sup>.

**6.3 Course of life-events**

The effect of life-events on life-satisfaction has received little attention. One of the few sophisticated studies that considered the matter is the four-wave 'Australian Quality of Life Panel Study' by Heady & Wearing (1992).

First, this study showed that the course of life-events is not the same for everybody. Some people repeatedly find troubles, they have accidents, are laid off, quarrel with family, fall ill, etc. Others are lucky most of the time; they meet nice people, get promoted, have children who do well, etc. These systematic differences in the course of their life events depend to some extent on life-chances. Favorable events appear to happen more often to persons who are well educated and psychologically extraverted. Adverse events are more frequent among neurotics and occurred less for people with good intimate attachments, both favorable and unfavorable events happen more for persons who are young and psychologically open. Taken together, the life-chances considered explained about 35% of the variation in an individual's life-events over eight years.

The study also demonstrated that the course of life-events affects satisfaction with life. First, it was found that the balance of favorable and adverse events in one year predicts reported life-satisfaction in the next year. The more positive that balance, the greater the satisfaction with life. Life-events explained some 25% of the differences in life-satisfaction, of which about 10% were independent of social position and personality. Next, longitudinal analysis of the data indicated that a change in an individual's characteristic pattern of events was followed by a change in their life-satisfaction. Respondents who shifted to a more positive balance became happier.

**6.4 Relative weight of outer and inner conditions**

Life-satisfaction depends both on the livability of the environment and on individual life-ability. Still one of these determinants could be more important than the other. Sociologists tend to think that environmental factors are the most important, but psychologists emphasize the importance of individual capabilities and some of them, those promoting set-point theory, even think that the determinants of life-satisfaction are to be found entirely 'between the ears'. There is truth in both views, but the balance appears to vary across contexts.

*Variance in life-satisfaction across nations*

**Scheme 9** showed that some 75% of the large differences found in average life-satisfaction across nations can be explained by institutional factors such as economic development and rule of law. It is not yet possible to estimate the impact of cross-national variation in average life-ability, both because of a lack of data and because of problems of multi-collinearity. Still the independent effect of life-abilities seems to be relatively small at the macro level.

*Variance of life-satisfaction within modern nations*

Things appear to be different at the micro-level, in particular in modern nations. Though average happiness is high in modern nations, not all inhabitants are equally satisfied; remember



**scheme 4** that shows the distribution of life-satisfaction in Switzerland. Less than half of these individual differences have been explained so far, as can be seen from the various attempts listed in the World Database of Happiness<sup>39</sup>.

Typically, less than 5% of the variation in life satisfaction is explained by socio-economic status, another 5% by social ties and about 10% by life-events that are independent of personality. This means that about a quarter of the differences in life-satisfaction in modern nations is due to variation in living-conditions.

As to individual life abilities, physical health explains some 10% and mental and personality an additional 15% of the variation in life satisfaction, which adds up to 25%. From twin research we know that about 30% of the variance in life-satisfaction has a genetic basis (Bartels & Boomsma 2009), so present research has clearly not grasped all individual factors that make a difference.

I guess that another 10% of the variation in life satisfaction is to be found in particular life-skills, such as social intelligence and an ability to enjoy. Another 10% of the variance could be down to life-choice, which is particularly important in present day multiple-choice-society. One of the reasons for the high level of life-satisfaction in modern societies is that we can choose how we live and in this context much of the variation around the level can lie in the more or less appropriate choice we make regarding our lives, e.g. in our choice of a job and a spouse.

Together these estimates of explained variance in life satisfaction leave us with 40% unexplained variance. Part of that is clearly in measurement error and part falls in variables not yet measured in conjunction with those listed in **scheme 12**

## 7 IS GREATER LIFE-SATISFACTION POSSIBLE?

Can we become more satisfied with life than we are now? Several scientists think not. Some psychologists maintain that life-satisfaction is largely inborn or at least embedded in stable personality. Hence a better society will not yield more life-satisfaction. This view is known as the “set-point” theory (e.g. Lykken 1999). Some sociologists draw the same conclusion because they think that happiness depends on social comparison and that you are no better off than your neighbors if conditions for everybody improve. The case of the USA is often mentioned as an example in that vein, average material wealth has doubled there since the 1950s while average happiness seems to have remained at the same level (e.g. Easterlin 1995). Yet these scientists are wrong, both empirically and theoretically.

### *Individual life-satisfaction not fixed*

Follow-up research has shown that some people get more satisfied over their life and others less (e.g. Ehrhardt et al. 2000). After the age of 50 most people become more satisfied and life-satisfaction declines in the years before death (Gesdorf & Wagner 2010).

### *Average life-satisfaction not stagnant*

As we have seen above, there is a clear relation between average life-satisfaction and societal quality. Think of the case of Zimbabwe where average happiness is 3.1. Apparently, people cannot enjoy life in a failed state, even if their neighbors suffer in the same way. The correlations shown in **scheme 9** demonstrate that this is no exception, with differences in quality of society explaining 75% of the variation in average life-satisfaction across nations.

We have also seen that average life-satisfaction *has* changed in most nations, and typically for the better (Veenhoven & Hagerty, 2006). A gradual rise in life satisfaction in Denmark over the last 30 years and the dramatic fall in average happiness in Russia, following

the rouble crisis in 1995 are shown in [Scheme 6](#). Clearly, happiness is not fixed to a set-point!

The data also illustrate that more life-satisfaction is possible in most nations of the world. Average life-satisfaction is currently highest in Denmark, with an average of 8.3 but much lower in most countries of the world, such as Zimbabwe where the average is 3.1. What is possible in Denmark should also be possible in other countries. Do not make the objection that Danish satisfaction is a matter of genetic endowment or national character, because [scheme 6](#) shows that happiness has improved in Denmark since 1973. Present day happiness in Denmark may be close to that maximally possible, if so, there is still a long way to go for most nations of this world, since the world's average is now about 6.

### *Theoretical flaws*

The erroneous idea that greater life-satisfaction is not possible has roots in erroneous theories about the nature of life satisfaction. One of these mistaken theories is that life-satisfaction is merely a matter of outlook on life and that this outlook is set in fixed dispositions, which are part of an individual's personality and a national character. Another faulty theory is that happiness results from cognitive comparison, in particular from making social comparisons. Twenty years ago I have shown that these theories are wrong (Veenhoven 1991, 1994) and recently Headey (2008) has confirmed that conclusion on the basis of better data. My alternative theory of how we assess how satisfied we are holds that we appraise life on the basis of affective information in the first place, and that affects signal the gratification of basic human needs, remember section 5.3. I have discussed this theory in more detail in Veenhoven 2009.

## **8 IS MORE LIFE-SATISFACTION DESIRABLE?**

Not everything that is possible is also desirable, so the next question is whether we should try to promote satisfaction with life. Several scientists believe that the pursuit of happiness will bring us from the frying pan into the fire. One of their qualms is that satisfaction with life will be achieved at the cost of freedom. Another misgiving is that satisfied people tend to be passive and uncreative. These notions figure in Huxley's (1932) science fiction novel *Brave New World* in which happiness for everybody is achieved using genetic manipulation and mind control and where the satisfied citizens are short-sighted consumer slaves.

Yet research on the consequences of life-satisfaction shows another picture. It appears that satisfaction typically fosters activity, creativity and an open mind. Happy people do better as spouses and parents. They are also better citizens; they are typically better informed and they are more involved in social action while being more moderate in their political views (Lyubomirsky et al. 2005). Life-satisfaction also lengthens life considerably, the effect of enjoying one's life being comparable to that of not smoking (Veenhoven 2008). A negative effect of life-satisfaction may be that it may make us less perceptive of risks. The evidence as yet is about minor things and it has not yet been established whether happiness also makes us prone to a too rosy outlook on major things.

These findings on the effects of life-satisfaction fit well with the theory that feeling good works as a 'go-signal' it tells the organism that the situation is OK and that it can go ahead. Consequently, happy people 'broaden' their behavioural scope and 'build' more resources (Fredrickson 2004). So life-satisfaction is worth pursuing for its own sake, and for its positive side effects.

## DISCUSSION AND FUTURE EXPECTATIONS

Empirical research on life-satisfaction has developed exponentially since its start in the 1970s and the volume of research is still growing today, as is reflected in [Scheme 13](#) in which the yearly numbers of scientific publications on this subject are depicted.

Will this result in greater happiness for a greater number? Probably, but not certainly. More research does not always result in better understanding and better understanding does not always result in better policies.

### *Limitation to accumulation of knowledge*

One of the things that impede better understanding is that it becomes ever more difficult to oversee all research findings on life-satisfaction that are becoming available. Even a specialist cannot keep track of the literature. As the pile of research findings grows, typically we see only the ones on the top, while many other findings get buried forever, and an overview of the literature is also limited by the terminological differences that still haunt the social sciences.

These problems are addressed by the World Database of Happiness (Veenhoven 2012). This ‘findings archive’ contains standardized descriptions of research findings that are sorted on subject, population and methodological features. To date (March 2012) the archive consists of some 20.000 findings, of which about 5000 findings on how satisfied people are with their life in different nations (distributional findings) and about 15.000 are on things that go together with life-satisfaction, i.e. correlational findings. This collection is fairly complete up to the year 2000, but many most recent findings have not yet been entered and are therefore in risk of getting lost.

### *Limitations to application of knowledge*

One of the things that impedes application of the gathered knowledge on life-satisfaction is that the case lacks the support of organized interest groups. Interests are typically organized around products, such as automobiles and professions, such as dentists. These groups are eager to claim a contribution to life-satisfaction, e.g. that you are happier when you own a car or happier with shining teeth, but reluctant to consider the real effects. Likewise politicians make their living from social problems and therefore prefer measures of social progress that record their successes in these particular fields rather than deal with average life-satisfaction.

Though institutions are not really interested in promoting life-satisfaction, individuals are, and in particular autonomous individuals in modern multiple-choice-societies. These people can choose how to live and therefore want to know what ways of life will be most satisfying. Their interest is reflected in soaring sales of ‘how-to-be-happy’ books and in the rising demand for life-coaching services. In the future this interest will probably manifest in call for happier schools and work places and in votes for political parties who take life-satisfaction seriously.

## KEYWORDS

Happiness, life-satisfaction, subjective wellbeing, quality of life



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Ruut Veenhoven (1942) is Emeritus Professor of ‘Social Conditions for Human Happiness’ at Erasmus University Rotterdam in the Netherlands. He is director of the [World Database of Happiness](#) and the founding editor of the [Journal of Happiness Studies](#). One strand of his research is ‘Happiness and Public Choice’. This research is designed to build a body of data that can be used to introduce evidence based politics aimed at greater happiness for a greater number. Another of Ruut Veenhoven’s research strands is ‘Happiness and Private Choice’. This research strand is designed to be used to build evidence based data on which individuals can draw when faced with making major life choices, such as whether to have children or to take early retirement.

Home page: <http://www2.eur.nl/fsw/research/veenhoven>

## NOTES

- <sup>1</sup> Three main meanings of health are applied to the term health: The maxi variant is all the good (WHO definition), the medium variant is life-ability, and the mini-variant is absence of physical defect.
- <sup>2</sup> A problem with this name is that the utilitarian philosophers used the word utility for subjective appreciation of life, in Bentham's words: 'the sum of pleasures and pains', a meaning which belongs in the right bottom quadrant of [scheme 2](#).
- <sup>3</sup> Frankl's (1946) logotherapy is aimed at helping people to believe in meanings for their life that they do not see.
- <sup>4</sup> In my view this last item is not appropriate. One can be quite satisfied with life, but still be open to the opportunity to try something else.
- <sup>5</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d) [Earlier by later happiness](#) (H5.2.1)
- <sup>6</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d) [Method of interrogation](#) (I5.1.3)
- <sup>7</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d) [Overall happiness by hedonic level](#) (H6.1.2)
- <sup>8</sup> World Database of Happiness (Veenhoven 2012) [Finding report Trend Average Happiness in Nations](#)
- <sup>9</sup> The distinction between *deficiency needs* and *growth needs* is part of Maslow's (1970) theory of human motivation.
- <sup>10</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d) [Happiness by Happiness](#) (H6)
- <sup>11</sup> This analysis involved 8 studies, the results of which are summarized section H6.1.2 'Overall happiness by Hedonic level of Affect'. The analysis limited to studies among general population samples using comparable single direct questions on overall happiness (type O-HL, O-SL, O-DT, O-QOL) and Affect (type A-AOL).
- <sup>12</sup> This analysis involved 7 studies, the results of which are summarized in, section H6.1.3 'Overall happiness by contentment'. The analysis limited to studies among general population samples using comparable single direct questions on overall happiness (type O-HL, O-SL, O-DT) and contentment (type C-BW).
- <sup>13</sup> This analysis involved 70 studies, the results of which are summarized in the section H6.1.2 'Overall happiness by Hedonic level of Affect'. The analysis limited to studies among general population samples using comparable single direct questions on overall happiness (type O-HL, O-SL, O-DT, O-QOL) and Affect Balance (type A-AB). See also Suh et. al. 1998.
- <sup>14</sup> This analysis involved 3 studies, the results of which are summarized in section H6.23 'Hedonic level of Affect by Contentment'. The analysis limited to studies among general population samples. Hedonic level was measured using Affect balance Scales (type A-AB) and contentment using the Cantril ladder (type C-BW) and questions about perceived realization of wants (type C-RW).
- <sup>15</sup> Wessman wrongly interpreted table 44 as showing that unfulfilled aspirations go with *unhappiness*.
- <sup>16</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Having Children](#) (C3), [Relation with children](#) (C5), [Family](#) (F1), [Relatives](#) (F3), [Friendship](#) (F6), [Marriage](#) (M2), [Social participation](#) (S8), [Socio-economic status](#) (S9), [Societal characteristics of the nation](#) (N4), [Region](#) (N9), [Social support](#) (S10), [Value climate](#) (V3), [War](#) (W1) and [Work conditions](#) (W4)
- <sup>17</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Housing](#) (H14), [Local Environment](#) (L10) [Geography of the nation](#) (N4.2)
- <sup>18</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and School environment](#) (S2.3)

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- <sup>19</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Work conditions](#) (W4)
- <sup>20</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Prison](#) (P11)
- <sup>21</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Age](#) (A4)
- <sup>22</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Gender](#) (G1)
- <sup>23</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Income](#) (I1)
- <sup>24</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Education](#) (E1)
- <sup>25</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Occupation](#) (O1)
- <sup>26</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Family of relatives](#) (F3), [Friends](#) (F6), [Marriage](#) (M2)
- <sup>27</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Having Children](#) (C3)
- <sup>28</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Relation with Children](#) (C5)
- <sup>29</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Employment](#) (E2)
- <sup>30</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Retirement](#) (R2)
- <sup>31</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Social participation in voluntary associations](#) (S7)
- <sup>32</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Climate](#) (N4.2.5)
- <sup>33</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Pollution](#) (N4.2.5)
- <sup>34</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and rural/urban residence](#) (L10.2)
- <sup>35</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Local facilities](#) (L10.4)
- <sup>36</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Physical health](#) (P6), [Mental health](#) (M7)
- <sup>37</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Intelligence](#) (I3)
- <sup>38</sup> World Database of Happiness, Correlational Findings (Veenhoven 2012d): [Happiness and Personality](#) (P4)
- <sup>39</sup> Explained variance is higher when variables are included that are close to life-satisfaction, such as satisfaction with one's job. The analysis below limits to variance explained by variables that do not involve evaluation.

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**Scheme 1: Four qualities of life**

	<i>Outer qualities</i>	<i>Inner qualities</i>
<i>Life chances</i>	Livability of environment	Life-ability of the person
<i>Life results</i>	Utility of life	<b>Satisfaction with life</b>

Source: Veenhoven 2000

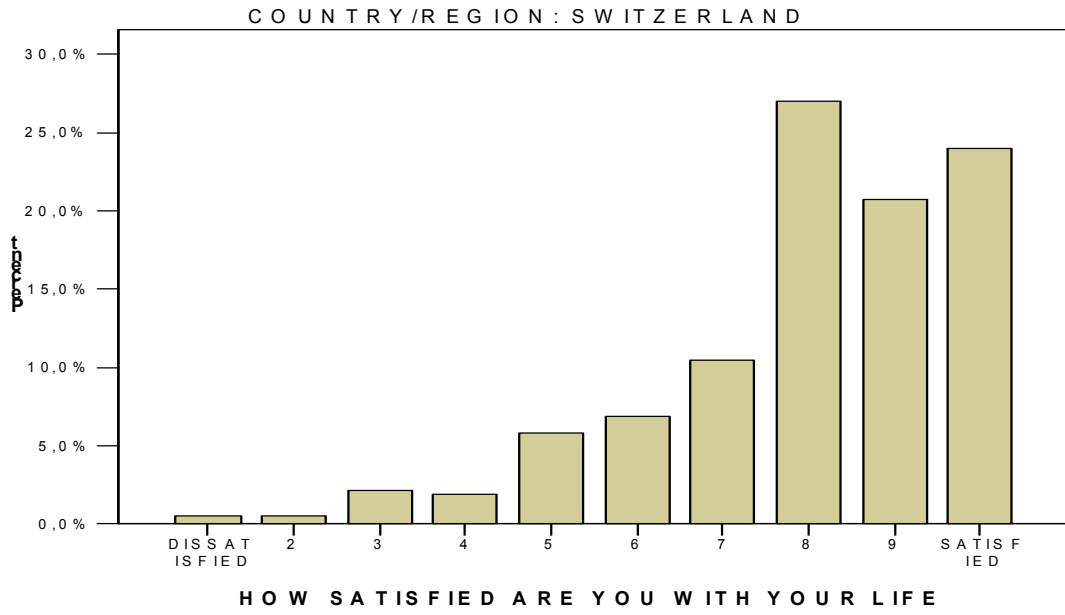
**Scheme 2: Four kinds of life satisfaction**

	<i>Passing</i>	<i>Enduring</i>
<i>Life aspects</i>	Pleasure	Domain-satisfaction
<i>Life as a whole</i>	Peak experience	<b>Life-satisfaction</b>

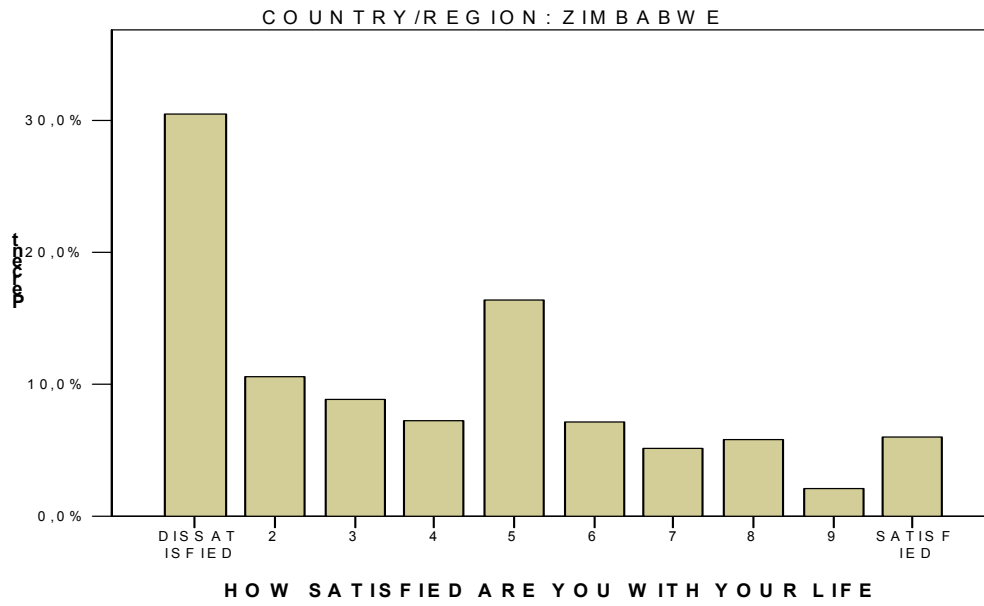




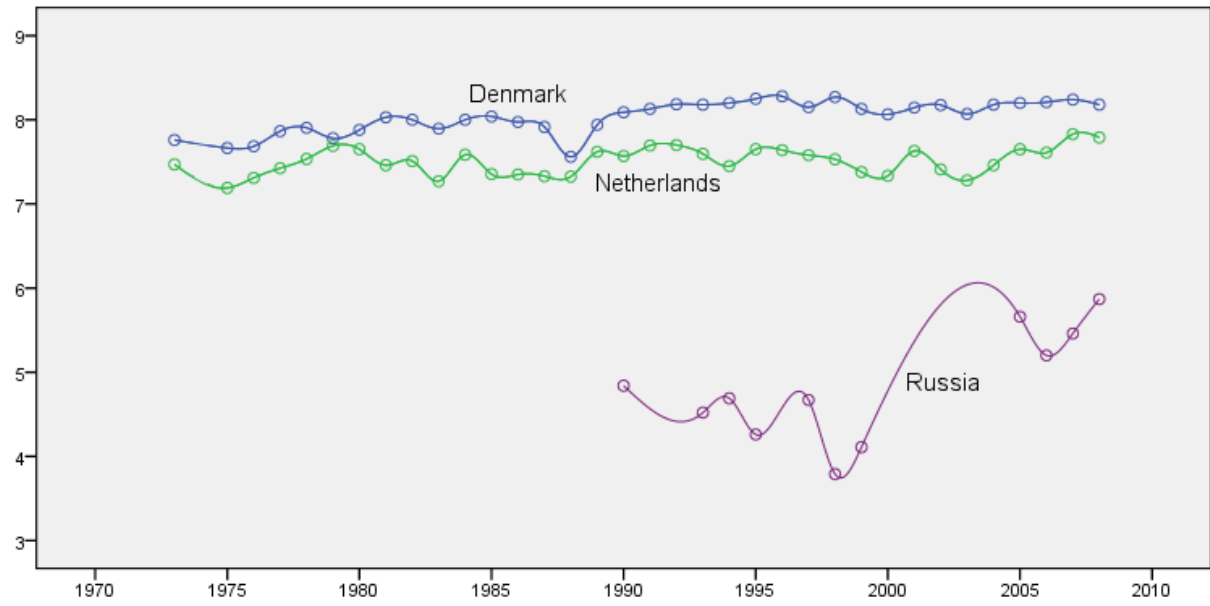
**Scheme 4: Happiness in Switzerland 2010**



**Scheme 5: Happiness in Zimbabwe in 2010**



**Scheme 6: Trend of average life-satisfaction in three nations**

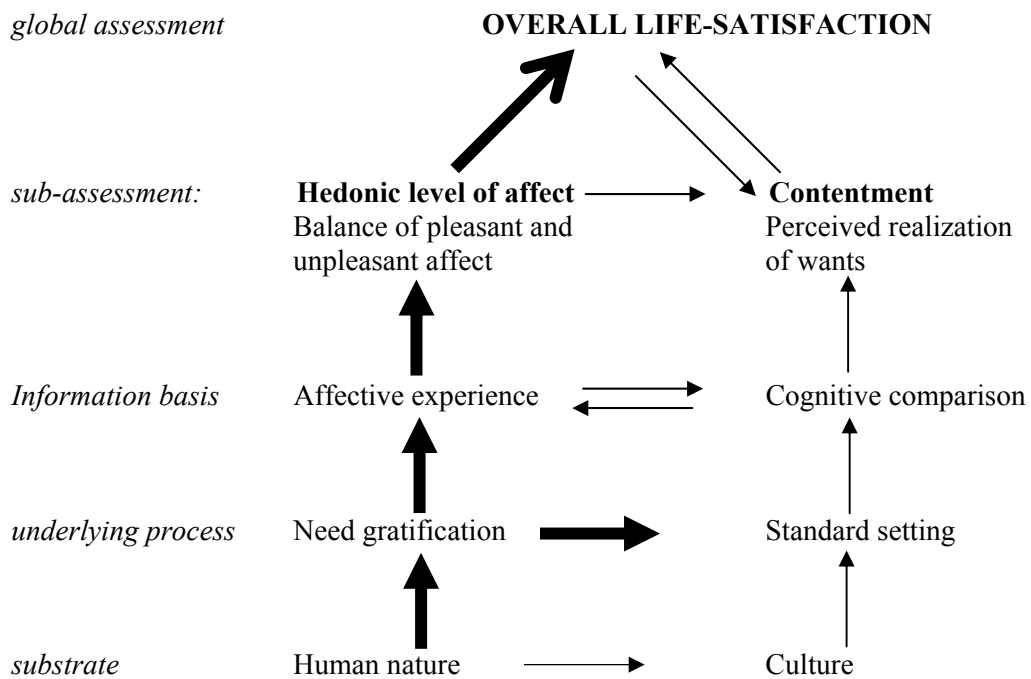


Source: World Database of Happiness, Trends in nations (Veenhoven 2012f)

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**Scheme 7: Assessment of life-satisfaction: significance of two causal paths**


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



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 Source: Veenhoven 2009

**Scheme 8: Conditions for life-satisfaction**

	<i>Outer qualities</i>	<i>Inner qualities</i>
<i>Life chances</i>	Livability of environment	Life-ability of the person
<i>Life results</i>	Utility of life	<b>Enjoyment of life</b>



**Scheme 9: Happiness and society in 146 nations around 2006**

<i>Characteristics of society</i>	<i>correlation with happiness</i>	<i>N</i>
<b>Affluence</b>	+0.69	136
<b>Rule of law</b>		
• Civil rights	+0.50	131
• Corruption	-0.69	137
<b>Freedom</b>		
• Economical	+0.63	135
• Political	+0.53	131
• Personal	+0.41	83
<b>Equality</b>		
• Income inequality	-0.08	119
• Gender inequality	-0.21	110
<b>Pluriformity</b>		
• % Migrants	+0.29	126
• Tolerance of minorities	+0.49	77
<b>Modernity</b>		
• Schooling	+0.56	138
• Urbanization	+0.58	137
Explained variance (Adjusted R <sup>2</sup> )	75%	

Source: World Database of Happiness, States of Nations (Veenhoven 2012e)



**Scheme 10: Happiness and position in society**

	<i>Correlation within western nations</i>	<i>Similarity of correlation across all nations</i>
<b>Social rank</b>		
• Income	+	-
• Education	±	-
• Occupational prestige	+	+
<b>Social participation</b>		
• Employment	±	+
• Participation in associations	+	+
<b>Primary network</b>		
• Spouse	++	+
• Children	0	?
• Friends	+	+
	++ = Strong positive	+ = Similar correlations
	+ = Positive	± = Varying
	0 = No relationship	- = Different correlations
	- = Negative	
	? = Not yet investigated	? = No data

Source: World Database of Happiness, Correlational Findings (Veenhoven 2012d)

**Scheme 11: Happiness and life-abilities**

	<i>Correlation within western nations</i>	<i>Similarity of correlation across all nations</i>
<b>Proficiencies</b>		
• Physical health	+	+
• Mental health	++	+
• IQ	<b>0</b>	+
<b>Personality</b>		
• Internal control	+	+
• Extraversion	+	+
• Conscientiousness	+	?
<b>Art of living</b>		
• Lust acceptance	+	+
• Sociability	++	+
	++ = Strong positive	+ = Similar correlations
	+ = Positive	± = Varying
	0 = No relationship	- = Different correlations
	- = Negative	? = No data
	? = Not yet investigated	

Source: World Database of Happiness, Correlational Findings (Veenhoven 2008)

**Scheme 12 : Explained variance in life-satisfaction within modern nations**

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*Livability of environment*

- Socio-economic position  $\pm 5\%$
- Social ties  $\pm 5\%$
- Neighborhood  $\pm 1\%$
- Life-events  $\pm 10\%$

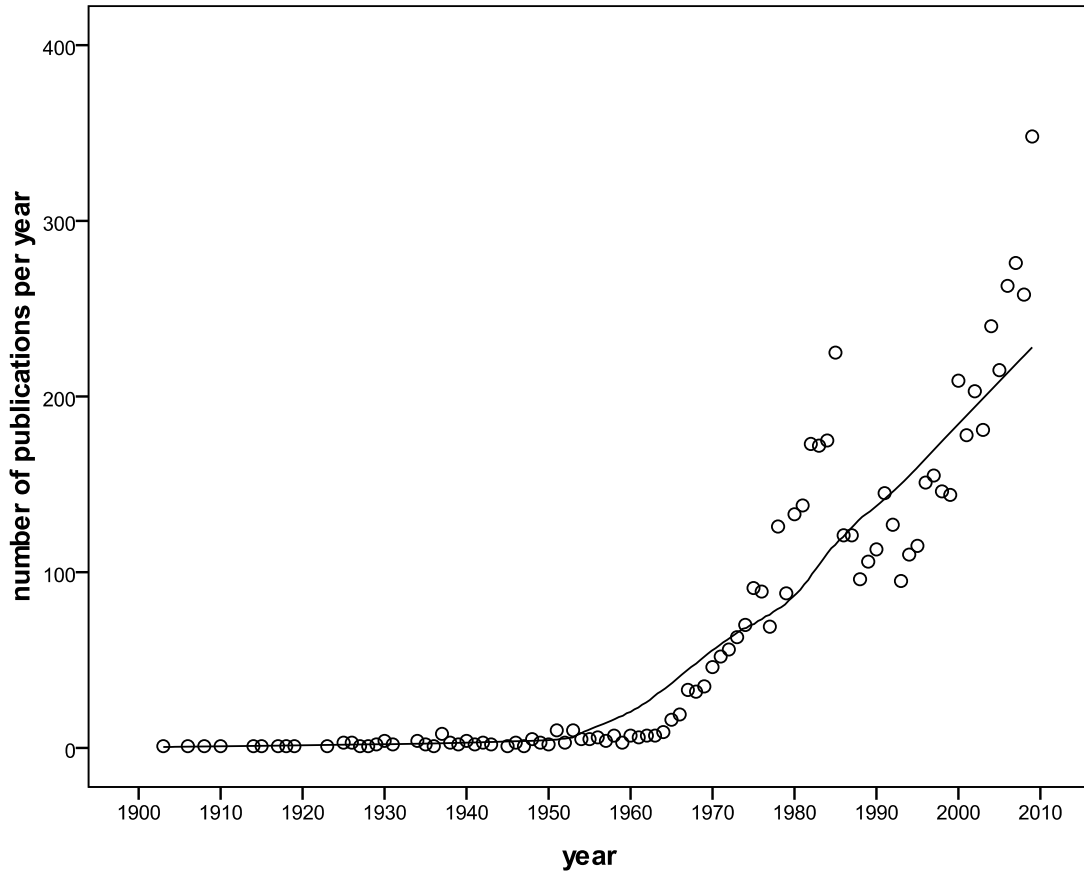
*Life-ability of individuals*

- Physical health  $\pm 10\%$
- Mental health and personality  $\pm 15\%$
- Life-skills  $\pm 10\%?$
- Life-choice  $\pm 10\%?$

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Source: World Database of Happiness, Correlational findings (Veenhoven 2012d) [Summed effects](#) (S15)

**Scheme 13: Yearly number of scientific publications on life-satisfaction**



Source: Bibliography of Happiness (Veenhoven 2012a)