

# COMPARABILITY OF HAPPINESS ACROSS NATIONS<sup>1</sup>

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## **ABSTRACT**

*Cross-national research on happiness is soaring, but doubts about the comparability of happiness remain. One source of doubt is the possibility of cultural measurement bias. Another source of doubt is the theory that happiness depends on standards of the good life that differ widely across cultures.*

*These qualms are checked using the available data on differences in average happiness across nations. It appears that cultural measurement bias is modest at best. The data show meaningful links with living conditions in nations. It is concluded that happiness is a good indicator of the livability of society.*

## **1 INTRODUCTION**

Happiness is a main goal in modern society; most individuals reach out for a happy life, and as a citizen they typically endorse policies that aim at greater happiness for a greater number. Consequently, there is rising demand for knowledge about conditions for happiness.

Policy makers are particularly interested in societal conditions for happiness and this has instigated comparative research on happiness in nations. This line of research started in the early 1960s with Cantril's (1965) seminal 'The pattern of human concerns'. Now, 40 years later, it has developed into a main stream of research. Currently the Bibliography of Happiness contains more than 500 publications on happiness in nations and the findings of some 3000 general population surveys are gathered in the data collection of Happiness in Nations, which is part of the World Database of Happiness (Veenhoven 2007).

Though comparative research about happiness is soaring, doubts remain, and in particular, doubts about the comparability of self-reported happiness across nations. These qualms are discussed in this paper in the light of what has been learned from the research mentioned above.

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## 2 PRACTICE OF COMPARATIVE HAPPINESS RESEARCH

In order to know what we are talking about, I will first define happiness and distinguish it from other notions of the good life. Next I will consider acceptable measures of this concept and summarize the main findings obtained using these measures in cross-national research.

### 2.1 Concept of happiness

The word 'happiness' is used in various ways. In the widest sense it is an umbrella term for all that is good. In this meaning it is often used interchangeably with terms like 'wellbeing' or 'quality of life' and denotes both individual and social welfare. The word is also used in the more specific meaning of subjective appreciation of life and this is what this paper is about. Below I will clarify the difference between the wider and narrow meaning and next define the narrow meaning more precisely.

#### 2.1.1 *Four qualities of life*

Quality-of-life concepts can be sorted using two distinctions, which together provide a fourfold matrix. This classification is discussed in more detail in Veenhoven (2000).

The first distinction is between chances and outcomes, that is, the difference between opportunities for a good life and the good life itself. A second difference is between outer and inner qualities of life, in other words between 'external' and 'internal' features. In the first case the quality is in the environment, in the latter it is in the individual. Lane (1994) made this distinction clear by distinguishing 'quality of society' from 'quality of persons'. The combination of these two dichotomies yields a fourfold matrix. This classification is presented in [scheme 1](#).

##### *Livability of the environment*

The left top quadrant denotes the meaning of good living conditions, shortly called 'livability'.

Ecologists see livability in the natural environment and focus on things such as fresh air and scenic beauty. City planners see livability in the built environment and associate it with such things as sewer systems, public transportation and safety on the streets. In the sociological view, society is central. Livability is associated with the quality of society as a whole and also with the position one has in society.

Livability is not what is called happiness here. It is rather a precondition for happiness, and not all environmental conditions are equally conducive to happiness.

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

The right top quadrant denotes inner life-chances. That is: how well we are equipped to cope with the problems of life. 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 absence of functional defects. This is 'health' in the limited sense, sometimes referred to as 'negative health'. Next to absence of disease, one can consider excellence of function. This is referred to as 'positive health' and associated with energy and resilience. A further step is to evaluate capability in a developmental perspective and to include acquisition of new abilities. 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. In this meaning life-ability extends to 'self actualization'. Lastly, the term 'art of living' denotes special life-abilities such as savoring refined enjoyments and developing an original style of life.

Ability to deal with life will mostly contribute to happiness, but is not identical. One can be quite competent, but still be unhappy because of bad external conditions.

#### *Utility of life*

The left bottom quadrant represents the notion that a good life must be good for something more than itself. This assumes some higher values. There is no current generic for these external outcomes of life. Gerson (1976: 795) refers to these effects as 'transcendental' conceptions of quality of life. Another appellation is 'meaning of life', which then denotes 'true' significance instead of mere subjective sense of meaning. I prefer the simpler 'utility of life'.

A useful life is not necessarily a happy life; positive external effects may require sacrifice of individual satisfaction.

#### *Core meaning: Subjective enjoyment of life*

Finally, the bottom right quadrant represents the inner outcomes of life. That is the quality in the eye of the beholder. As we deal with conscious humans, this quality boils down to subjective enjoyment of life. This is the kind of happiness that Bentham<sup>2</sup> addressed in his 'greatest happiness' principle and it is also the kind of happiness that ranks high in the value hierarchy of modern people. This paper is about happiness in that sense.

### **2.1.2 Four kinds of satisfaction**

Even when we focus on subjective satisfaction with life, there are still different meanings associated with the word happiness. These meanings can also be charted in a fourfold matrix. In this case, the classification is based on the following dichotomies: *Life-aspects* versus *life-as-a-whole* and *passing* delight versus *enduring* satisfaction.

Above, we have seen that appraisals of life can concern aspects, such as marriage or work-life, and one's life-as-a-whole. The word 'happiness' is used in both contexts. Obviously, such appraisals are linked. Enjoyment of aspects of life will typically contribute to satisfaction with life as a whole (so-called bottom-up effect), and enjoyment of one's life-as-a-whole appears to foster satisfaction with life-aspects (top-down). Still, these are not identical matters. One can have a happy marriage but still be dissatisfied with life-as-a-whole, or be satisfied with life-as-a-whole in spite of an unhappy marriage.

Next, the experience of enjoyment can be short-lived or enduring. Again, the word happiness is used for both phenomena. Sometimes it refers to passing moods and on other occasions to stable satisfaction. Once more, these matters are related but not the same.

When combined, these distinctions produce the fourfold matrix presented in [scheme 2](#). The distinction between part and whole is presented vertically, and the distinction between passing and enduring enjoyment horizontally.

#### *Instant satisfaction*

The top-left quadrant represents passing enjoyment of life-aspects. Examples would be delight in a cup of tea at breakfast, the satisfaction of a chore done or the enjoyment of a piece of art. This category is denoted with different words. Some name it 'pleasures' or 'hedonic happiness'. Kahneman (1999:4) speaks of 'instant-utilities'. I refer to this category as 'instant-satisfactions', which marks the difference with 'life-satisfaction' in the right bottom quadrant.

So, the concept of happiness used here is broader than instant satisfactions. Though fleeting enjoyment obviously contributes to a positive appreciation of life it is not the whole of it.

*Domain satisfaction*

The top right quadrant denotes enduring appreciation of life-aspects, such as marriage satisfaction and job-satisfaction. This is currently referred to as domain-satisfactions. Though domain-satisfactions depend typically on a continuous flow of instant-satisfactions, they have some continuity of their own. For instance, one can remain satisfied with one's marriage even if one has not enjoyed the company of the spouse for quite some time. Domain-satisfactions are often denoted with the term happiness: a happy marriage, happy with one's job, etc.

In this paper the term happiness is used in the broader sense of satisfaction with life-as-a-whole. One would not call a person happy who is satisfied with marriage and job, but still dissatisfied on the whole because that person's health is failing. It is even possible that someone is satisfied with all the domains one can think of, but nevertheless feels depressed.

*Peak-experience*

The bottom left quadrant denotes the combination of passing experience and appraisal of life-as-a-whole. That combination occurs typically in peak-experiences, which involve short-lived but quite intense feelings and the perception of wholeness. This is the kind of happiness poet's write about.

Again this is not the kind of happiness aimed at here. A moment of bliss is not enduring appreciation of life. In fact such top-experiences even seem detrimental to lasting satisfaction, possibly because of their disorientating effects (Diener et. al. 1991).

*Core meaning: ongoing satisfaction with one's life-as-a-whole*

Lastly, the bottom-right quadrant represents the combination of enduring satisfaction with life-as-a-whole. This is what I mean when I use the word happiness. A synonym is 'life-satisfaction'. This is the meaning the utilitarian philosophers had in mind when talking about happiness. When speaking about the 'sum' of pleasures and pains they denoted a balance over time and thus a durable condition.

**2.1.3 Definition of happiness**

Overall happiness is the *degree to which an individual judges the overall quality of his/her own life-as-a-whole favorably*. In other words: how much one likes the life one leads. This definition is explained in more detail in Veenhoven (1984:22-25).

**2.2 Measurement of individual happiness**

Measurement has long been understood as 'objective' and 'external' assessment, analogous to the measurement of blood pressure by a doctor. By now we know that happiness cannot be measured this way. Steady physiological correlates have not been discovered, and probably never will be. Nor have any overt behaviors been found to be consistently linked to inner enjoyment of life. Like most attitudinal phenomena, happiness is only partially reflected in behavior. Suicidal behavior is probably more indicative of unhappiness. Almost all people who attempt or commit suicide are quite unhappy. However, not all the unhappy seek resort to suicide.

Inference from overt behavior being impossible, we must make do with questioning. That is, simply asking people how much they enjoy their life-as-a-whole. Questioning is an appropriate method of measurement in this case, since happiness is defined as something we have on our mind.

Questions on happiness can be posed in different ways, directly or indirectly, using single or multiple items. Indirect questioning using multiple items is quite common in

psychological measurement and for that reason the first generation of happiness measures consisted mainly of ‘inventories’, such as the 20-item Life Satisfaction Index by Neugarten et al. (1961). This approach is appropriate for assessing fuzzy mental syndromes of which the individual is not necessarily aware, such as ‘alienation’ or ‘neuroticism’; one cannot ask respondents how alienated they are. Yet in the case of happiness, the concept is clear-cut and respondents are aware by definition. Hence happiness can also be measured using single direct questions<sup>3</sup>.

### 2.2.1 *Common questions*

Some common questions are presented in [Scheme 3](#).

### 2.2.2 *Validity*

Critics have suggested that responses to questions on happiness actually measure other phenomena. Rather than indicating how much respondents enjoy life, answers reflect their normative notions and desires.

#### *No notion*

One of the misgivings is that most people have no opinion about their happiness. They would be more aware of how happy they are supposed to be, and report that 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. Responses to questions about happiness tend to be prompt. Non-response on these items is low, typically less than 1%.; ‘don't know’ responses are also infrequent.

A related assertion is that respondents mix up how happy they actually are, with how happy other people think they are, given their situation. If so, people considered to be well off would typically report to be very happy, and people regarded as disadvantaged should characterize themselves as unhappy. That pattern is observed sometimes, but this is not the general situation. For instance, in The Netherlands good education is seen as a pre-requisite for a good life, but the highly educated appear slightly less happy in comparison to their less educated counterparts.

#### *Colored answers*

Another objection concerns the presence of systematic bias in responses. It is assumed that questions on happiness are interpreted correctly, but that responses are often false. People who are actually dissatisfied with their life would tend to answer that they are happy. Both ego-defense and social-desirability would cause such distortions.

This bias is seen to manifest itself in over-report of happiness; most people claim to be happy, and most perceive themselves as happier than average. Another indication of bias is seen in the finding that psychosomatic complaints are not uncommon among the happy; however, these findings also allow other interpretations. Firstly, the fact that more people say they are happy than unhappy does not imply over-report of happiness. It is quite possible that most people are truly happy (some reasons will be discussed below). Secondly, there are also good reasons why most people think that they are happier than average. One such reason is that the salience of misery in the media suggests that unhappiness is the rule. Thirdly, the occurrence of headaches and worries among the happy does not prove response distortion. Life can be a sore trial some times, but still be satisfying on a balance.

The proof of the pudding is in demonstrating the response distortion itself. Some clinical studies have tried to do so by comparing responses to single direct questions with ratings based on depth interviews and projective tests. The results are generally not different

from responses to single direct questions posed by an anonymous interviewer (e.g. Wessman & Ricks 1960).

### *Global validity checks*

Next to considering specific distortions in responses to questions about happiness, validity can also be estimated in more general ways. One way is assessing correspondence using other indicators of happiness, such as ratings by family and peers, observation of non-verbal signs of good mood and estimates of daily mood based using the experience sampling method. This typically shows strong correlations (e.g. Lucas et. al. 1996). In this line one can also look for links with activity in reward areas of the brain and such links have been found (Davidson 2004). A second approach is assessing correspondence with other manifestations of human thriving, such as health and longevity. Elsewhere I have reviewed the literature on this matter, I found that happiness is strongly correlated to physical and mental health and that happiness predicts longevity (Veenhoven 2007).

### **2.2.3 Reliability**

Though single questions on happiness 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. Over a period of a week, test-retest reliability drops to circa +.60. Though responses seldom change from 'happy' to 'unhappy', switches from 'very' to 'fairly' are rather common. The difference between response-options is often ambiguous. The respondents' notion about their happiness tends to be general. Thus the choice for one answer-category or the next is sometimes haphazard.

Because choice is often arbitrary, subtle differences in interrogation can exert considerable effect. Variations in the place where the interview is held, the characteristics of the interviewer, the sequence of questions and the precise wording of the key-item can tip the scale to one response or another. Such effects can occur in different phases of the response process, in the consideration of the answer and in the communication of 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 happiness. 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 happy than I used to be? The appraisal can also involve quick re-evaluation of 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 happiness somewhat higher and the correlation of happiness-ratings with health variables will be more pronounced. Schwartz and Strack (1991) have demonstrated several of these heuristic effects.

### *Bias in response*

Once a respondent has formed a private judgment, 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 happiness 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. Self-rating of happiness tends to be slightly higher in personal interviews than in anonymous questionnaires. However, direct contact with an interviewer does not always inflate happiness reports. If the interviewer is in a wheel chair, modest self-presentation is encouraged (Schwartz & Strack 1999).

#### *Reliability estimates*

Many 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 this basis. A first application on satisfaction measures is reported by Saris et al. (1996).

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

### 3 CROSS NATIONAL PATTERN OF REPORTED HAPPINESS

#### 3.1 Average happiness

Survey data on happiness are gathered in the World Database of Happiness (Veenhoven 2006). At the moment this source contains comparable figures for 95 nations, which are presented in a 'finding report' (Veenhoven 2006a)<sup>4</sup>. An illustrative case is presented in [scheme 4](#).

[Scheme 5](#) presents average happiness in nations on a range of 0 to 10. The highest score is observed in Denmark (8,2) and the lowest in Tanzania (3,2), so the actual variation on this range is 5 points.

Average happiness tends to be above neutral in most countries, which means that great happiness for a great number is apparently possible. Still, there are also nations where the average is below 5. One of these is Russia and this score is typical of most former soviet states, probably as a result of the social transformations that have taken place in this era. Average happiness is also low in several African countries, but not in all. Possibly, average happiness is also below neutral in some of the countries not investigated, in particular in war stricken countries such as the Sudan.

#### 3.2 Trend of happiness in nations

We have comparable data on 25 years or longer for only 11 of the 95 nations in the World Database of Happiness. These nations are: the USA since 1945, Japan since 1958 and the nine member states of the European Union since 1973. These data are available in the data file 'TrendsInNations' that is part of the World Database of happiness.

Trend data on average happiness are plotted in [scheme 6](#), which shows that happiness has risen somewhat in the US and the EU<sup>5</sup>, but stagnated in Japan.

The observed rise in the US is conflicts with current opinion, which holds that Americans have become richer, but no happier. This so-called 'Easterlin paradox' pervades the economic discourse on happiness but does not fit the latest data. See: Veenhoven & Hagerty (2006), this paper also presents indications for rising happiness in several developing nations.

#### 3.3 Societal correlates of average happiness

Average happiness differs greatly across nations. We have seen earlier that differences cannot be explained by cultural bias in the measurement of happiness. We will see later that they can also not be attributed to cultural variation in outlook on life. Conversely, there is a strong basis for interpretation of this variation in terms of differential livability of society. [Scheme 7](#) presents many strong correlations between average happiness and societal qualities.

Much of the above mentioned correlates of average happiness are part of the 'modernity' syndrome. Hence, similar patterns emerge if we consider further indicators of modernity, such as urbanization, 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).



## 4 REALITY VALUE OF THE DIFFERENCES

### Some validity tests

Sizable differences in self-reported happiness in nations are presented in [Scheme 5](#), such as an average of 8.2 in Denmark and only 4.4 in Russia. What do these differences mean? Is life really more enjoyable in Denmark than in Russia, or are the differences due to cultural measurement error? Below I will check the validity of these differences in two ways; first I will consider the evidence for some specific distortions (section 4.1) and next I will report some general validity checks.

#### 4.1 Tests of specific distortions

In section 3 we saw large and systematic differences in reported happiness across nations. Still there is doubt about the meaning of these differences. One qualm is that the differences may reflect cultural measurement bias rather than real variation in enjoyment of life.

Several suggestions have been made about possible sources of measurement distortion. The first is that *translation* plays us false, since words like 'happiness' and 'satisfaction' have subtly different connotations in the various world languages. Similar questions would therefore measure different matters. A second suggestion is that responses are systematically distorted by *desirability bias*. In countries where happiness ranks high as a value, people will be more inclined to overstate their appreciation of life. A third claim is that *response styles* distort the picture. It is suggested that in collectivist societies people tend to present themselves as 'average', which leads to lower happiness scores. Finally, a common suggestion is that happiness is a typical western concept. *Unfamiliarity* with the concept in non-western cultures is seen to result in low ratings. Below we will inspect these claims one by one.

##### 4.1.1 Differences a matter of language?

The first claim is that the differences in reported happiness between countries result largely from variations in the meaning of key terms used in questions in different languages. Translations will be imprecise. Consequently seemingly identical questions will tap in fact different things.

If this claim is true we can expect the following: a) The pattern of difference must vary with the keyword used. Countries that score high on a question that uses the word 'happiness' can rank low on questions that refer to 'satisfaction' with life, or score middle on a rating between 'best/worst' possible life. b) In bi-lingual countries, ratings of happiness must differ between linguistic categories. Ratings must in fact be more close to same-language populations abroad, than to different-language compatriots. c) Average happiness must be highly similar in nations where the same language is spoken, even if these nations differ considerably in other respects.

##### *Keyword does not matter*

The first prediction (a) can be checked by comparing the happiness rank orders of countries on different happiness questions. For this purpose the Gallup/Kettering world survey was used. This cross-national study involves three questions on happiness posed in 11 mono-lingual nations. Questions and data are presented in [scheme 8](#) which show that the rank order of happiness is largely the same for all three questions. Though there are some minor differences, high positive rank order correlations emerge. Rank order correlations may over-emphasize slight differences between countries at the same level of happiness. Therefore, we also computed product moment correlations ( $r$ ). These are respectively +.88 (Best/Worst by

Happy), +.89 (Happy by Satisfied) and +.99 (Best/Worst by Satisfied). One could interpret these data as showing that the word 'happy' is less easily used in Germanic languages. Germany ranks relatively low on the happiness item. However, this is no general pattern in languages of German origin. The difference does not appear in the results of the World Value Studies in 1980 and 1990. In particular not when the Netherlands and Iceland are considered. The data do not support the common idea that English language involves easier use of the term 'happy'

#### *Little difference in bi-lingual nations*

The second prediction (b) can be tested on two cases: Belgium and Canada. In Belgium two languages are spoken, French and Dutch. These linguistic categories can be identified in the data of the Eurobarometer surveys, which allow a specification of regions within the country. The scores can be compared with those of France and the Netherlands, which are also involved in the Eurobarometer survey. In Canada, French and English are spoken. Data on level of happiness in these categories are available from Blisshen and Atkinson (1980). These scores can be compared with those of France and Britain from the Gallup/Kettering world survey (Gallup 1976).

Results are presented in [scheme 9](#) that shows slight support for the prediction in the case of Belgium. French speaking Belgians report somewhat less happiness than their Dutch speaking compatriots. This difference is in the same direction as the (much greater) difference in average happiness between France and the Netherlands. The case of Canada is contrary to the prediction however. French Canadians report themselves slightly happier than English speaking Canadians, while average happiness in France is markedly lower than that of the English speaking nations. Inglehart (1977) reports similar results in the case of Switzerland. The Swiss of all tongues report relatively high levels of satisfaction with life. The scores rank far above the Germans, French and Italians, with whom the Swiss share their languages.

#### *Sizable differences in average happiness in same-language nations*

The third prediction (c) can be checked by comparing English language nations (Britain, Australia, Canada, USA), Portuguese language nations (Portugal, Brazil), Spanish language nations (Spain, Mexico) and German language nations (former East Germany and West Germany). Data are presented in [scheme 10](#).

Average happiness appears to be quite similar in the English speaking nations, though not identical, the UK lagging behind. Comparison of happiness in Portugal and Brazil shows greater happiness in the latter nation. Likewise happiness seems to be higher in Mexico than in the same tongued Spain. The case of East and West Germany also shows similar sizable differences in average happiness in nations of the same language. This difference was even more pronounced in the first years after the re-unification of Germany, when living conditions still differed markedly between East and West Germany. Average happiness was about one point lower in East Germany than in West Germany on the early 1990s.

### **4.1.2 Differences a matter of desirability bias?**

The second claim to be tested is that part of the difference in self-reported happiness between countries results from differences in moral appreciation of happiness. In countries where happiness is regarded as morally desirable, people will be apt to over-report their satisfaction with life, both for reasons of ego-defense and social presentation. This claim is often raised to discount the high level of happiness in the USA (e.g. by Ostroot & Snyder 1985).

This distortion will manifest more pronouncedly in responses to questions about 'general happiness' than about 'feelings in the past few weeks'. Reports on last weeks' feelings are probably less vulnerable for desirability distortion, because it is less embarrassing to say that one has felt down lately, than to admit one's life-as-a-whole is unsatisfactory. Past weeks' feelings are also more difficult to deny; defense mechanisms have a better chance in the less palpable evaluation of life-as-a-whole. As a result we should see considerable divergence between reported happiness and affect level as measured by the Bradburn Affect Balance Scale. For the same reason there will be divergence between happiness and affect on the individual level. Desirability pressures produce uniformly high reports of happiness, whereas reports of affect remain closer to reality and are more variable. This must manifest itself in small correlations between reports of these happiness variants; in particularly in countries that cherish happiness, such as the USA.

*Strong correlation between overall happiness and affect balance across nations*

Both variables, overall happiness and affect balance, have been assessed in 39 nations in the context of the World Value Survey. Overall happiness was measured using two different questions: a question using the key word 'happiness' and a question using the keyword 'life-satisfaction'. Average scores on both questions appear to be highly correlated with the average score on the Affect balance Scale in nations, correlations being respectively +.68 and +.72. The correspondence between reported Life satisfaction and computed Affect Balance in nations is depicted in [scheme 11](#).

*Strong correlation between self-reported happiness and affect balance within nations*

Likewise, several studies within nations show a strong correlation between global ratings of happiness and various measures of current mood. Correlations vary between +.50 and +.60. See World Database of happiness, collection of Correlational Findings, subject category H6.1.2 'Overall happiness and hedonic level of Affect'.

#### **4.1.3 Differences due to response style?**

The third claim holds that in collectivistic societies, such as Japan, people would tend to present themselves as 'average' citizens. Therefore, they would respond modestly and be apt to choose the midpoint of the response scale. This would lead to relatively low scores, because happiness is typically above neutral; the normal human condition being that one is more or less happy. By choosing the (neutral) midpoint of the scale, collectivistic people would in fact avow themselves less happy than they are (Iijima, 1982). In individualistic societies, people would rather define themselves with respect to difference with others, or orientate on internal cues.

If this claim is true, *average* happiness must be lower in collectivistic countries than in individualistic ones. This is indeed the case (Veenhoven 1999) but this does not necessarily signify cultural measurement bias, since the difference can also be due to differences in livability of cultures, collectivism fitting human nature less well. Another implication would seem that the *dispersion* of happiness in a country, as apparent in standard deviation, must be smaller in collectivistic countries than in individualistic ones, collectivists tending to flock together. Further happiness must be closer to the midpoint of the scale in collectivistic countries than in individualistic ones, irrespective of the average.

*Greater dispersion of happiness in collectivistic nations (rather than less)*

Individualism has many facets, most of which are taken into account in the expert estimate of individualism in nations by Harry Triandis (cited in Diener et. al 1995: 856). Happiness has

been assessed in 39 nations, using a 10-step life-satisfaction question and the standard deviation of the responses provides a good indicator of dispersion of happiness (Kalmijn & Veenhoven 2005).

The relation between individualism and inequality of happiness is presented in **scheme 12**. The dispersion of happiness appears to be smaller the more individualized the country ( $r = -.78$ ). This contradicts the prediction of collectivists flocking together.

#### *No particular concentration in middle categories*

As mentioned above, Iijima (1982) suggests that the Japanese tend to choose the midpoint of the scale. There is some truth in this observation, in the 2000 World Value Survey 37% of the responses are in the categories 4, 5 and 6. Yet this is less than half and about as many of the Japanese scored 8, 9 or 10 (35%). A similar pattern is observed in South-Korea. The data do not show a concentration in the middle comparable to the concentration at the top of the distribution we see in western nations. The distribution is just flatter and also reveals greater percentages of very unhappy respondents.

#### **4.1.4 Differences a matter of familiarity with the concept?**

The last claim to be checked is that happiness is a typical Western concept: because people in non-western societies would be less familiar with the concept, they would be more apt to avoid extreme responses and tend to rate themselves safely in between. This would lead to a relatively low average score, which would not fully reflect the real level of happiness in these countries. If unfamiliarity is indeed involved we can expect more 'don't know' and 'no answer' responses in non-western societies: particularly on questions which use the word 'happiness'.

This prediction can be checked using data from the earlier mentioned Gallup/Kettering World Survey of 1975. This study involved representative samples in 5 parts of the world and therefore allows a good distinction between the 'Western' and 'Non-Western' world. It also involved three happiness questions: 1) happiness-in-life, 2) satisfaction-with-life, and 3) ranking of present life on an 11-step scale ranging from 'best possible' to 'worst possible'. Each of these rating scales involved a DK/NA response category. Data are presented in **scheme 13**. Again the prediction is refuted by the data. Non-response to questions about the appreciation of life is generally low and not lower in Non-Western nations than in Western ones.

## **4.2 Global validity checks**

The global validity of happiness as a measure of livability can be assessed by comparing its correspondence with other indicators of livability. This is called 'external' validity testing. There are two ways of external global validity testing.

A first way to carry out external validity testing is to assess correspondence with other indicators of enjoyment of life in nations, such incidence of depression and suicide. This is called *congruent* validity. In this context it makes also sense to compare with indicators of wider quality of life, such as longevity.

The second way to carry out external validity testing is to assess correspondence with conditions that are likely to be conducive to happiness. This is called *concurrent* validity. In this case we consider the link between external chances for a good life (left top quadrant in **schema 1**) with the internal outcomes of life (right bottom quadrant in **schema 1**).

#### 4.2.1 **Congruent validity tests: correspondence with other indicators of human flourishing**

Happiness is only one of the indicators of the degree to which people flourish in a society. Other indicators are incidence of depression and suicide and longevity.

##### *Less depression in happier nations*

If happiness is a relevant indicator of livability of society, we can expect a negative correlation between average happiness in nations and incidence of depression. This appears to be the case. VanHemert et al (2004) compared average happiness and scores on the Beck Depression Inventory (BDI) in 29 nations and found that BDI scores were negatively correlated with subjective well-being and other happiness-related variables ( $r = -.42$ ). They conclude that depression had the same meaning at individual and country level and that depression is an adequate measure of (a lack of) subjective well-being at country level.

##### *Less suicide in happier nations*

If self reports of happiness adequately reflect the enjoyment of life in a nation, we can also expect a negative correlation with suicide rates. This appears to be the case, see [scheme 14](#). The correlation in this set of 52 nations is  $-.40$ . This relation is discussed in more detail in Helliwell (2007).

##### *Longer life in happier nations*

Subjective enjoyment of life is likely to correspond with actual thriving and that must reflect in longevity. There is a strong correlation:  $r = +.50$ . Likewise average happiness in nations is also linked to self-rated health,  $r = +.60$ .

#### 4.2.2 **Concurrent validity test: Better living conditions in happier nations**

Concurrent validity testing assesses correspondence with indicators of another kind. In this case we can compare with indicators of the quality of society, such as material affluence and good governance. Reported happiness is likely to be higher in nations that provide good living conditions than in nations that do not.

There is some circularity in such a test. We measure happiness in nations to identify societal conditions that contribute to happiness, because we do not trust current assumptions regarding conditions for happiness. Now we are about to validate our measure of happiness using these distrusted matters. Still, it is worth knowing whether these indicators correspond or not. Commonly held beliefs are not held without grounding. So there must at least be some correspondence. If we do not find any relationship, there is clearly something wrong with one or both; the belief or the measure. If however we find a strong statistical relationship, we can be fairly sure that the happiness indicator reflects livability.

Above in section 3.3 we have considered the statistical association between happiness and the following societal qualities: 1) wealth, 2) freedom, 3) equality, 4) brotherhood and 5) justice. Together these variables explained 83% of the differences in reported happiness in 95 nations in the early 2000s. See [scheme 7](#). So there is indeed a considerable correspondence!

Still not everything deemed desirable appeared to be correlated with happiness. Remember the non-correlation with income-inequality.

## 5 MEANING OF THE DIFFERENCES

Next to the above discussed qualms about cultural bias in the *measurement* of happiness there are also misgivings about cultural variation in the *meaning* of happiness. It is argued that happiness is a mere idea and that the observed differences are therefore of little consequence. The Danes may be more positive about their life than the Russians, but they evaluate their life in a different way and the outcomes are therefore not really comparable. This critique is rooted in a cognitive theory of happiness.

Below I will take a closer look at this theory (5.1) and next present some evidence against it (5.2). Next I will outline the alternative theory that happiness signals the gratification of universal human needs.

### 5.1 The theory that happiness is culturally relative

In this view, happiness is regarded as a social construction, comparable to notions like 'beauty' and 'fairness'. In this line it is assumed that happiness depends on shared notions about life and that these collective notions frame individual appraisals.

One of the ways this is assumed to work is seeing the glass half full or half empty, optimistic cultures tending to highlight the positive aspects of life, while pessimistic cultures emphasize its shortcomings. Americans have been mentioned as an example of the former view and the French of the latter, e.g. by Ostroot & Snyder (1985). In this line Inglehart (1990:30) has suggested that happiness is lower in France than in the US because life was harder in France for earlier generations, and this is echoed in a more pessimistic outlook on life today.

Another cognitive mechanism assumed to have a bearing on happiness is comparison with shared notions of the good life. In this view, happiness is the gap between perceptions of life-as-it -is with notions of how-life-should-be. In this line it is commonly argued that the advertising industry reduces our happiness, because it fosters dreams of a life that is out of reach for the common man (Layard 2005). In this line the low level of reported happiness in poor countries has also been explained as a result of exposure to western life-styles. Critics of western society see that as 'false consciousness' and assume that poor Africans actually live better.

An additional mechanism that has been mentioned is that we see ourselves typically through the eyes of others and hence also judge our happiness through their eyes. In this view, happiness is a 'reflected appraisal'. We will be positive about our life when people around us deem us to be well off and negative when others see us as losers. In this vein the lower happiness in poor countries could be explained as the result of labeling: because Africans see themselves lagging behind in the eyes of Europeans, they will define themselves as unhappy, in spite of the advantages of their authentic way of life.

The constructionist view implies that there is little value to happiness, happiness being a mere idea. Since notions about the good life vary across time and culture, happiness is also seen to be culturally relative. A life that is deemed perfect in one idea of the good life may be seen to be a failure from another perspective.

#### 5.1.2 *Some tests of the cultural relativity thesis*

It is beyond doubt that shared notions frame much of our appraisals, yet this is not to say that all awareness is socially constructed. We do not need shared notions to experience pain or hunger; culture at best modifies our reflection on these experiences. Our understanding also draws on external stimuli and on inner signals. The question thus is: How does this work in the case of happiness?



The reality value of this view cannot be tested as such, because the human mind is still a black box. Yet we can check its aptness indirectly, when we consider the implications of the theory that happiness is a mere social construction.

*Pattern of happiness not cultural specific*

One implication is that conditions for happiness will vary across cultures. If happiness is a culture specific construct, its determinants will also be culturally specific. Hence empirical studies on correlates of happiness must show considerable cultural variation and hardly any universal pattern. Yet the available data show otherwise.

Comparison of average happiness across nations reveals a common pattern. Happiness is systematically higher in nations that provide a decent material standard of living, freedom, equality, brotherhood and justice. Remember [scheme 7](#) and in particular the fact that these societal conditions explain together no less than 83% of the observed variation in average happiness across nations.

Comparison of correlations within nations also shows much similarity. In all countries, the married appear to be happier than singles (Diener, 2000) and health is also a strong correlate of happiness all over the world, both physical health and mental health. See correlational findings on Physical health (section P 6) and Mental health (section M 7) in WDH 2007. Likewise, the differences in happiness across age and gender are typically small everywhere. See correlational findings on happiness and Age (section A 4) and Gender (section G 1) in WDH 2007.

*Average happiness is stable over time, but responsive to major events*

A second implication is that happiness must be variable over time. If happiness depends on shared notions of the good life, it will vary with fads about that matter and this must be reflected in erratic movements in average happiness in nations, comparable to changes in political preferences and tastes for music. Yet again this not what the data show. Average happiness appears to be very stable over time, at least in western nations over the last 30 years, where happiness has risen slightly without many fluctuations (Veenhoven 2006c). Follow-up studies at the individual level also show considerable constancy over time (Erhardt et. al. 2000).

This is not to say that average happiness in nations is immutable. Happiness is rising gradually in most nations of the present day world, and in particular in successfully developing nations (Veenhoven & Hagerty 2006). Happiness is also responsive to major events. As we have seen in [scheme 6](#), average happiness dropped by more than one point in Russia in the late 1990s after the Rubel crisis. Evidently, this drop cannot be attributed to a sudden change in collective outlook on life

*Happiness of migrants closer to country of settlement than to country of origin*

If the appraisal of life is largely determined by socialized outlook, we can expect that migrants judge life differently than natives. Though migrants live in the same society, they will evaluate it differently, because they look at life through differently cultured eyes. In this context, one can expect that: a) average happiness of migrants will be closer to the average level in their country-of-origin than to the average in the country-of-settlement. b) that this is especially true for recent migrants and c) that among migrants of different origins in a country, the rank order of happiness will be similar to the rank order of happiness among their respective countries-of-origin.

Elsewhere I have tested these predictions in two countries in the 1980s: Australia and West Germany. These countries host a sizable number of new-comers, Australia migrants from Western Europe and Mediterranean countries and Germany Mediterranean migrants. In

both countries survey studies assessed happiness in samples that involved sizable numbers of migrants (Veenhoven 1994).

*Average happiness of migrants close to average in country of settlement*

The first prediction (a) is clearly defied by the data. The happiness of migrants is typically closer to the average in the country-of-settlement, than to the average in the country-of-origin. Migrants from Mediterranean countries are typically happier in Australia and Germany than their relatives at home. All are first generation migrants, whose pre-adult socialization took place in the country of origin. Hence, if they had been brought up with a gloomy outlook at all, they have apparently lost that cultural heritage quite quickly.

*Second generation hardly closer*

The second prediction (b) is a specification of the first one and is thus also largely disproved. Still we can look at the minor differences between happiness of migrants and the general public in the country of settlement. In Australia this difference is hardly greater among fresh migrants than among first-generation veterans. In Germany the prediction is confirmed; second generation migrants are closer to the average German than their first-generation parents. Obviously this can also be the result of better adjustment into German society.

*Rank-order of happiness in countries of origin not reproduced*

The third prediction (c) is also not supported; only in half the cases do we see that the rank order of happiness among migrants more or less reflects the differences found among mother-countries.

*Happiness is closely linked to human thriving*

A third implication is that happiness is of little consequence. If happiness is sheer cognitive spin, based on fashionable ideas, it will not matter much whether it pans out positively or negatively. Happiness is then a petty appraisal, such as a person's preference for one kind of wallpaper or another; nice in itself, but of no consequence for anything more than that.

Once more, this appears not to be the case. Happiness appears to go hand in hand with objective thriving and follow-up studies have shown that happiness is a strong predictor of physical health and longevity, both at the individual level and at the societal level (e.g. Danner et. al 2000 Veenhoven 2007).

### 5.1.3 *In sum*

Together, these findings do not support the theory that happiness is a mere making of the mind.

Note that these findings concern happiness-as-such, and not opinions about what adds to happiness. Happiness-as-such is something that we experience ourselves and which we can appraise without the help of others. Though we know *how* we feel, we often do not know *why* and in attributing grounds for our wellbeing we draw more on a shared view. In this respect happiness is comparable to a headache: a headache-as-such is not a social construction, it is an autonomous signal from the body. Yet our interpretations of what gives us a headache depend very much on hearsay.

## 5.2 **The theory that happiness signals need-gratification**

An alternative view holds that we do not 'calculate' happiness, but rather 'infer' it, the typical



heuristic being “I feel good most of the time, hence I must be happy” (Schwartz & Strack 1991)

It would seem that this inference is geared by the most salient affective experiences and that these are typically intense affects. This view is common in fiction and is more or less implied in life-reviews. Yet research using the Experience Sampling Method shows that it is rather the *frequency* of affective experience that matters more than its intensity (Diener et. al 1991).

How do we assess the relative frequency of positive and negative affects? The cognitive view on affect procession suggests that we compute an affect balance in some way, using estimates of frequency and duration. A competing view is that this occurs automatically and that the balance reflects in *mood*. In this view mood is an affective meta-signal that, contrary to feelings and emotions, is not linked to specific objects.

### *Gratification of needs*

Why do we feel good or bad at all? Probably because it informs us about how well we are doing. Affects are an integral part of our adaptive repertoire and seem to be linked to the gratification of human needs. ‘Needs’, such as eating, bonding and exercise, are vital requirements for survival. Nature seems to have safeguarded the gratification of these needs with affective signals such as hunger, love and zest. In this view a positive mood signals that all needs are sufficiently met at the moment. ‘Needs’ in this theory should not be equated with ‘wants’ in the above discussion of cognitive theories. Needs are inborn and universal while ‘wants’ are acquired and can be variable across cultures. Wants can, at best, concur more or less with needs.

### *Function of happiness*

In this view negative and positive moods function as red and green lights on the human machine, indicating either that there is something wrong or that all systems are functioning properly. If so, this is likely to have behavioral consequences, a negative mood urging caution and a positive mood encouraging going on. This is what Fredrickson’s (2004) ‘broaden and built’ theory is about.

This theory also makes sense in an evolutionary perspective. It is likely that evolution has developed ways of monitoring needs gratification, in particular in organisms that can choose. It is unlikely that rational thinking is the main way, since this developed late in evolution. It is quite likely that adaptation is guided by affective signals in the first place and that all higher animals can feel more or less well. It is unlikely that humans are an exception to this rule. The ability to think was added to an existing affect system and did not replace it. This can be seen in the structure of the human brain, where the affect system is located in the primal parts that we have in common with other animals and the were the ratio is situated in the neo-cortex that is typical for the human kind.

This ‘need theory’ of happiness is summarized in [scheme 15](#). The theory implies that happiness is a universal phenomenon and as such well comparable across nations. In this view differences in average happiness in nations denote variation in societal effectiveness in meeting human needs. Elsewhere I have discussed this theory in more detail (Veenhoven 1995, 2006e).

## **6 CONCLUSION**

Happiness is defined as the subjective enjoyment of one's life-as-a-whole. Since this is something people have in mind, it can be measured using self-report. Average self-reported happiness varies considerably across nations. These differences cannot be denounced as mere measurement bias. They cannot be explained either as a result of cultural differences in the evaluation of life. The observed differences in happiness across nations rather denote that not all societies meet universal human needs equally well.

***Scheme 1***  
***Four qualities of life***

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

***Scheme 2***  
***Four kinds of satisfaction***

	<i>Passing</i>	<i>Enduring</i>
<i>Part of life</i>	<b>Instant satisfaction</b>	<b>Domain satisfaction</b>
<i>Life as a whole</i>	<b>Peak experience</b>	<b><u>Happiness</u></b> Life satisfaction

### ***Scheme 3***

#### ***Some currently used questions about happiness***

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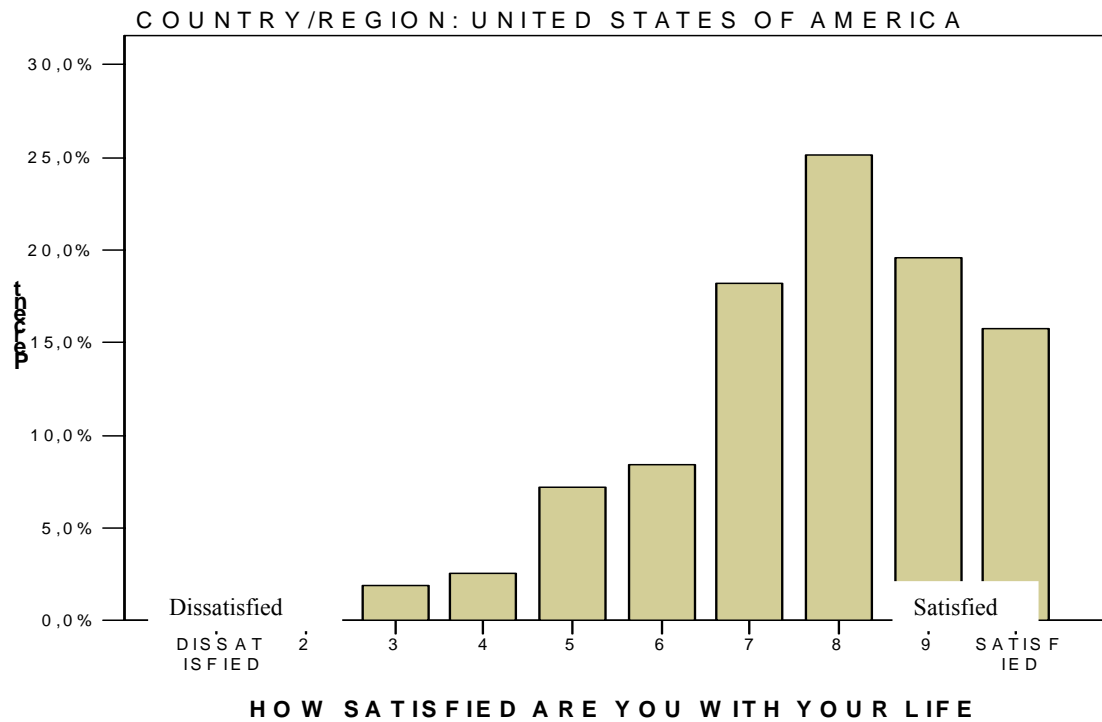
##### *Single questions*

- Taking all together, how happy would you say you are: very happy, quite happy, not very happy, not at all happy?  
(Standard item in the World Value Studies)
- How satisfied are you with the life you lead? Very satisfied, fairly satisfied, not very satisfied, not at all satisfied?  
(Standard item in Euro-barometer 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 question asked twice: at the beginning and at the end of 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, rated on a 1-7 scale ranging from strongly agree to strongly disagree.  
(Diener's 1985 Satisfaction With Life Scale SWLS<sup>6</sup>)
    - 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
-

**Scheme 4**  
**Life-satisfaction in the USA 2000**



Source: World Value Survey

**Scheme 5**  
**Happiness in nations around 2000; Average on scale 0-10**

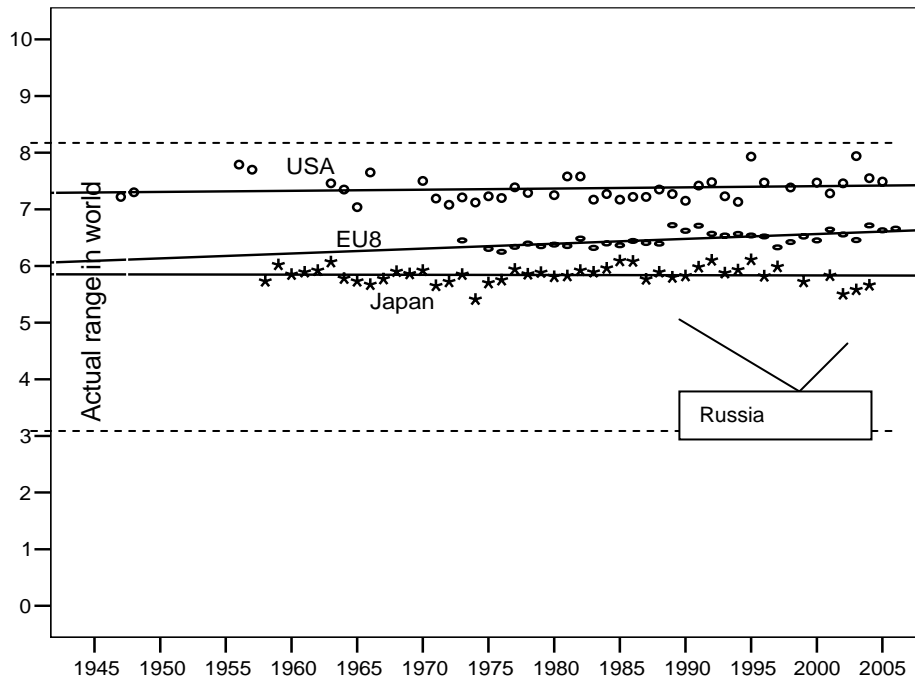
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• Denmark	8,2
• Switzerland	8,1
• Sweden	7,7
• USA	7,4
• Argentine	6,8
• France	6,5
• Philippines	6,4
• Japan	6,2
• Iran	6,0
• Poland	5,9
• Lebanon	5,3
• Latvia	4,7
• Russia	4,4
• Zimbabwe	3,3
• Tanzania	3,2

---

Source: World Database of Happiness, Happiness in Nations, Rank report 2007-1

**Scheme 6**  
**Trend average happiness in the EU8, Japan, Russia and the USA**



**Scheme 7**  
**Happiness and characteristics of nations around 2000**

Condition in nation	Correlation with average happiness		
	<i>Zero-order</i>	<i>Wealth Controlled</i>	<i>N</i>
<b>Wealth</b>			
• Purchasing power per head	+ .65	-	88
<b>Freedom</b>			
• Economic	+ .60	+ .26	88
• Political	+ .48	+ .17	90
• Personal*	+ .35	- .13	83
<b>Equality</b>			
• Disparity in incomes	+ .05	+ .42	82
• Discrimination of women*	- .52	- .25	58
• Disparity in happiness	- .60	- .28	96
<b>Brotherhood</b>			
• Tolerance	+ .52	+ .40	76
• Trust in compatriots	+ .39	+ .17	79
• Voluntary work	- .06	+ .12	57
• Social security	+ .35	- .16	66
<b>Justice</b>			
• Rule of law	+ .64	+ .20	90
• Respect of civil rights	+ .47	+ .09	90
• Corruption	- .56	- .03	62
<b>Explained variance</b>	83%		60

Data: World Database of Happiness, data file 'States of Nations

\* = not included in regression due to limited number of cases

**Scheme 8****Happiness rank order of nations on three survey questions: 11 nations circa 1975**

<i>Country</i>	<i>Happiness question</i>		
	<i>happiness-in-life</i>	<i>satisfaction-with-life</i>	<i>best/worst possible life</i>
Australia	2/3/4	1	1/2
Canada	1	2	1/2
Britain	2/3/4	4	3
USA	2/3/4	3	4
Brazil	5	6	7
France	6	7	8
W. Germany	7	5	5
Mexico	8	8	6
Japan	9	10	9
Italy	10	9	10
India	11	11	11

<i>rank order</i>	----- +.94 -----	----- +.94 -----
<i>correlation (r<sub>s</sub>)</i>	----- +.91 -----	----- +.91 -----

**Scheme 9****Happiness in bi-lingual nations compared to happiness in neighboring countries bi-lingual countries with the same language**

*Question: "On the whole, are you very satisfied (4), fairly satisfied (3), not very satisfied (2), or not at all satisfied (1) with the life you lead?"*

**Belgium**

- French speaking	3.2	France	2.9
- Dutch speaking	3.5	Holland	3.3

*Question: "All things considered, how satisfied or dissatisfied are you with your life as a whole? Which number comes closest to how you feel?" The respondent was asked to choose a number from a card containing an 11-point scale ranging from 1 to 11.*

**Canada**

- French speaking	8.9	France	7.6
- English speaking	8.6	UK	8.5
		USA	8.6

Source: World Database of happiness, Happiness in Nations: table 1.2.1b and 1.2.2.b.  
Linguistic categories: Belgium: Inglehart 1977:160/2, Canada: Blishen et. al. 1980:33



***Scheme 10***  
***Happiness in nations where the same language is spoken***

---

*English*

- Australia 7.7
- Canada 7.6
- UK 7.1
- USA 7.4

*German*

- East Germany 6.6
- West Germany 7.2

*Portuguese*

- Brazil 6.8
- Portugal 6.0

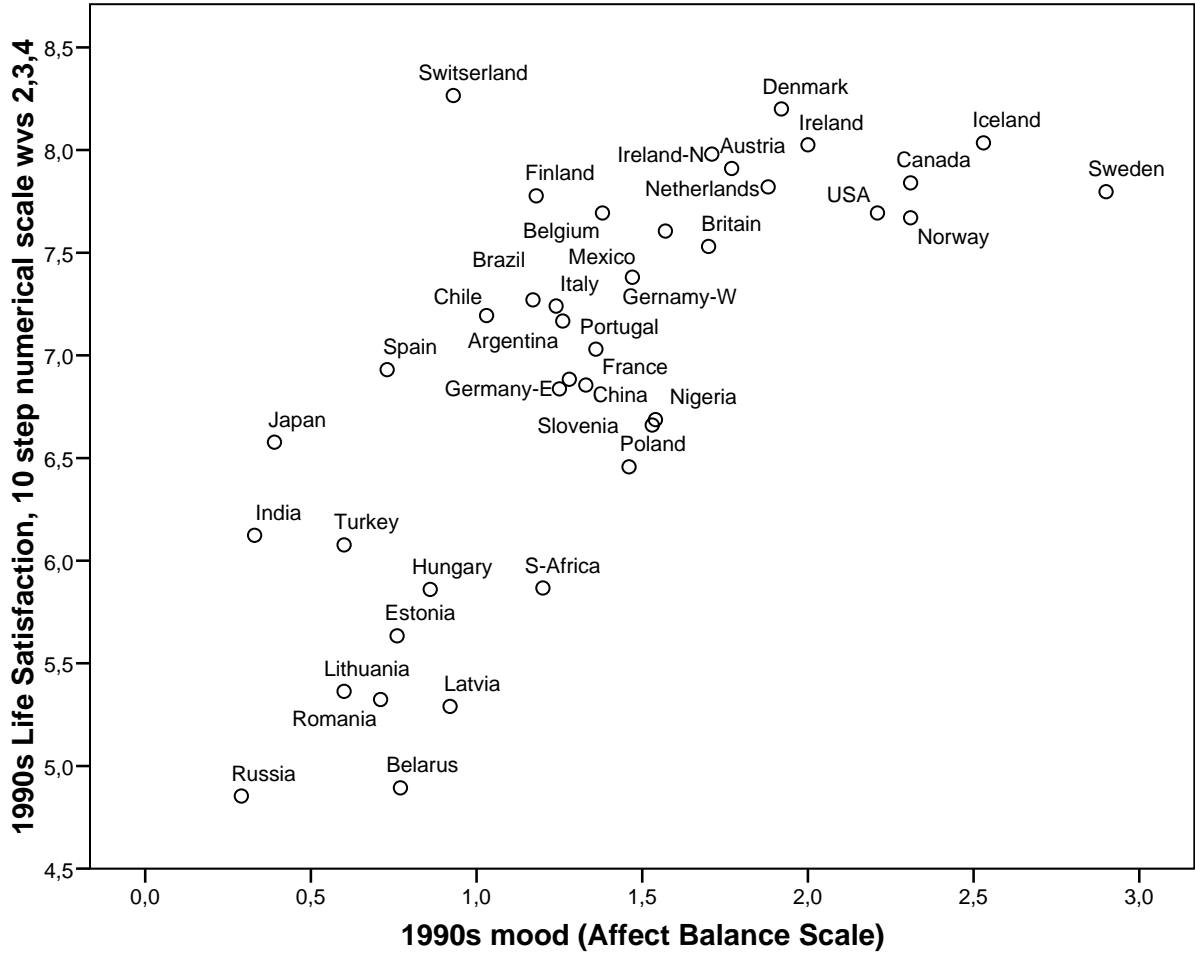
*Spanish (2000)*

- Mexico 7,6
  - Peru 6.0
  - Spain 6.9
- 

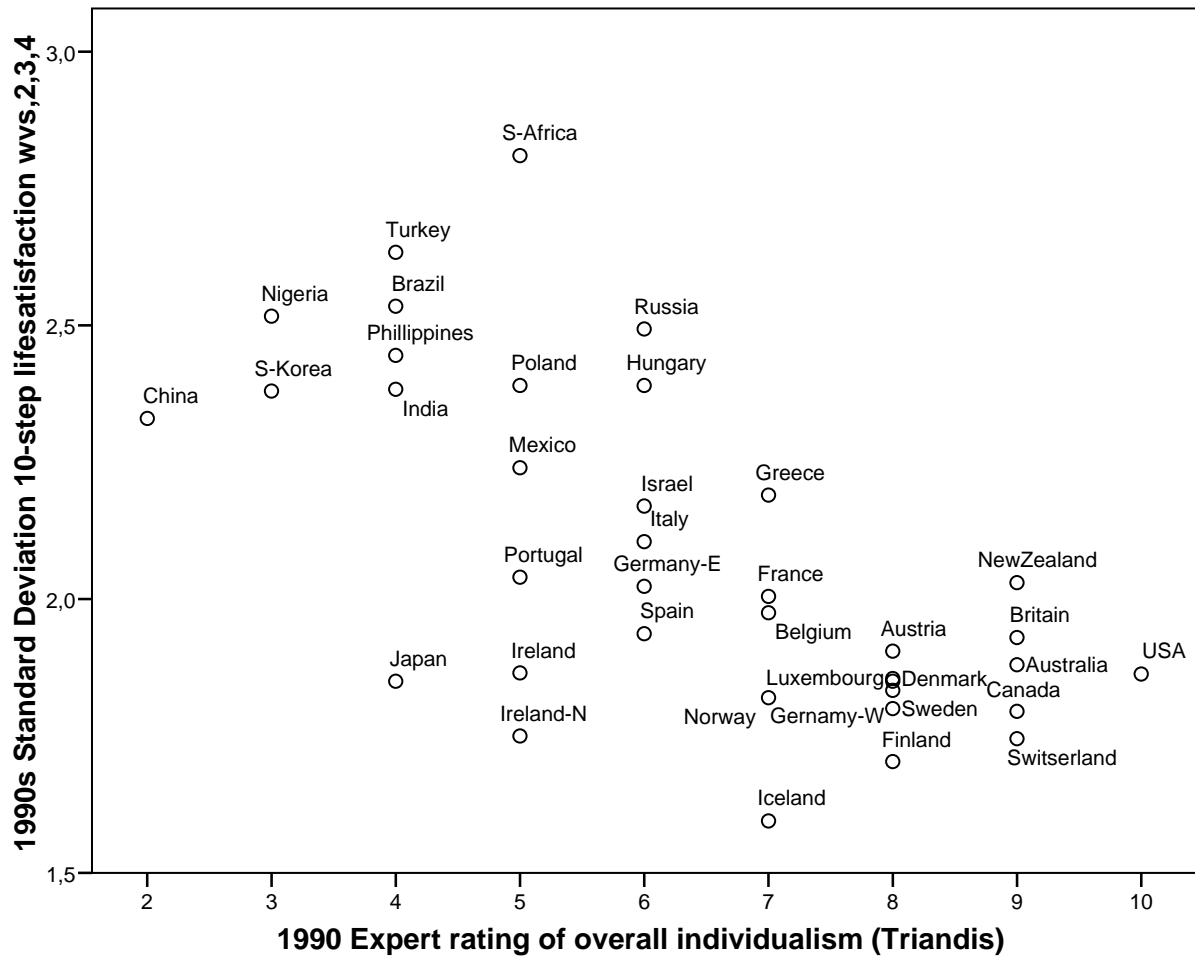
Source: World Database of Happiness, Happiness in Nations, Rank report 2007-1

**Scheme 11**

**Life satisfaction and mood in 42 nations in the early 1990's**



**Scheme 12**  
**Dispersion of happiness and individualism in nations**



**Scheme 13**

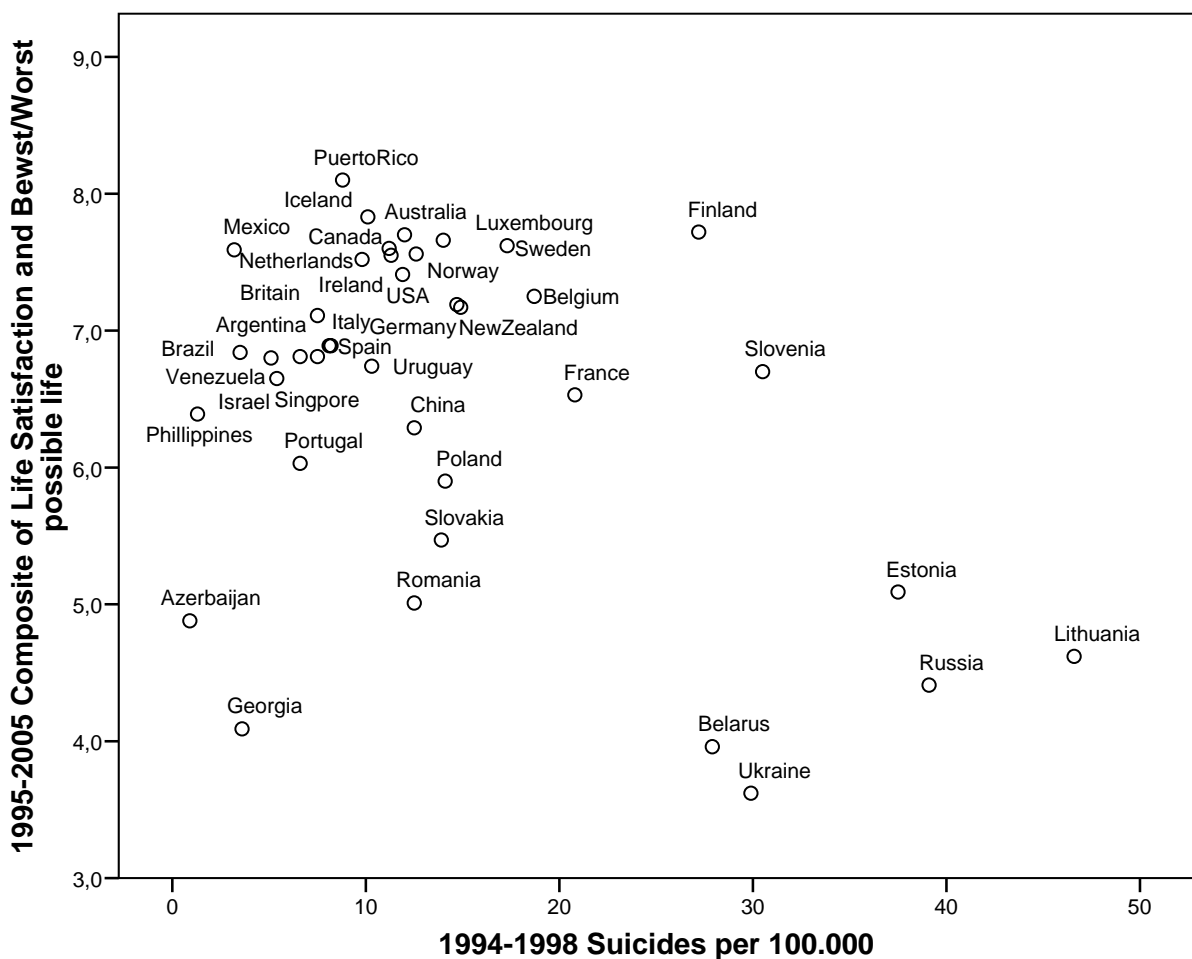
**% non-response (don't know, no answer) on three questions about overall happiness  
Six parts of the world in 1975**

<i>Part of the world</i>	<i>Question about overall happiness</i>		
	<i>happiness- in-life</i>	<i>satisfaction- with-life</i>	<i>best-worst possible life</i>
Australia	0	1	0
South Sahara	1	0	0
North America	2	1	1
Latin America	2	1	0
Far East	2	1	1
- Japan	12	0	0
- India	1	2	2
Western Europe	2	0	1

Source: World Database of Happiness, Happiness in nations, tables 111a, 122b and 13

**Scheme 14**

**Average happiness and suicide in nation in the 1990s**



**Scheme 15**  
**Need theory of happiness**

---

*global assessment*

**OVERALL HAPPINESS**  
Satisfaction with one's life-as-whole



*sub-assessment:*

**Hedonic level of affect**  
Balance of pleasant and unpleasant affect



*information basis*

Affective experience



*underlying process*

Need gratification



*substrate*

Human nature

---

**NOTES**

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- <sup>1</sup> Paper presented at the International Meeting of the Psychometric Society (IMPS) Tokyo, Japan, July 9th to 13th, 2007. Session on "Theoretical and Methodological Issues in Cross-Cultural Research"
- <sup>2</sup> Jeremy Bentham defined happiness as 'the sum of pleasures and pains'. He did not limit the concept to sensory experience but also included higher mental experiences such as beauty and justice.
- <sup>3</sup> A disadvantage of single questions is their vulnerability to slight variations in wording. Such variations balance out when multiple questions are used. Yet a common disadvantage of multiple questions is that wrong items slip in, for instance, of the 20 items in Neugarten's Life Satisfaction Index only some tap happiness as defined here. Most of the other items concern conditions for happiness, such as social participation.
- <sup>4</sup> The collection of 'happiness in nations' of the world database of happiness contains also rank-reports on 'Happy Life Years', 'Inequality of happiness' and 'Inequality-Adjusted happiness in nations' (Veenhoven 2006b-d)
- <sup>5</sup> Average of the first 8 member states for which data are available since 1973: Belgium, Denmark, France, Germany (W), Luxembourg, Italy, The Netherlands and the UK.
- <sup>6</sup> In my view this last item is not appropriate. One can be quite satisfied with life, but still be open for the opportunity to try something else.

**REFERENCES**

- Andrews, F.M. & Withey, S.B. (1976)  
*Social indicators of well-being*  
New York, U.S.A., Plenum Press
- Blishen, B.R. & Atkinson, T.H. (1980)  
*Anglophone and Francophone Perceptions of the Quality of Life in Canada*  
in: Szalai, A. & Andrews, F., (Eds.) "The Quality of Life, Comparative Studies", Sage, 1980,  
London, 25 – 40
- Cantril, H. (1965)  
*The pattern of human concern*  
New Brunswick, U.S.A., Rutgers University Press
- Danner, D.D., Friessen, W. V. & Snowdon, D. A. (2001)  
*Positive Emotions in Early Life and Longevity: Findings from the Nun Study*  
Journal of Personality and Social Psychology, Vol. 80, 804 – 813
- Davidson, R.J. (2004)  
*Well-Being and Affective Style: Neural Substrates and Biobehavioural Correlates*  
Philosophical Transactions, Biological Sciences, Vol. 359, 1395 - 1341
- Diener, E., Emmons, R. A., Griffin, S. & Larsen, R. J. (1985)  
*The Satisfaction With Life Scale*  
Journal of Personality Assessment, Vol. 49, 71 - 75
- Diener, E., Pavot, W. & Sandvik, E. (1991)  
*Happiness is the frequency, not intensity of positive and negative affect*  
In: Strack, F. et. al. (eds.) 'Subjective wellbeing', Pergamon, London
- Diener, E. Diener, C. & Diener, M. (1995)  
Factors Predicting the Subjective Well-Being of Nations  
Journal of Personality and Social Psychology, Vol. 69, 851 - 864
- Diener, E., Gohm, C.L., Oishi, S. & Suh, E. M. (2000)  
*Similarity of the Relation between Marital Status and Subjective Well-Being across Cultures*  
Journal of Cross-Cultural Psychology, 2000, Vol. 31, 419 -436
- Gallup, G.H. (1976)  
*Human Needs and Satisfaction: A Global Survey*  
Public Opinion Quarterly, Vol. 40, 459 – 467
- Ehrhardt, J., Saris, W & Veenhoven, R. (2000)  
*Stability of life satisfaction over time Analysis of change in ranks in national population*  
Journal of Happiness Studies, Vol. 1, pp. 177-205

- Fredrickson, B.L. (2004)  
*The Broaden - and - Build Theory of Positive Emotions*  
Philosophical Transactions, Biological Sciences, Vol. 359, 1367 – 1377
- Gerson, E.M. (1976)  
*On quality of life*  
American Sociological Review, Vol. 41, pp. 793-806
- Heliwell, J.F. (2007)  
*Well-Being and Social Capital: Does Suicide Pose a Puzzle?*  
Social Indicators Research, Vol.81, 455 - 496
- Inglehart 1977  
*The Silent Revolution*  
Princeton University Press, 1977, Princeton, USA
- Inglehart, R. (1990)  
*Culture Shift in Advanced Industrial Society*  
Princeton University Press, 1990, Princeton, USA
- Kahneman, D. (1999)  
*Objective happiness*  
In Kahneman, D., Diener, E. & Schwarz, N. (Eds.) 'Wellbeing: foundations of hedonic psychology', New York U.S.A., Russell Sage Foundations, pp.3-25
- Kalmijn, W.M. & Veenhoven, R. (2005)  
*Measuring Inequality of Happiness in Nations. In search of proper statistics*  
Journal of Happiness Studies, vol. 6, 357-396
- Layard, R. (2005)  
*Happiness, lessons of a new science*  
Penguin, London, UK
- Lucas, R.E., Diener, E. & Suh, E. M. (1996)  
*Discriminant Validity of Well-Being Measures*  
Journal of Personality and Social Psychology, Vol. 71, 616 – 628
- Neugarten, B.L., Havinghurst, R. J.& Tobin, S. S. (1961)  
*The Measurement of Life Satisfaction*  
Journal of Gerontology, Vol. 16, 134 -143
- Ostroot, N & Snyder, W.W. (1985)  
*Measuring Cultural Bias in a Cross-National Study*  
Social Indicators Research, Vol. 17, 243 - 251
- Saris, W., Scherpenzeel, A, & Veenhoven, R. (Eds. 1996)  
*Satisfaction in Europe*  
Budapest Hungary, Eötvös University Press



- Sen, A. (1992)  
*Capability and wellbeing*  
In: Sen, A. & Nussbaum, M. (Eds.) 'The quality of life', Clarendon Press, Oxford, UK, pp. 30-53
- Schwarz, N. & Strack, N. (1991)  
*Evaluating one's life: a judgment model of subjective well-being*  
In: Strack, F. ET. al. (eds.) 'Subjective wellbeing', Pergamon, London UK, pp. 27-48
- Schwarz, N., & Strack, F. (1999)  
*Reports of subjective well-being: Judgmental processes and their methodological implications*  
In D. Kahneman, E. Diener, & N. Schwarz (Eds.), 'Well-being: The foundations of hedonic psychology (pp. 61-84). New York: Russell Sage.
- VanHemert, D.A., Poortinga, Y.H. & VandeVijver, F.J. (2004)  
*The Beck Depression Inventory as a Measure of Subjective Well-Being: A Cross-National Study*  
Journal of Happiness Study, 2002, Vol. 3, 257 – 286
- Veenhoven, R. (1984)  
*Conditions of happiness*  
Kluwer (now Springer), Dordrecht, Netherlands
- Veenhoven, R. (1994)  
*Is happiness a Trait? Tests of the theory that a better society does not make people any happier*  
Social Indicators Research, vol. 32, p 101-160
- Veenhoven, R. (1995)  
*The cross-cultural pattern of happiness Test of predictions implied in three theories of happiness*  
Social Indicators Research, vol. 34 p 33-68
- Veenhoven, R. (1999)  
*Quality-of-Life in Individualistic Society A Comparison of 43 Nations in the Early 1990's*  
Social Indicators Research, Vol. 48, 157 - 186
- Veenhoven, R. (2000)  
*The four qualities of life*  
Journal of Happiness Studies, Vol. 1, pp. 1-39
- Veenhoven, R (2005)  
*Is life getting better? How long and happy do people live in modern society?*  
European Psychologist, special section on 'Human development and Well-being', vol. 10, pp. 330-343
- Veenhoven, R, (2006)  
*World Database of Happiness, Continuous register of scientific research on subjective appreciation of life*

Erasmus University Rotterdam, The Netherlands  
Available at: <http://worlddatabaseofhappiness.eur.nl>

Veenhoven, R. (2006a)  
*Average happiness in 95 nations 1995-2005*  
World Database of Happiness, Rank Report 2006-1

Veenhoven, R. (2006b)  
*Happy Life Years in 95 nations 1995-2005*  
World Database of Happiness, Rank Report 2006-2

Veenhoven, R. (2006c)  
*Inequality of happiness in 94 nations 1995-2005*  
World Database of Happiness, Rank Report 2006-3

Veenhoven, R. (2006d)  
*Inequality-Adjusted Happiness in 94 nations 1995-2005*  
World Database of Happiness, Rank Report 2006-4b

Veenhoven, R. (2006e)  
*How do we assess how happy we are? Tenets, implications and tenability of three theories*  
Paper presented at conference on 'New Directions in the Study of Happiness: United States and International Perspectives', University of Notre Dame, USA, October 22-24 2006

Veenhoven, R. (2007)  
*Healthy happiness: Effects of happiness on physical health and consequences for preventive healthcare*  
Accepted for publication in Journal of Happiness Studies

Wessman, A.E. & Ricks, D.F. (1966)  
*Mood and Personality*  
Holt, Rinehart and Wilson, New York, USA