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EVIDENCE BASED PURSUIT OF HAPPINESS

What should we know, do we know and can we get to know?

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ABSTRACT

The rational pursuit of happiness requires knowledge of happiness and in particular answers to the following four questions:

- 1: Is greater happiness realistically possible?
- 2: If so, to what extent is that in our own hands?
- 3: How can we get happier? What things should be considered in the choices we make?
- 4: How does the pursuit of happiness fit with other things we value?

Answers to these questions are not only sought by individuals who want to improve their personal life, they are also on the mind of managers concerned about the happiness of members of their organization and of governments aiming to promote greater happiness of a greater number of citizens. All these actors might make more informed choices if they could draw on a sound base of evidence.

In this paper I take stock of the available evidence and the answers it holds for the four types of questions asked by the three kinds of actors. To do this, I use a large collection of research findings on happiness gathered in the World Database of Happiness. The data provide good answers to the questions 1 and 2, but fall short on the questions 3 and 4. Priorities for further research are indicated.

Keywords: happiness economics, life-satisfaction, research synthesis, utilitarianism

JEL codes: A130, B31, D60, H000, I31

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1 CALL FOR GREATER HAPPINESS

Interest in happiness is rising, in particular in modern affluent societies. People seek ways to make their own life more satisfying and this quest manifests in soaring sales of ‘how-to-be-happy books’ and the development of life-coaching businesses. Happiness ranks high in the value hierarchy of students all over the world (Diener 2004) and 85% of the British agree with the statement that ‘a governments prime aim should be achieving the greatest happiness of the people, not the greatest wealth’ (BBC 2006, question 14).

Interest in happiness is also rising among policy makers, who are becoming more open to setting goals ‘beyond GDP’ (European Commission 2011). Well-being is a new topic on the political agenda, next to sustainability. A recent manifestation of this trend is the international conference on Happiness and Wellbeing held at the UN headquarters in New York in April 2012 (Thinley 2012).

Interest in happiness is also on the increase among scientists. Happiness has become a major topic of interest in several new strands of research: in ‘social indicators research’ that emerged in the 1970s, in medical ‘quality of life research’ that developed in the 1980s and in ‘positive psychology’ and ‘happiness economics’, which appeared around the year 2000. The number of scientific publications on happiness has grown steeply since the 1960s, as can be seen in [scheme 1](#). In all this research the leading question is what makes people happy with the major motivation being to advance happiness.

1.1 Ideological context

At first sight this interest in happiness is something quite new, but actually it is the revival of a long-standing creed. The idea that there is a moral obligation to advance human happiness is a fruit of the European ‘Enlightenment’, an intellectual movement that took a position against religious views that had dominated thinking in the European Middle Ages.

One of the contested views was that happiness can be found only in the afterlife and that an earthly life serves only as an entrance test to Heaven. The enlightened opinion was that happiness is possible on Earth and that we should not renounce it. Another contested view was that morality roots in divine revelation, and in particular in the ‘Ten Commandments. Enlightened thinkers came to see morality more as a matter of human agreement’, and discussed the intellectual foundations for social contracts.

Much of this thought is voiced by Jeremy Bentham (1789) in his famous book *On Morals and Legislation*, in which he argues that the good and bad of actions should be judged by their effects on human happiness. In his view, the best thing to do is that which results in the “greatest happiness, for the greatest number.” This moral creed is called ‘the greatest happiness principle’ and is also known as ‘utilitarianism’.

This secular ideology met with considerable resistance. In the 18th century the opposition came mainly from the churches, which were still quite powerful. In the 19th century the greatest happiness principle was met with reservations in the liberal and socialist emancipation movements that were more interested in freedom and equality than in happiness. In the early 20th century considerable opposition came from the then-virulent nationalism that laid more emphasis on the glory of the nation than on the happiness of its inhabitants. All these ideologies lost power in the late 20th century, and partly for this reason² we have seen a revival of Bentham’s greatest happiness principle.

² Interest in happiness is also fuelled by social counter movements that revere ‘alternative’ ways of life and social organization, such as 19th century romanticism that projected happiness in pastoral life and 20th century New Age that sees happiness in exotic spirituality. In this tradition, the word ‘happiness’ is used for rhetorical

Rising prosperity was another factor in this ideological shift. Pressing problems, such as poverty and illiteracy, were fairly well solved in western nations, and the removal of the ‘negatives’ gave room to ‘positive’ goals’ on the political agenda. The recent emergence of ‘happiness economics’ is part of this long-term development.

1.2 Plan of this paper

The rational pursuit of happiness requires us to have an understanding of happiness. In this paper I consider first what we *should* know about happiness if we want to advance it systematically. Next I take stock of what we *do* know at this moment. Then I will examine what we *do not* know yet and mark some things we *can* get to know.

This approach is based on the assumption that happiness is not just a stroke of luck, but something that can be advanced rationally and that our chances of success are greater when pursued on the basis of good information.

In this view the pursuit of greater happiness is similar to the pursuit of better health. In the past we have invested considerable energy and money on empirical research in health and, as a result, we live now longer than ever before in human history. Likewise, investing in obtaining knowledge about happiness will probably mean that we will also live happier long lives.

Our current knowledge on happiness is limited, and far more limited than our knowledge on health. Most of the available research findings on happiness have been gathered into the World Database of Happiness (Veenhoven 2012) and in this paper I will draw on this findings archive.

purposes in the first place and denotes something missing in current life but available in the advocated life. Since the way to greater happiness is already given in this line of thought, there is little interest in empirical research on that matter.

2 WHAT IS ‘HAPPINESS’?

A preliminary step is to explain what I mean with the word ‘happiness’. The word ‘happiness’ has different meanings. In the widest sense, ‘happiness’ is an umbrella term for all that is good. In this meaning it is often used interchangeably with terms like ‘well-being’ or ‘quality of life’. Below I will delineate four different *qualities* of life and show that my concept of happiness fits only one of these.

2.1 Four qualities of life

Quality-of-life concepts can be sorted using two distinctions, which together provide a fourfold matrix. 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. The combination of these two dichotomies yields a fourfold matrix. This classification is presented in [Scheme 2](#).

Livability of the environment

The left top quadrant of [scheme 2](#) denotes the meaning of good living conditions, in brief ‘livability’. Economists associate livability with access to goods and services. Ecologists see it in the natural environment and describe livability in terms of pollution, global warming, and degradation of nature. City planners see livability in the built environment and associate it with such things as sewer systems, traffic jams, and ghetto formation. 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 of [Scheme 2](#) 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 skills for living. This is commonly denoted by the term ‘self-actualization’. Since abilities do not develop alongside idleness, this quality of life is close to ‘activity’ in Aristotle’s concept of eudemonia.

An ability to deal with the problems of life will mostly contribute to happiness as defined here, but it is not identical to happiness. If one is competent at living, one has a good chance at happiness, but being thus endowed does not guarantee an enjoyable life outcome.

Usefulness of life

The left bottom quadrant of [Scheme 2](#) represents the notion that a good life must be good for something more than itself. This assumes a life has some higher values. There is no current generic term 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.

When evaluating the external effects of a life, one can consider several aspects. One aspect is what that a person's life does to the quality of life of other people, such as how well a mother raises her children or how many lives are saved by a medical doctor. Another aspect is the contribution made by a life to human civilization, such as in inventions or exemplary moral behavior. Still another aspect is what a life does to the ecological system.

An individual's life can have many environmental effects that may differ in the short term and in the long term, and these cannot be meaningfully collated. Still another problem is that these effects can be judged from different perspectives. Hence it is quite difficult to grasp this quality of life.

Leading an objectively useful life may contribute to one's subjective appreciation of life, but it may also come at the cost of that. So, useful living is not the same a happy living.

Core meaning: Subjective enjoyment of life

Finally, the bottom right quadrant of **Scheme 2** represents the inner outcomes of life. That is the quality of a life in the eye of the beholder. As we deal with conscious humans, this quality boils down to subjective enjoyment of life. This is commonly referred to by terms such as 'subjective well-being', 'life satisfaction', and 'happiness' in a limited sense of the word. This is the kind of happiness Jeremy Bentham had in mind, and it is also the kind of happiness addressed here.

2.2 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, that classification is based on the following dichotomies: part-of-life versus life-as-a-whole, and passing delight versus enduring satisfaction. These distinctions produce the fourfold matrix presented in **Scheme 3**.

Pleasure

The top-left quadrant of **Scheme 3** represents passing enjoyments 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. I refer to this category as 'pleasures'. Kahneman (1999) calls it 'instant-utilities'.

The concept of happiness used here is broader and concerns "overall satisfaction" with life-as-a-whole. Though fleeting enjoyment obviously contributes to a positive appreciation of life, it is not the whole of it.

Satisfaction with life domains

The top right quadrant of **Scheme 3** 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 pleasures, 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 some time.

Domain satisfactions are often denoted with the term happiness: a happy marriage, happy with one's job, etc. Yet I use the term happiness in the broader sense of satisfaction with life-as-a-whole. One would not call a person happy who is satisfied with their marriage and job but still dissatisfied on the whole because his or her 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 right quadrant of **Scheme 3** denotes the combination of passing experience and appraisal of life-as-a-whole. This 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 poets write about.

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

Core Meaning: Lasting Satisfaction with One's Life-as-a-Whole

Lastly, the bottom-right quadrant of **Scheme 3** 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 at stake in Jeremy Bentham's "greatest happiness principle." When speaking about the "sum" of pleasures and pains, he denoted a balance over time and thus a durable matter.

2.3 Definition of Happiness

In this line I define happiness as *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. I have elaborated this concept elsewhere (Veenhoven, 1984, chapter 2).

2.4 Components of happiness

When evaluating the favorableness of our life, we tend to use two more or less distinct sources of information: how we feel most of the time and how well the realities of our life fit our aspirations. These appraisals do not necessarily coincide. One may feel fine generally, but nevertheless be aware that one has failed to realize one's aspirations. Or one may have surpassed one's aspirations, but nevertheless feel miserable.

Using the word 'happiness' in both these cases would result in three different kinds of happiness, the overall judgment as described above and these two specific appraisals. Therefore I will refer to these components as 'hedonic level of affect' and 'contentment'. To mark the difference with the encompassing judgment, I will refer to happiness (the core concept) as *overall* happiness. A synonym for overall happiness is 'life-satisfaction'.

2.4.1 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 of feelings, of emotions, as well as that found 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 so to say: an individual's average hedonic level over a long time-span such as a month or a year. The concept does not presume subjective awareness of that average level.

2.4.2 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.

These variants of happiness are depicted in [scheme 4](#). This conceptual distinction between the two components of happiness is paralleled by different view on the nature of happiness. Some theorists see happiness as an affective phenomenon in the first place, determined by the left arrow in [scheme 1](#). Others think of happiness as the outcome of a rational comparison process and focus on the arrow on the right side of [scheme 4](#). The latter view dominates in the literature, but the available evidence better supports the former view (Veenhoven 2009).

2.5 Measurement of happiness

Since happiness is defined as something that we have in mind, it can be measured using questions. Questions on happiness can be presented in various ways:

Direct vs. indirect questions

A common direct question is 'Taking all together, how happy would you say you are?' Indirect question rather tap related things, such as 'Do you think that you are happier than most people in this country' or 'Do you often sing when under the shower?'. An assumed advantage of indirect questioning is that this will reduce response bias. A disadvantage is that something different than happiness is measured.

Single vs. multiple questions

Rather than using single questions as in the example above, one can ask about the same using multiple question. Series of questions on happiness are referred to as 'scales' and the most often used questionnaire is Diener's (1985) Satisfaction With Life Scale (SWLS). An advantage of single questions is that it is clear what is being measured and hence that one can easily see whether that is happiness as subjective enjoyment of one's life as a whole (face validity). A disadvantage is that the particular words used may not be interpreted in the same way by all respondents. An advantage of multiple questions is that such differences in interpretation balance out. Yet a disadvantage is that the questions may not quite address the same thing, such as the last item in Diener's SWLS.

One time vs. multiple moment

The above mentioned single question calls for a global estimate by the respondent, which may involve various biases (Kahneman 1999). An alternative is to ask repeatedly how happy one feels at the moment and to compute an average. This is referred to as the Experience Sampling Method (ESM) a variant of which is the Day Recall Method (DRM). These method can be used only the affective component of happiness, referred to above as 'hedonic level of affect'.

Affect Balance Scales:

Hedonic level of affect can also be measured indirectly asking people about particular feelings in the recent past, such as how often they felt 'cheerful' or 'blue'. The reported number of negative affects is then subtracted from the number of positive experiences. A common scale of that kind is Bradburn's (1969) 10 item 'Affect Balance Scale'. This

technique fits well with Bentham's (1789) classic notion of happiness as 'the sum of pleasures and pains'.

An overview of questions is available in the collection 'Measures of Happiness' of the World Database of Happiness includes about 900 variants (Veenhoven 2012b). Some common questions are presented in [Scheme 5](#).

2.5.1 *Validity*

Critics have suggested that responses to questions on happiness actually measure other phenomena. Rather than indicating how much the respondent enjoys life, the answers will reflect his or her normative notions and desires and it is also claimed that people say to be happier than they know they are. Empirical checks do not support these qualms. If questions are clear and anonymity guaranteed, people seem to answer what is asked for³.

2.5.2 *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. Retest reliability drops to circa +.60 when the same question is asked a week later. Though responses seldom change from 'happy' to 'unhappy', switches from 'very' to 'fairly' are rather common. The difference between response-options is often ambiguous, and a respondent's notion about his/her happiness tends to be general. Thus the choice for one answer-category or the next is sometimes haphazard, and 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 precise wording of the key-item can tip the scale to one response or the other. Such effects can occur in different phases of the response process; in the consideration of the answer and during the communication of the answer.

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? But it 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. Several of these heuristic effects have been demonstrated by Schwarz and Strack (1991).

Bias in response

Once a respondent has formed a private judgment, the next step is to communicate their judgment. 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

³ An overview of the literature about the validity of self reported happiness is available in the [Bibliography of Happiness](#) (Veenhoven 2012a), section 'Validity of happiness measurements', subject code Ca01.

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 on anonymous questionnaires, however, direct contact with an interviewer does not always inflate happiness reports. Modest self-presentation is encouraged if the interviewer is in a wheel-chair.

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 this 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. In principle it does not affect correlations, unless the measure of the correlate is biased in the same way, to give a correlated error. To some extent, systematic error can also be estimated and corrected for, see for example Saris et al. (1996).

2.5.3 Cultural measurement bias

Average happiness differs markedly across nations. 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. Elsewhere I have checked these doubts (Veenhoven 2008a). The results of that inquiry are summarized below.

The first objection is that differences in *language* hinder comparison. Words like 'happiness' and 'satisfaction' will 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. I also compared responses to questions on happiness and satisfaction in two bi-lingual countries, and found no evidence for linguistic bias.

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 this claim by checking whether reported happiness is indeed higher in countries where hedonic values are most endorsed. This appeared not to be the case. As a second check, I inspected whether reports of general happiness deviate more from feelings in the past few weeks in these countries; the former measure being more vulnerable to desirability distortion than the latter. This also 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 in a country would discourage 'very' happy responses in that nation, because modest self-presentation is more appropriate within that cultural context. I tested this hypothesis by comparing happiness 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 happiness 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.

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 can be truly less

happy than Canadians, but be so because of a gloomier outlook-on-life.

2.6 Comparability of happiness

Even if answers to questions about happiness adequately reflect how satisfied respondents are with their life, there is still the question whether such answers can be meaningfully compared across persons and cultures. Several social scientists think not, mainly because they see happiness in comparison with standards of the good life, which vary across persons and cultures.

These critics equate happiness with contentment (defined in section 2.4.2) and fail to acknowledge that the evaluation of life also depends on affective experience (section 2.4.1). Affective experience seems to dominate in the overall evaluation of life (Veenhoven 2009) and affective experience roots in human nature rather than in human culture. As such we can expect that the range of variation in hedonic level is rather similar all over the world. Still critics could have a point in the case of contentment. There is indeed variation in standards of the good life, though research has shown remarkable similarity in notions of the good life across the present day world (Veenhoven 2010).

All this suggests that happiness should be fairly well comparable. How comparable it actually is, is an empirical question, and in this context the following should be considered.

2.6.1 *Interpersonal comparability.*

Apart from the above discussed distortions in the measurement of happiness: does score of 8 on a scale of 0-10 denote the same degree of satisfaction for person A as for person B? Stated otherwise: If A and B are equally happy, can person A rate their happiness as a 7, while person B gives a 9? As we cannot yet look into peoples' heads⁴ we test the above having indirect evidence.

One indication is the distribution of happiness ratings. If happiness is entirely idiosyncratic we can expect scattered pattern of responses, that is, about as many scores for 1 and 2 as 10. Yet surveys show concentrated patterns, in particular in developed nations. An example is presented on [scheme 8](#).

Another indication is in the correlation between self-reported happiness and objective living conditions. If the same degree of happiness is rated 7 by person A and 9 by person B we will see little correlation between these ratings and the things that determine that common degree of happiness. Research has indeed shown remarkable small correlations with some things believed to determine happiness, such as income, but also found sizable correlations with other drivers of (un)happiness, such as bereavement.

A third indication is correspondence with peer ratings. If the same degree of happiness is rated 7 by person A and 9 by person B, peers can only make wild guesses as to how happy A and B are. Yet research shows substantial correlations (e.g. Lepper 1998). The correlations are far from perfect but still sizable when taking into account that peer-ratings are based on limited information and that both self-ratings and peer-rating are subject to the measurement distortions mentioned in section 2.5.2.

Still there are limits to the interpersonal comparability of happiness, though a difference in rating of the same degree of happiness by more than 2 points may be the exception rather than the rule, a difference of one point seems to be quite common, e.g. person A saying 8 and person B saying 9. One of the tasks for future research is to find ways to estimate the size of such difference.

⁴ Brain scans can give us information about current affective experience, but cannot yet be used to measure our enduring satisfaction with life.

This matter and the related issue of cardinality are discussed in more detail in Ng (1997).

2.6.2 *Cross-cultural comparability*

We will see in section 4.3.1 that there is considerable difference in average happiness across nations, such as an average of 2,8 in Zimbabwe and an average of 8,3 in Denmark. Is this difference due to variation in the quality of life or rather in how life is evaluated, Zimbabweans judging life by different standards than the Danes?

We will also see in section 4.3.3 that some 75% of the cross-national differences can be explained by variation in objective living conditions. The main reason why Zimbabweans are unhappy is that they live in poverty in a failed state. If we had more and better indicators of the institutional quality of nations we could probably explain about 80% of the differences, and if these indicators were free of measurement error we could possibly explain even 90% of the difference.

This would leave us with 10% unexplained variance that can be attributed exclusively to cultural factors. Part of that cultural effect will be in cultural determinants of happiness, for instance low trust in people or a widespread belief in witches. Another part will be in cultural variations of how life is evaluated, such as possible higher ratings in cultures where life is seen as a gift of God, one which we should enjoy in His honor. It is a task for future research to estimate the size of the latter effect. Given the above considerations it is likely to be small.

In short: Happiness can be measured well and we can therefore develop verifiable knowledge about happiness.

3 WHAT WE SHOULD KNOW ABOUT HAPPINESS

Happiness cannot be pursued without knowledge. Rational pursuit of happiness requires information about happiness, and the following four questions must be answered:

- Is more happiness a realistic possibility? If we have reached the maximum already, there is no point in striving for more.
- To what extent do we control our happiness? If happiness appears to be a matter of fate, there is no point in pursuing it.
- How can we get happier? This question presents typically when we are faced with having to make major choices.
- How well will the pursuit of happiness fit with other things we value? We typically aim at more things than just happiness and look for an optimal balance.

Below I will consider these information requirements on three levels: 1) the micro-level of individuals, 2) the meso-level of organizations and 3) the macro-level of nations. The questions and levels are depicted in [scheme 6](#).

3.1 What individuals should know about happiness

Many of us would like to become happier than we are. In this context we are faced with the above questions of whether such a goal is realistically possible, and if so, to what extent achieving this is in our own hands. How can greater happiness be achieved and how well the pursuit of greater happiness fits with other things we value.

3.1.1 *Could one be happier?*

This is not as evident as it seems at first sight, several scholars argue that a lasting rise in happiness is not possible and that we can, at best, achieve temporally uplifts. One of the arguments is that our happiness is bound to a ‘set-point’ based in genetic disposition and early experience (e.g. Lykken 1999). Another claim holds that happiness depends on comparison and that standards rise when we get happier. In that view the pursuit of happiness puts us on a ‘hedonic treadmill’, on which we do not advance. The first thing one would like to know is whether these experts are right.

If the experts are wrong (as we will see they are, in section 4.1), the next question is what are the chances of more happiness for one personally. Your chances for greater happiness in the future depend obviously on how happy you are in the present; if you are very happy already there is less to gain than if you start out miserable. So what you need to know is how happy you are and what the chances for improvement are at your level of happiness.

Another thing worth knowing is how happy comparable people are, that is, compatriots with a similar age, level of health and personality. If these people are happier than you are, a similar level is probably also within your reach. If comparable people are typically less happy than you are, you may be at your maximum.

Such guesstimates require that you know how happy you are yourself. It also requires an overview of the happiness of the people with whom you compare yourself, and if such data is available, you would want to know whether you can trust them, since some expert say that self reports of happiness are biased in several ways, for instance, that people present themselves as happier than they really are⁵.

⁵ An overview of the literature about possible distortions in responses to questions about happiness is available in the [Bibliography of Happiness](#) (Veenhoven 2012a), section ‘Measurability of happiness’, subject code Ca.

3.1.2 *How much can you do about it?*

If greater happiness is apparently feasible for people like you, the next question is whether you can do much about increasing your happiness. Were these comparable people just luckier than you were, or did they deal better with life? To what extent are you the ‘smith of your own happiness’? In that context it is worth knowing what part of the differences in happiness is due to genetic endowment and strokes of luck and what part depends on things that are in your control?

3.1.3 *What to choose?*

If greater happiness seems to be in your hands, the next question is: What to do? This question arises not only when you plan your life, but typically when you are faced with choices. We are faced with many choices in our private lives, next to the many minor daily choices, such as what to eat for dinner, we also have to make major life-choices, such as having children and accepting a job abroad.

Limitations to information

Deciding such major choices is inevitably based on assumptions about future happiness and these assumptions are often wrong. As a result we often ‘miss-predict’ our future happiness. For example: a person may accept a better paying job at a longer distance from home, expecting that the higher pay will buy more happiness, but end up less happy because of an unforeseen loss of happiness due to the longer time spent commuting (Stutzer & Frey 2008).

This type of information deficit is the subject of a new strand of research in economics. In his ‘Stumbling on Happiness’ Daniel Gilbert (2006) reviews several of the cognitive mechanisms involved, such as our tendency to predict future happiness on the basis of what we remember we have enjoyed in the past. We also have to deal cultural sources of misinformation, such as faulty folk wisdom and misleading advertising.

Put into the words of economists, the happiness we anticipate when making a choice is *expected utility* (or decision utility), and the happiness we feel later as a consequence of this choice is *experienced utility*. The observed discrepancy illustrates the limitations of the assumption that Homo Economicus is fully informed about his or her preferences (Kahneman & Thaler 2006).

Steps to informed choice

In this view a lot of happiness can be gained (utility optimized) if we are better informed about the consequences of our choices. What information do we need? A first thing to know is how such choices tend to work out for the happiness of most people, second thing is how such choices have worked out for people like you and a third thing is how it does work out for your own happiness once you have made that choice.

Consider the example of choosing an occupation. If you consider becoming a lawyer, it is worth knowing how happy lawyers generally are. If they are less happy than average, as some studies suggest, you would want to know whether this is an effect of the kind of work they do, or that the occupation attracts unhappy people who possibly get even happier digging around in conflicts. A next thing you would like to know is how that has worked out for people like you. How about the happiness of lawyers with a similar personality? How many of them are happy and how many did get more or less happy over the years they are in the profession? When you have gone into law you can still decide to quit and in that context you would like to know whether being a lawyer has made you any happier. Since memory can be imprecise, this calls for systematic monitoring of your happiness. In that phase comparison with comparable people is also welcome for another reason. We typically get somewhat less happy in our thirties and for estimating the effect of your work as a lawyer

you should take this into account. So the question is then whether your loss of happiness is greater than that of comparable people who have taken a different path after school and went on to become medical doctors or teachers.

This point can also be illustrated with the analogy of how a doctor chooses the right medicine for a patient. Step one in evidence based medicine is to assess whether a medicine works for most patients and this is typically examined in large scale trials. Step two is to assess the effectiveness of the medication among particular kinds of patients, such as males and females, and increasingly in patients with a similar genetic profile. Since the effectiveness of a specific medication for a specific patient is still unsure, the doctor will monitor the patient's reactions to the medication and stop the treatment if it does not work or has side effects that are too bad. This requires systematic monitoring of patients and their reactions need to be compared with those of similar patients given the same medication for the same reason, i.e. a specific type of pain killer for a specific type of pain..

Common subjects of choice

Certain common questions arise in a number of spheres of life. Below I consider some cases.

Family

Almost all of us start our lives living in a family and, when grown up, we are faced with choices as how to live after that. Live alone or together, have children or not, keep close to one's family of origin or cut ties to the past, etc. Sometimes such things more or less happen to us, but increasingly they are becoming a matter of deliberate choice. This is for instance often the case with respect to having children or not. I will use that case as an example for this category of decisions.

In the past children were an inevitable and sometimes unwelcome byproduct of sex, but today planned parenthood is possible and a decision to stop contraception is required if one wants to have a child. As a result many couples brood over whether or not to have children, and if so, when to have them. This decision process can take years and sometimes a conclusion is not reached.

What would these people want to know? First, will having children add to their happiness or not? Then will a second and or a third child add or subtract from their happiness? What is the optimal work-life arrangement for such people? Since they cannot look into the future, they must find their answers by looking at the experiences of comparable people who made the decision to have, or not have, children in the past. So it is worth knowing the percentage of like people who became less happy after the birth of their first child, the percentage that remained equally happy, and the percentage for whom having children made them happier than they were before.

Career

Most of us have to choose how to make for a living. In deciding on an occupation we will want to know how much we will earn and how happy we will be in that job. We are mostly better informed about the former than about the latter. We can make a more educated guess about how happy we will be in this work when we have information about the average happiness of people currently working in that job.

Once we have chosen what type of work we want to do, we can also choose how much we work we want to do and that begs the question of whether we will be happier in a part-time job than in full-time work. At the end of our working life we are faced with the choice of when to stop working and at that stage we would like to know how well those who have taken early pension are doing against those who continued working until the mandatory age of retirement.

Likewise, it is worth knowing whether your working conditions will make a difference, such as being an independent entrepreneur or in paid employment and working in a large company or a small organization. When making these choices it is also helpful to know how such choices have worked out for other people, in particular for people like you.

Still another choice is whether to go for job advancement or not, and in this context it is worth knowing whether the chances for happiness are better on the upper rungs of the social ladder. Are successful people typically happier? Does occupational success buy happiness for people like you?

Consumption

We spent a lot of money during our life time, next to expenses for daily necessities a lot of money is spent on big purchases, such as on a house. Expectation about happiness also figures in such choices, for instance, people who take on a heavy mortgage to buy a big house mostly expect that life will be more satisfying in a big house than in a small one. In this context it is worth knowing whether people living in big houses are indeed happier than those living in cramped housing and how the size of your house will reflect on your happiness in the different phases of your life.

For the same reason it is worth knowing whether spending patterns make a difference to one's happiness. Are people who spend relatively large amounts on experiences, such as holidays and theater, typically happier than otherwise comparable people who would rather invest their money in property and savings?

Such information about the real long-term effects on happiness is particularly needed as an antidote to the many suggestions made in advertising.

Personal development

How happy we are depends partly on our life-ability, that is, on the skills we have to make the most of our situation; remember the top-right quadrant in [scheme 2](#). Most of these abilities can be improved to some extent. One way of strengthening one's skills is to expose oneself to challenging experiences, such as in demanding work, tough sports or tricky love affairs. Alongside this 'school of life', one can also seek professional guidance and visit a life-coach or take a course in personality development.

In the latter cases market information would be welcome. What trainings are available? How about their effectiveness? Is there any evidence for how such interventions have worked out on the happiness for people like you?

3.1.4 How compatible with other goals?

Though most people will aim to obtain greater happiness, few people aim exclusive at maximizing their own happiness. We typically have more aims in mind and look for an optimal combination of these, for instance we may want to know how to lead a life that is both satisfying and meaningful. In this context two questions arise: one question regarding whether the *means* to achieve greater happiness fit the means required to realize other goals. A second question is how well happiness *as such* goes together with other values one endorses.

An example of the first question is to what extent boosting one's happiness by buying a second home in a far away country will interfere with one's preferences for sustainable development of the world and maintaining close ties with one's family. An example of the second question is how will being more happy affect your functioning. Will it make you self-sufficient and lazy, or will it boost your social involvement? Will happiness blind you to the misery of others or will it rather enhance your empathy? What about people who have given up personal happiness for a good cause, such as running an orphanage for war children: Has

their loss in happiness interfere with the realization of other goals, such as being a good spouse and parent?

In both cases the question is whether there is synergy (trade on) between happiness and other aims or conflict (trade off). Such estimates are uncertain of course. Still it is better to consider them than to neglect them. It is mostly also better to choose one's course in life on, even incomplete, evidence, than based on the half truths thrown at us by of advertising and folk wisdom.

3.2 What organizations should know about happiness

Happiness is also an issue for organizations, such as business companies, government bodies, schools and hospitals. Happiness is typically not a primary aim of organizations, for example, business corporations will aim at profit in the first place, while the police aims to maintain law and order. Still, the happiness of employees and clients can often be instrumental in fulfilling these chief tasks and happiness is sometimes even set out as a secondary goal in some mission statements.

Happiness is a more prominent a goal in many educational organizations. Schools often claim that they prepare not only for the labor market, but also for a good life. Happiness is a main aim of leisure clubs and of care-homes; the product of care-homes for elderly people being typically to add a few not too unhappy years to their life. Below I will expand on the latter idea as an example.

3.2.1 *Could your people be happier?*

One of the first things managers of care-homes should know is how happy their clients and staff members are. This requires systematic observation, via for example, a periodical satisfaction survey. In the case of clients, their ratings of happiness should be combined with data on their longevity, so that the performance of the care-home can be expressed in happy life years added to a clients' life span since entrance.

The next question is then whether the added life-years figures could be better, for instance whether an average of five happy life-years is realistically possible among clients who entered the care home in the advanced stage of dementia. Answering of this question requires comparable data, to be obtained from comparable institutions and also from alternative settings where care is provided for comparable people.

3.2.2 *Can your organization do much about improving happiness?*

If such data, as in the above example, do show higher average happiness in comparable organizations, the next question is whether you could make your people any happier if you wanted to do so. In this context it is worth knowing to what extent the difference is in selection: Did you happen to hire many unhappy workers? Another thing worth knowing is what share of the variance in the happiness of your people is due to organizational conditions that you can change.

3.2.3 *How can you make your people happier?*

Conditions that promote happiness are evidently different across organizations and the effects will not be the same way for everyone. Still a manager aiming at greater happiness would like to know whether there are general tendencies.

Continuing on the example of care-homes for the elderly, a common question is how much care is optimal. Too little care will obviously hurt, but too much of it can result in hospitalization and bring clients from the frying pan into the fire (Becker 2006). In this context it is worth knowing how different care regimes have worked out for the happiness

and longevity of different kinds of clients. Answering this question requires systematic monitoring of many clients in many care homes.

Likewise, managers in work organizations would like to know how much employee autonomy is optimal from a happiness perspective, or better, how optimal autonomy differs across jobs and people. In that context they would like to see how things have worked out in comparable organizations.

Happiness is often associated with non-work aspects of 'work', such as company celebrations, nice buildings and days off. Managers would like to know what happiness revenues such provisions actually garner.

3.2.4 *How compatible is happiness promotion other goals of your organization?*

As happiness is not the prime aim of most organizations, questions arise about the match of pursuing happiness with more prominent organizational objectives. One question is to what extent the means required for greater happiness match with these other aims. Another question is how greater happiness, when it is realized, will work out for other organizational objectives.

Cost-efficiency is one of the main objectives in most organizations, be it for profit or for the sake of other causes. So the question arises of what the money costs of promoting greater happiness are. If greater happiness of employees is achieved with more days off and a bottle of wine at lunch, there is obviously a conflict. Yet there can also be win-win situations, such as in the above mentioned case of the old age home, where saving on care resulted in greater happiness (Becker 2006).

There are also questions about how greater happiness, when achieved, will work out for the other goals of an organization. In business organizations such a question is whether happy workers will be more productive, and to what extent happy clients will pay more. For hospitals the main question is whether happy patients recover better and for schools it is whether happy students achieve more.

There are probably no general answers to these questions, effects on and of happiness being contingent to persons and situations. This calls again for information about how things have worked out in specific situations under specific conditions in the past.

3.3 What governments should know about happiness

Happiness is also an issue at the macro level of societies, the more so where societies have developed into states in which governments engage in social engineering. As in the case for organizations, greater happiness is typically not a prime concern of state administrations. Still happiness is rising up on the political agenda, as we have seen in section 1.1 of this paper. What should governments know if they want to bring about greater happiness for a greater number of citizens?

3.3.1 *Is greater happiness in the country possible?*

Governments will hear some experts say that pursuit of greater happiness for a greater number is pointless. Alongside the arguments as to why greater happiness will not be possible for individuals (cf. 3.1.1), it is also argued that greater average happiness in nation is a mirage. A common argument is that happiness depends on comparison with compatriots, and that relative differences do not change when absolute conditions improve for everybody in the country (e.g. Brickman & Campbell 1971). The 'Easterlin paradox' (Easterlin 1974) is often explained in this way. Next there is the theory that happiness depends very much on 'national character' rooted in historical conditions, such as the many revolutions in France which have created a cynical view on life, as Inglehart (1990: 30) suggests. A first thing

governments need to know is whether average happiness in nations is immutable.

Once it is clear that average happiness in nations can change; the next step is to estimate the chances for creating greater happiness in one's own country. This requires a view on how happy people currently are in the country, which calls for survey studies of representative samples of the population. The next step is comparison, both comparisons of present day happiness with happiness in earlier times in one's country and with happiness in other countries. Governments can then see how their country is doing happiness wise on a range between the highest and lowest levels ever observed in nations.

Since most governments are also concerned about equality among their citizens, they are also interested in dispersion of happiness in their country and how that compares to inequality of happiness in other nations.

3.3.2 *Can governments do much about the happiness of citizens?*

If the level of happiness in a country lags behind the possible level, the next question is whether a government can change that situation for the better. In this context a first question is to what extent the differences in happiness are in things that are beyond the control of governments, such as a prevalence of unhappy genes in the population, poor climatic conditions or historical legacies.

If the level of happiness in a country appears to depend on things that can be changed, the next question is whether a government can bring about that change. This is the question of limits to social engineering. In this context it is worth knowing how other governments have fared in their attempts to improve happiness in their countries: Have they made any difference or have attempts to create a better society mostly resulted in the opposite?

3.3.3 *What can governments do to foster happiness?*

If a government decides to pursue greater happiness in their country, next question is where to start. In this context a government typically wants to know whether there are pockets of unhappiness in their countries, or actually, whether there is any truth in the claims about unhappiness in particular categories of citizens advanced by interest groups.

Taking a broader view, governments would like to know what the drivers of differences in happiness among citizens are: in particular to what extent these correspond with things over which a government has some control, such as income, schooling, health care and safety. Again this typically involves the sifting of competing claims of special interest groups and those presented by lobbyists. Interior struggles also call for information about winners and losers of particular policies, for example, whether emancipation of women will come at the expense of the happiness of men.

In an even wider perspective, which some governments take, questions about societal conditions for happiness arise. What is the secret of the happiest countries, such as Denmark? Is it in institutional things such as a strong welfare state? Is it in the political regime, such as interest groups having much voice? Or is it in particular policies, such as promotion of equal rights for men and women? What is the role of the well-being professions, such as psychologists and life-coaches?

3.3.4 *How compatible with other policy aims?*

As in the case of organizations, happiness is only one of the aims states pursue and typically not a very prominent one. This begs the question of how well the pursuit of greater happiness fits major policy aims, such as economic competitiveness, political democracy and social peace. This is not necessarily the case as is illustrated in Huxley's (1932) science fiction novel 'Brave New World', where great happiness was brought about using mind control and drugs (soma) and where that happiness resulted in shortsighted hedonism

In this context one question is to what extent the things required for greater happiness will also add to these causes, such as schooling adding both to happiness and economic growth. Or, how the question is put most of the time, to what extent the things governments do anyway for other causes, will also add to happiness.

Once more a further question is what will be the consequences of greater happiness: Will it foster decadence and decay, as some prophets of doom predict? Or will a happy populace rather be more productive, democratic and peace minded? These contradictory speculations call for empirical assessment.

4 WHAT WE DO KNOW ABOUT HAPPINESS

As noted in section 1, empirical research on happiness emerged in the 20th century: the first study dating from 1911 with the number of publications in the field accelerating since the 1970s. Remember [scheme 1](#). What answers does all this research provide for the questions raised in section 3, and presented in [scheme 6](#)?

Basis of information

The common way to go is to scan the literature on these issues. Yet this young body of literature has already grown too big to digest and for this reason this approach would result in ‘cherry picking’. Therefore I will take a more systematic approach and draw on the research findings gathered in the ‘World Database of Happiness’ (Veenhoven 2012).

The World Database of Happiness is a *findings archive* that consists of several *collections*. The database builds on a collection of all scientific publications about happiness, called the ‘Bibliography of Happiness’ (Veenhoven 2012a). To date this collection includes some 7000 books and articles, of which half report an empirical investigation in which an acceptable measure of happiness has been used. Indicators that fit the concept of happiness, as defined in section 2.3 of this paper, are listed in the collection ‘Measures of Happiness’ (Veenhoven 2012b).

The findings yielded by some 3500 studies that pass this test for adequate measurement of happiness are described on separate ‘finding pages’, using a standard format and a standard terminology. Two kinds of findings are discerned: *distributional findings* on how happy people are at a particular time and place and *correlational findings* about the things that go together with more or less happiness in these populations.

To date the database contains about 8000 distributional findings, of which 5000 on happiness in the general population of nations (Veenhoven 2012c) and 3000 on happiness in particular social categories, such as students or psychiatric patients (Veenhoven 2012d).

The collection ‘Correlational Findings’ (Veenhoven 2012d) contains some 15.000 research results. These findings are sorted on subject and the collection can also be searched on characteristics of the population investigated, i.e. public, place, time, and on methodological features such as sampling and measurement. Though far from complete⁶, this is the best available source on conditions for happiness at present.

Dark and blank spots

The current body of knowledge on happiness contains answers to some of the questions raised in section 3, but not to all. The data fall short on most questions and are missing entirely for some of them. An overview of data availability is presented in [scheme 7](#), the richer the information, the darker the color of the cells and blank cells indicate a lack of any data.

Below I will hark back to the questions discussed in section 3 and consider what the available research findings tell about the answers.

4.1 Evidence base for private choice

Most of the available research findings concern the micro level of individuals and provide information about how happy people typically are, how much they differ in happiness from

⁶ To date (June 2012) the collection of distributional findings in nations is almost complete. The collection of correlational findings is fairly complete up to the year 2000, but a lot of findings published since are still waiting to be entered.

each other and what things go together with more or less happiness. The bulk of this research is cross-sectional, which often leaves us with ‘chicken or egg’ questions. There are also a growing number of longitudinal studies that provide indications about the direction of causality. What answers do these findings provide to the questions mentioned in section 3.1?

4.1.1 *Could one be happier?*

Is the pursuit of greater happiness illusory as the claims of ‘set-point’ and ‘hedonic treadmill’ suggest? The data tell another story; follow-up studies show considerable changes in the happiness of individuals over time, in particular in the long term⁷. Change is linked to things that happen in people’s lives, for instance, most people get happier when they find a spouse and become less happy if that spouse dies. A lot of people get happier and a lot become less happy over time. Happiness tends to rise in the third stage of life and to drop in one’s final years before death⁸. So happiness can apparently change.

How happy do people say they currently are? Survey studies show considerable differences in responses varying from ‘extremely unhappy’ (0) to ‘extremely happy’ (10). The distribution of responses in the Netherlands is presented in [scheme 8](#). In this case about 15% of the respondents say they are ‘extremely happy’ (rating 10) and these people are unlikely to become substantially happier, rather some loss of happiness is to be expected. Yet all the other respondents rate themselves below the maximum and could improve their happiness, at least in theory. In practice the chances for greater happiness are constrained by genetic and situational factors. Not everybody can get to a 10. So the question is whether greater happiness is possible for a person like you.

One clue then is, how happy one has been in the past, if one has been happier before, greater happiness in the future is at least in one’s repertoire. Retrospective studies show such cases, although most people think that they are having the best time of their life. However, recollections of earlier happiness are not very accurate and less so, the longer in the past. A better alternative is to make repeated assessment of one’s happiness over the years, and this can now be done using happiness-tracking tools, such as the HappinessIndicator⁹.

Another indication of one’s possible happiness level is found by comparing oneself with similar people, if these are happier than you are, there is a good chance that you can also get happier. Data for such comparisons are available from survey studies and are being used in some self-help websites. Comparison is mostly limited to people of the same age, sex and education. A more refined comparison is possible using the above mentioned HappinessIndicator website, on which visitors enter more information, about such things as their health, habits and personality¹⁰.

This all provides no definite answer, but allows an educated guess.

4.1.2 *How much can we do about?*

Set point theory has a point in that happiness depends, at least partly, on genetic endowment; babies born with a healthy body and an extraverted disposition have a better chance of leading a happy life. In this respect happiness is comparable to health, which is also partly determined by physical make-up and partly by health behavior. How much of the differences in happiness as shown in [scheme 8](#) can be attributed to genetics? Studies among twins

⁷ World Database of Happiness, [Findings on Change in Happiness](#), See H2.2.2

⁸ World Database of Happiness, [Findings on Happiness and Age](#)

⁹ <http://www.happinessindicator.com> The HappinessIndicator is a joint project of Erasmus University and VGZ health insurance company. The original Dutch version is available at <http://www.gelukswijzer.nl>

¹⁰ These self reports are strictly confidential.

suggest some 30%¹¹. Such percentages are observed in rich nations, where external living conditions are good (top-left quadrant in [scheme 2](#)) and happiness therefore is more dependent on internal life-abilities (top-right quadrant in [scheme 2](#)). The share of heritability is probably lower in developing nations where happiness depends more on more variable strokes of luck.

Mere good or bad luck will also determine happiness in developed nations, where people are still vulnerable to misfortunes, such as illness, unemployment and bereavement. The course of life-events depends to some extent on ourselves, some people get in trouble repeatedly, while others seem to enforce fate. Headey and Wearing (1992) have separated these effects using a panel study in which happiness, life events and personality were followed over time. They estimated that about 15% of the differences in happiness among Australians are due to blind luck.

Together this explains about half of the differences in happiness and there a claims that we are the smith of the other half. Lyubomirsky (2008) even speaks of 60% of our happiness being in our control. This seems to be too optimistic to me, since we are dealing with unexplained variance.

Still there is good evidence that happiness depends on various capabilities we can willfully develop and that people who take active control of their lives are systematically happier than those who do not. It is at least plausible that happiness also depends on the adequacy of choices made in life, in particular in modern multiple choice societies. Due to a lack of data on this I can only make a guess as to how much of the variance in our happiness is really in our own hands. My guesstimates are presented in [scheme 9](#).

4.1.3 *What to choose?*

Informed choice requires that we know a) how things generally work out for the happiness of people in general, b) how they have worked out for the happiness of people like us, and c) how the choice is currently working out for our own happiness (cf. section 3.1.1). What do we know about these things?

A lot of research has been done on conditions for happiness of people in general. Most of this research is cross-sectional and leaves us with chicken or egg questions, but there is also a growing body of evidence on things that have a causal effect on happiness. Some examples will be presented below.

There is also some information about conditions for happiness in particular categories, such as males and females, young and old, psychiatric patients, adolescents and university students¹². Specifications by personality and preferences are scarce as yet, specifications by genetic profile non-existent. Split-ups are typically limited by sample size and as a result our current knowledge provides no real answers to the question of how a particular choice has worked out for the happiness of people ourselves.

Evidently, the research literature does not give an answer to how the choices you have made are currently working out for your personal happiness. However, tools have been developed that can be used to track your happiness and compare it with that of comparable people. See section 5.1.1 for more detail.

I will now review some of the data on the happiness of people in general that are relevant for individual choice. I follow the domains of choice discussed in section 3.1.1. In each case I summarize the results in a table, in which data availability is again indicated by shaded cells and the direction of association by + or – signs. The right columns contain only indications of

¹¹ World Database of Happiness, [Finding on Happiness and Happiness of Siblings](#), See F1.6.2.4

¹² World Database of Happiness, [Happiness in Publics](#)

data availability, since all the variations cannot be summarized in one cell.

Family

A major choice in life is whether to seek the company of a spouse or to live alone. An attendant choice is whether to have children or not. Some research findings on the consequences for happiness are presented in [scheme 10](#).

Marry?

There is much publicity about the joys of singlehood, but research findings show positive effects on happiness for matrimony. Married people tend to be happier, even if one takes into account that people who have an advantaged background have better marriage chances. Follow-up studies show that marriage boost happiness, though much of the gain melts away over the years. Still no marriage appears to be better than a bad marriage and divorcees become somewhat less unhappy once they are divorced relative to how happy they were before. Remarriage is typically followed by a rise in happiness. Men seem to benefit somewhat more from marriage than women do. Though marriage is a mixed blessing, research has not yet identified categories in which the disadvantages prevail. Even neurotics appear to be happier living in a relationship than alone.

Children

Mass media typically depict the joys of parenthood, but research findings are less positive. Childless couples appear to be somewhat happier than couples with children and follow-up studies show a causal effect. Though the birth of the first child is attended with a peak, happiness declines soon after and recovers only when the last child leaves home. Yet there is considerable variation: the dip is deepest for young parents and highly educated mothers. Low educated full-time mothers tend to become happier, as do late parents. There are indications of positive effects on the longer term, very old people with children appeared to be somewhat happier than elderly without and the presence of children seems to add at least to the happiness of grandparents.

Work

Working life also involves several big choices, such as how much one will work, in what profession and in what conditions. Some food for informed choice is presented in [scheme 11](#).

Work or not?

The prime choice is to whether engage in paid work at all. This choice presents itself typically to women, when they become a mother and also to those people who cannot cope well with the demands of work.

Research on the happiness of working mothers is inconclusive; some studies find them slightly happier than home mothers are and other studies find them slightly less so. This pattern appears in cross-sectional studies and in longitudinal ones. Apparently, the balance of advantages and disadvantages differs across persons and situations and these contingencies are not yet known.

Research on the effect of unemployment is more conclusive at first sight. Unemployed people are less happy than the employed, even when their lower income is taken into account. Follow-up studies show a drop in happiness when people fall unemployed and a rise of their happiness when they become re-employed. Still recovery is not complete, which has been interpreted to be the result of ‘scarring’. Unemployment does not hurt everybody equally much and a sizable part of the long-term unemployed feels as well as the average employed person does.

Work how much?

A next choice is how much one will work and in this context questions arise such as whether to work full-time or part-time and to retire late or early.

Studies among working people find typically greater happiness among full-time workers than among part-time workers, and change from part-time to full-time tends to go with a small rise in happiness, while a reduction of working hours is often attended with some decline of happiness.

Cross-sectional studies find lower happiness among workers who retire early than among people who continue working until the standard pension age. Yet follow-up studies show a rising happiness among early retirees, which halves the distance to their working age mates.

Make a career?

Happiness is often equated with success, success in work in particular. Cross sectional studies show higher happiness among people working in well paying and prestigious jobs, such as among managers and professionals. Yet the few available follow-up studies do not show an effect of job advancement over the life-time.

What kind of work?

Cross-sectional studies show modest differences in average happiness across vocations. As noted above, managers and professionals tend to be the happiest, possibly because of the autonomy allowed in these occupations. The data do not show much difference in average happiness across blue and white collar jobs. Artists appear to be less happy than average, but due to a lack of longitudinal data we do not know whether this is a causal effect of the profession. Possibly this vocation attracts unhappy people, who are happier as an artist than they would have been as an accountant.

What work conditions?

Cross-sectional studies show lower happiness among self-employed people than among wage workers. We do not yet know to what extent this is a causal effect of self-employment, due to a lack of follow-ups of people who change from one condition to the other. Cross-sections also show somewhat greater happiness among people working in the public sector than in the market sector, and again the direction of causality is as yet unclear.

Studies among wage earners show a correlation between happiness and pay, but little correlation with secondary work conditions, such as pension schemes and child care.

Consumption

Spending money also requires that one makes choices; one is how much to spend, another is what one should buy, for example, should one spend one's money on durables or on experiences? [Scheme 12](#) summarizes the scarce findings.

How much?

Cross-sectional studies show greater happiness among people with savings than among people with debts and one study suggests that simplifiers are happier than big spenders. Yet studies on consumption in particular fields show typically positive correlations with happiness.

On what?

People who possess a car, a house and a garden tend to be somewhat happier than people who

do not have these goods. The same holds for the possession of luxury goods, such as a boat. Owing plenty of household equipment and electronic devices is also correlated with happiness. The causality is unclear as yet.

Likewise spending on experiences, such as eating out and going to the theater goes with greater happiness. Follow-up studies on holiday travel show uplift during the trip, which disappears when back home.

Personal development

Schooling is compulsory in modern countries, but we can choose how long to stay in school beyond the legal minimum and after elementary school we can also choose between educational specializations. Later in life we can also take additional courses and training. What will that do on our happiness? Some research findings worth considering are presented in [scheme 13](#).

How much education?

Adults who have spent more years of their youth in school tend to be happier than age mates who spent less. Yet the ones that reached the highest level of education are not always the happiest, some studies showing the highest average happiness at medium levels of education. Control for income and occupational status, reduces the correlations substantially and sometime even suggest a negative effect of school education as such. However, the causality is unclear as yet, due to a lack of studies that have followed people over their educational careers.

What educational specialization?

Comparison of the few available findings on this subject show minor differences in average happiness across adults who have followed different specializations. The differences vary across educational level and no clear pattern appears.

Take a psychological training?

Alongside to school education one can take various trainings and therapies for improving wider life abilities. Most such trainings are aimed at dealing with specific problems, such as stress and marital problems. The effects of such courses on happiness have been assessed in some cases and appear to be small or non-existent. Next there are various courses that aim at greater happiness in the first place and the few effects studies on these also show meager results. Probably more such disappointing research findings are buried in file drawers.

So much for the few studies among ‘normal’ persons. Some of the trainings for mental patients seems to add more to happiness.

4.1.4 *How compatible is greater happiness with other things one values?*

Fit of happiness with other things of worth can be evaluated in two ways: by the degree to which the means used to achieve greater happiness match up with other values we endorse and by the degree to which happiness-as- such ties in with these things, once achieved (cf. section 3.1.4).

Means to happiness

Several of the above mentioned means used to achieve greater happiness fit well with most other things we value. Pursuing happiness through a good marriage fits widely held family values and enhancing one’s happiness by engaging in hard work matches a protestant work ethic. Yet there are also incompatibilities, such as voluntary childlessness leading to population decline and lavish consumption harming the environment. Generalization on such

effects is not possible, due to variability across situations and value priorities. Data availability also sets limitations, where happiness is concerned, and more so, in the case of less tangible notions of the good such as ‘solidarity’, ‘equality’ and ‘justice’. Still, in particular cases, the available findings on conditions for happiness allow for a more or less educated guess.

Happiness-as-such

It is easier to foresee the effects of happiness by itself. Follow-up studies on happiness have documented several beneficial effects. Contrary to the notion of the happy as passive ‘lotus eaters’, happiness appears to foster activity and creativity. This is one of the reasons why happy people tend to work a lot. Contrary to the notion of happy people as ‘contented cows’, happiness is found to stimulate political interest and activity, happy citizens are better informed and less extreme than their less happy compatriots. There is also good evidence of the positive effects of happiness on health and longevity. The findings on the beneficial effects of happiness are summarized in Fredrickson’s (2004) ‘broaden and build theory’, which holds that positive affect expands one’s behavioral scope, which in the long term results in greater resources

A possible negative effect of happiness would seem to be that happiness gives rise to unrealistic optimism and consequently to more risky behavior. There is indeed evidence that the happy worry less about minor things, but as yet no evidence for them to disregard major problems of life. Neither are there indications of happiness leading into reckless behavior. Happy people, for example, appear to use safety belts more often when driving a car.

4.2 Evidence base for corporate choice

As yet we know very little about happiness in organizations. There is a wealth of data on job-satisfaction in work organizations but hardly any comparable data on life-satisfaction. Likewise many care-homes gather information about their client’s satisfaction with specific products, such as food, nursing and entertainment, but typically not about their client’s satisfaction with life as a whole. An overview of the scanty findings is given below.

4.2.1 *Could your people be happier?*

Since individuals can get happier (cf. section 4.1.1), the average happiness of employees or clients of an organization should also be open to improvement. However, that may not be possible in any organization. One reason could be that the organization is at the maximum possible level of happiness already, for instance that an average of more than 7 is not feasible in a work organization and an average greater than 5 not possible among the clientele of a care home. As yet we do not really know what level of happiness is possible in what kinds of organizations.

4.2.2 *How much of our happiness rests in an organization’s control?*

The degree of control will obviously depend on the kind of organization, control is evidently high in ‘total institutions’, such as prisons, psychiatric hospitals and nursing homes.

The case of prisons illustrates that point, a main goal of prisons is punishment and prisons appear to do well on that goal, prisoners being much less happy than the average citizen and even unhappier than psychiatric patients are. Though criminals may not be the most happy anyway, they are unlikely to have been equally unhappy before confinement.

In the case of nursing homes, the organizations are supposed to make people less miserable than they were before entrance, but I do not know of any studies on the effects of such transitions on the happiness of clients.

Most organizations are less ‘total’ than prisons and nursing homes are and their effects on the happiness of their members will be typically smaller, both because people spend less of their time in the organizational context and because they can quit.

Organizational conditions are part of the livability factors in [scheme 2](#), which together account for some 25% of the variance in happiness within developed nations (cf. [scheme 9](#)). Organizational conditions will be only part of this and are therefore unlikely to account for more than 5% of the variance.

4.2.3 *How can the organization add to the happiness of its people?*

There is superabundance of studies on job-satisfaction in work organizations and also quite a lot of studies on client-satisfaction in service organizations. These findings are often generalized to satisfaction with life-as-a-whole, as appears in Warr’s (2007) book ‘Work happiness and unhappiness’, which is mainly about satisfaction with work. Though job-satisfaction and life-satisfaction are related, both top-down and bottom-up, they are not quite the same and can relate independently to organizational conditions as appears to be the case with non-monetary earnings. The few available findings on the relationship between organizational conditions and happiness are summarized in [scheme 14](#).

The one study that considered organizational size found no correlation, which does not suggest that small is more beautiful happiness wise. Autonomy stands out as a condition for happiness in all three kinds of organizations and in section 4.3.3 we will meet a similar pattern at the nation level.

4.2.4 *How well does pursuit of happiness fit in with further aims of the organization?*

A general answer to this question is not possible, since organizations pursue different aims. Below I will distinguish between organizations that aim to produce market goods, such as factories, and organizations that provide human services, such as care homes and schools.

Production organizations

Profit is the prime aim of most such organizations, so the question is whether investing in the happiness of the companies’ personnel will be cost effective.

One aspect of that question is whether the means for producing greater happiness tie in well with other profitability requirements. On this issue the only indication we have is that worker autonomy tends to add to the worker’s happiness. This begs the question of how much worker autonomy is optimal for the functioning of the organization, which will vary across persons and situations.

Again we can say more about the effects of greater happiness as such, once realized. Since happiness boosts activity, creativity and solidarity (cf. section 4.1.4), it is likely to add to the profitability of organizations that need such things most, probably software houses more than post offices.

Service organizations

Happiness is an important goal for many service organizations and in particular for care homes. Money is typically short in this industry, so these organizations also face the problem of achieving happiness at a low cost. There seems to be much tacit knowledge on what works best for what kinds of clients, but as yet no hard evidence.

Again happiness in itself is likely to fit wider goals of care, such as enhancing client’s autonomy but once more this is a promise rather than established fact.

4.3 Evidence base for public choice

There is a lot of research on happiness in nations. As notes in the introduction to this section 4, some 5000 findings on average happiness in the general public in nations are gathered in the collection ‘Happiness in Nations’¹³ of the World Database of Happiness (Veenhoven 2012c). These distributional findings form the basis of some 500 correlational findings on societal conditions for happiness that are bunched in the collection ‘Correlational Findings’¹⁴ of the World Database of Happiness (Veenhoven 2012d). Do these data provide a basis for informed public choice on matters of happiness? Let us again consider the four steps.

4.3.1 *Could citizens be happier?*

Several men of learning have denounced the pursuit of greater happiness of a greater number as an illusion (cf. section 3.3.1). What do the data tell us? Firstly, that there are huge differences in average happiness across nations, secondly that happiness has changed considerably in some countries and thirdly that happiness has risen slightly in most countries of the world over the last 40 years.

Great happiness of a great number of citizens is possible

Most people are happy, at least in developed countries. In [scheme 8](#) we have seen the distribution of responses to a question on happiness in the Netherlands; the average score on that 0-10 scale was 7.6. Even higher average scores are observed in 14 other nations, with the highest of all in Denmark, where average happiness is 8.3. The most recent world-map of average happiness in nations is presented in [Scheme 15](#).

Greater happiness of a great number is also possible

Happiness is assessed periodically using identical survey questions in several nations. This allows comparison over time within nations. Three examples are presented in [scheme 16](#). These data show that happiness is not immutable. Average happiness declined in Russia at the time of the Ruble-crisis and improved a lot in the following ten years. Note that average happiness has also improved in Denmark, which is the happiest country of the world. So gains are possible even at the higher levels. Denmark may now be at the maximal possible level of happiness, if so, there is clearly considerable room for improvement in all other countries of the world.

Happiness has risen in most nations

An analysis of the available time-series on average happiness in nations shows a gradual rise in most nations (Vergunst and Veenhoven). This rise appears on all kinds of survey questions used.

Contrary to the Easterlin paradox, there is a correlation with economic growth. Not only have both happiness and GDP gone up in most countries over the last 40 years, but the rise in happiness also tends to be greater in the countries where GDP has increased the most. The effect sizes are small however and only become visible when longer series are considered. These data were not available when Easterlin’s ‘paradox’ was launched in 1974.

4.3.2 *To what extent is greater happiness in the hands of governments?*

The world map in [scheme 15](#) shows wide differences in average happiness across contemporary nations. Part of these differences may be due to factors which governments

¹³ World Database of Happiness, [Happiness in Nations](#), [Ranks Average Happiness in Nations](#), [Trends Average Happiness in nations](#)

¹⁴ World Database of Happiness, [Findings on Happiness and Conditions in Nation](#)

cannot control such as climate and genes. There is good evidence for an independent effect of climate on average happiness in nations; the hotter, the less happy (VandeVliert et al. 2004). There are also indications of genetic factors, such as allelic frequency of the serotonin transporter functional polymorphism (5-HTTLPR), which seems to have co-evolved with the individualism/collectivism of cultures and may affect happiness directly and indirectly (Chiao & Blizinski 2010). These effects seem small however and dwarf in comparison with the societal determinants of happiness, which, as we will see in the next section, explain some 75% of the variation of average happiness across nations.

4.3.3 *What can governments do to enhance happiness?*

The first analyses of societal conditions for happiness (Easterlin 1974, Veenhoven 1984) drew on data for a handful of nations, mostly western nations. Today we have data on more than 140 nations, which cover some 95% of the world's population. Cross-sectional analysis of these data shows strong correlations and together the societal variables used explain about 75% of the variance in average happiness across nations. Data for trend-analysis are less abundant as yet.

The key findings on societal correlates of happiness are presented in [scheme 17](#). All these findings concern things that governments can influence and most of these things are on the governments agenda already.

Economic development

People live clearly happier in rich nations than in poor ones, the zero-order correlation with real income per head being +.65. About half of the correlation remains after control for other societal characteristics, such as freedom and rule of law. Such controls may underestimate the real effect of the economy, since freedom and justice depend to some extent on economic development.

The independent effect of economic affluence on happiness is not yet fully understood. In part it is probably in the benefits of material comfort, but the correlation may also reflect a positive effect on happiness of economic activity as such, happiness being both a matter of work for pence and play.

As was noted above, there is also some correlation between economic growth and happiness, though there are many exceptions to this pattern. In spite of considerable economic growth since the 1960s, the Japanese have not got any happier. In the post communist countries of Eastern Europe economic (re)development was initially accompanied by a drop in happiness during the 1990s until the expected rise in happiness manifested in the early 2000s. A similar V-pattern on a larger time-scale seems to be happening in China.

So far the data do not suggest that zero-growth will make us happier.

Freedom

Average happiness is also higher in nations where choice is least restricted. This manifests in economic life, in political life and in private life. The effect of economic freedom on happiness is greater in developing nations than in developed ones and the effect of political freedom greater in the latter than in the former. Trend data on freedom are not available as yet.

Governments can enhance freedom by lessening restrictions, such as those on starting a new business or founding a political movement. They can also enhance freedom by strengthening a citizen's capability to choose. For more detail see Veenhoven (2008b).

Equality

Surprisingly, there is no correlation between average happiness and income inequality in

nations. This pattern of non-correlation also appears in different parts of the world (Berg & Veenhoven 2010). The disadvantages of income inequality emphasized by the left seem to be balanced by the benefits claimed by the right.

There is a strong correlation between happiness and gender-equality in nations, the more emancipated the women in a country are, the higher average happiness. A trend analysis by Stevenson & Wolfers (2009) suggests that the gain is not found in the feminist advance guard.

Security

Safety is another condition for happiness over which governments have control. Fighting crime is typically high on the agenda, violent crime in particular. Yet the data show little correlation with murder rate, while white collar crime (corruption) appears to affect happiness more negatively. Likewise rates of death due to accidents correlate stronger with average happiness in nations than homicide rates do. This calls for more research into these hidden happiness leaks.

At first sight there is a positive correlation between average happiness and social security in nations, both when measured in terms of entitlements and in expenditures. Yet the correlation disappears when GDP is controlled. People appear to be no happier in generous welfare states than in equally rich nations where Father State is less open handed. In a recent comparison over time I found no corresponding change in happiness in nations that had cut spending on social welfare or had expanded their spending (Veenhoven 2011). This is not to say that the welfare state should be abandoned for the sake of happiness, rather the data imply that this issue is happiness neutral.

Institutional quality

The happiness of citizens also depends on the quality of various institutions in their society, such as their educational system, health services and their juridical system, and, what is particular important, is the technical quality of government. Are the civil servants competent or corrupt, are rules transparent? Good governance is the strongest correlate of average happiness, slightly stronger than economic development. One of the reasons is probably that good governance makes life more predictable and that a well organized society allows individuals more choice. More detail can be found in Ott (2010, 2011).

Promoting institutional quality is again something that governments can do, and this is something beyond dispute.

Modernity

Much of the above mentioned conditions are part of a wider pattern of 'modern' society. Consequently we also see positive correlations with other indicators of modernity, such as urbanization, education and globalization. Modern societies result from an ongoing process of 'modernization'. Prophets of doom associate modernization with increasing misery, but the data show a positive correlation with happiness. We now live longer and happier than ever before in human history and both longevity and happiness are still on the rise. One of the reasons for this seems to be that modern (post)industrial society fits human nature better than traditional society, which roots in the agrarian phase of societal development (Veenhoven 2010).

The least governments can do is to acknowledge this fact and to put the brake on restorative tendencies. Governments can also encourage modernization, as most governments in fact do on various fields, such as research and development aid. Modernization is to some extent an autonomous process, but governments can surf on its waves.

4.3.4 *How compatible is happiness promotion with other aims of public policy?*

This would be the end of the story for a radical utilitarian, who is only interested in maximizing the level of happiness in a country. Yet governments pursue multiple goals, so the question is how well then pursuit of greater happiness will fit their wider policy mix. Again I will consider the match of both means to happiness and achieved happiness.

Means to greater happiness

The means to happiness mentioned in [scheme 17](#) are all on the political agenda, both because they are deemed desirable in their own right and because they are instrumental to other policy aims. Even if economic growth and social equality would not add to happiness, most governments would still pursue these goals, if only for the sake of social stability.

In most of the cases there is synergy: continued pursuit of economic growth, gender equality and rule of law will also add to the cause of happiness. Some of the common aims do not add to greater happiness, as is the case with income equality and social security. Yet these things do not detract from happiness either, so there is no conflict.

Obviously, there are also conflicts, for instance when war and the aim of national security required sacrificing happiness. A less dramatic and more recent example is the general raise in the pension age in the developed world, which is likely to lower the happiness of a considerable number of people, since our current pre-pensioners were found to become happier when they stopped working¹⁵.

Happiness as such

Once achieved, happiness seems to fit well with most of the goals that governments pursue in developed nations. Happy citizens are economically more productive and politically more responsible. They even seem to cheat less on taxes (Güven 2009). Happiness also adds to health, and the common goal of 'Health for all', matches well with the pursuit of 'Greater happiness for a greater number' (Veenhoven 2008c). Likewise happiness adds to the formation of 'social capital', happiness strengthening intimate networks and facilitating participation in voluntary organizations.

¹⁵ World Database of Happiness, [Findings on Happiness and Retirement](#), see R3.1.2

5 WHAT WE DO NOT KNOW YET, BUT CAN GET TO KNOW

We know now a lot more about happiness than we did when I entered this field in the 1970s. Still there are a lot blank spots, as we have seen from [scheme 7](#), and in more detail on the [schemes 10, 11, 12, 13, 14 and 17](#). Now that this strand of research has matured, it should not be too difficult to fill these gaps. We have passed the teething troubles of conceptualization and measurement, the subject is acceptable for funding agencies and there are a lot of good and interested researchers around. What topics deserve priority? Which methods promise the most relevant results?

5.1 What?

A look at [scheme 7](#) shows us that as yet we know very little about happiness in organizations. So this is an obvious priority. One of the problems in this domain is the absence of good dataset. Our knowledge on happiness at the micro level of individuals and at the macro-level of nations is built largely on welfare surveys, instigated in the context of marketing research for welfare services. As yet, there is no such source of data for the meso-level of organizations. A program of comparative happiness monitoring in organizations would be most welcome.

The following blank spots strike the eye in each of the separate domains.

Information for private choice

Looking back at [schemes 10, 11, 12 and 13](#) a first notable thing is the many blank spots in [scheme 12](#). We spend considerable amounts of money in consumption, but are largely in the blind to the effects of this spending on our happiness. Due to this lack of sound information on how spending affects our happiness, our choices often depend too much on advertising, which stimulates producers to invest in marketing rather than in product improvement. So this is a priority topic, in particular for happiness economics.

The many blank spots in [scheme 13](#) mark a variation of the above. The life coaching business claims to improve our happiness, but cannot provide solid evidence of effectiveness. This is not only to the disadvantage of their clients, but in the end it is also detrimental for the sector. Once there is good evidence of effectiveness of life coaching, the market for such services will probably triple.

In the case of education there is a striking lack on information of the effects of educational specialization on happiness, which is akin to the lack of information on the effects of occupational choice, noted in section 4.1.3. Again an industry falls short; there is quite a business in vocational guidance, that is not backed up with sound knowledge on the consequences of making these choices for this valued outcome.

We lack specific data on all topics at the meso level, the available data only provide information about effects on the average person. We have little to no data on how choice will work out for particular kinds of people.

Information for corporate choice

[Scheme 14](#) stands out because of its many blanks. Only a few topics have been addressed and analyses in this field are rudimentary. There is an absence of follow-up studies. For the time being, managers must make do with the available information on job-satisfaction and they remain unaware of organizational conditions that affect happiness through other channels.

Information for public choice

We are pretty well informed about how happy people are in nations and what conditions

foster the happiness of citizens. Yet our information on the latter is limited to tangible things on which comparable international statistics are available. We are largely blind to the effects of cultural factors such as the quality of programs on TV and forms of socializing. Possibly this is a clue to the relatively high levels of happiness found in Latin American countries.

Most of our knowledge about societal conditions for happiness is based on cross-sectional analyses. Now that the data time-series are growing, we can get a view on effects of changes in societal conditions on change in happiness, as has already been done for the cases of economic growth and social security.

Though most societal conditions for happiness seem to be universal (Veenhoven 2010a), we must keep an open mind for variations across different kinds of nations, such as the relatively great impact of economic freedom in poor nations. Such split-ups become feasible now that we have data on almost all countries of the world.

5.2 How?

What methods are required to gather this missing knowledge about happiness? What kind of data do we need? What approaches should we use to analyze the data we obtain?

Panel studies

In [schemes 10 to 14](#) we saw many blank spots in the column of follow-up data. We badly need panel studies, since these are required if we want to separate cause and effect. The challenge is not to start new panels that focus primarily on happiness, but rather to get happiness included in existing panels, such as follow-up studies on health and nutrition. At present, many publications in happiness economics draw on one single question on life-satisfaction that was wisely incorporated in the German Socio Economic Panel (GSOEP) in 1984. We need to expand our reach in this field

Electronic diaries

Most of the now available information on happiness has been gathered using questionnaires on which people report how happy they feel most of the time and what they usually do. In follow-up studies the same questions are repeated at intervals of a month or a year. This method is vulnerable to various recollection biases, and it also misses out much information about the individual's daily life. In the case of work, we may get an estimate of the hours worked and on how well the respondents gets on with colleagues, but not of the things that happen during the day and how these affect daily mood.

One of the ways to deal with these problems is to use time diaries in which respondents also record how well they feel. An example is the earlier mentioned Happiness Indicator¹⁶ (Oerlemans et. al 2012).

This tool was designed to allow respondents to compare their own happiness with the happiness of comparable people, following the information demand described in section 3.1.1. It is also suited for long-term follow-ups and the ultimate goal of the project is to gather information about how major life choices, such as having children or not, work out for the happiness of different kinds of people. The method is also suited to monitoring happiness in organizations, and for following the happiness of students long after they have left school.

Since such diaries are kept on the internet, using a PC, tablet or I-Phone, the costs of data gathering are very low. Yet this method requires considerable investment in motivating participants.

¹⁶ <http://www.happinessindicator.com>

Experiments

The best way to establish causality is to do experiments. Laboratory experiments are not so possible on the subject of happiness; since data collected in this manner will limit to transient mood (upper left quadrant in [scheme 3](#)). Still, natural experiments are possible as in the case of determining if therapies work, when treated and control groups are compared. Natural experiments are also possible in organizations. The above mentioned happiness tracking tools will be useful for such purposes, in the case of the HappinessIndicator it will also be useful because matched control groups can be selected from the wider pool of participants.

Focus on specification and contingencies

Analyses in happiness research are often focused on isolated particular effects, such as the effect of income on happiness, net of things like education, marital status and health. Though interesting for some purposes, data of such ‘pure’ effects is this is not what people really need when making choices. What they want to know is whether more or less income is likely to make them happier, given their situation, such as, their poor education, their second marriage and their health condition. To serve that demand, data split-ups are required rather than the distillation of pure effects. Such specifications set high demands on sample size. An example of a dataset that is large enough for detailed specification is the ‘Wage Indicator’¹⁷.

Likewise, the organizations are getting little wiser with respect to general tendencies. What they want to know is how things have worked out in similar settings and what are the contingencies involved.

Accumulation of knowledge

Lastly there is the problem of keeping an overview of the growing pile of research findings. The greater the pile, the more information disappears under the surface. Literature reviews become more selective and cherry picking becomes more common. One solution to this problem is specialization, which means that some people get to know more about less. This is not the best way to obtain a well assessable body of knowledge, such as that required for the pursuit of happiness at all three levels discussed in this paper.

An alternative of my own making is the World Database of Happiness (Veenhoven 2012), used in section 4 of this paper. This ‘findings archive’ stores standardized descriptions of research findings that can be sorted in many ways, such as on subject, method and population. As mentioned in the introduction to section 4, the database contains currently some 5000 distributional findings and 15.000 correlational findings and provides, as such, a good basis for research synthesis.

This approach is becoming even more fruitful now that the stream of research findings on happiness is growing exponentially (cf. [scheme 1](#)). Yet this growth also makes it more difficult to keep the database up to date. For that reason I welcome colleagues willing to take responsibility of a particular part of the collection, such as a particular subject like ‘Happiness and Poverty’ or research on happiness in a particular country such as ‘Happiness in Chile’. Information on the role of an ‘associate’ is available in section 7.2 of the latest paper on this project (Veenhoven 2011b).

¹⁷ <http://www.wageindicator.org>. Dutch version: <http://www.loonwijzer.nl>

6 CONCLUSIONS

Empirical research on happiness has taught us that greater happiness is possible. Most individuals can become happier than they are and average happiness in nations can also be improved. Probably the same holds for happiness in most organizations.

Research has also taught us that obtaining greater happiness is, for a great deal, in our own hands, our happiness depends on conditions we can improve and on abilities we can develop. This applies both for individuals and institutions.

Research is less conclusive on how greater happiness can be achieved. The available research findings provide strong clues for public choice, but as yet less so for individual choice and there is little data for evidence based organizational choice.

Consequently we are still largely in the dark about how well the means required to obtain greater happiness fit other things we value. Still we do know that greater happiness, as such, typically fosters wider worth.

Future research should prioritize under-researched topics, such as the effects of consumption and occupational choice on happiness. We need follow-up studies to identify causal effects and large samples to specify how choices work out for particular kinds of people. Natural experiments are required to establish causal effects. As well as gathering more data we should invest in organizing the available research findings and making these findings easily available.

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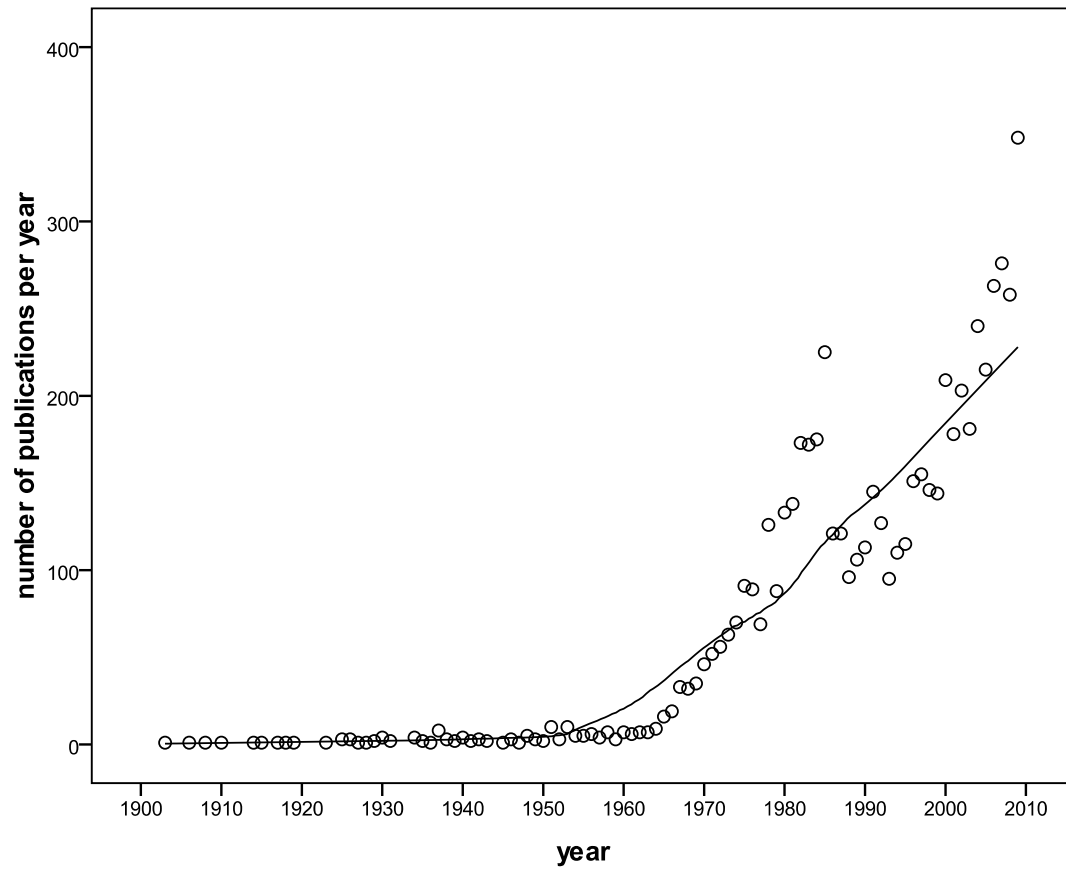
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Scheme 1

Scientific publications on happiness

Source: Bibliography of Happiness (Veenhoven 2012a)

Scheme 2

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>	Usefulness of life	Satisfaction with life

Source: Veenhoven 2000

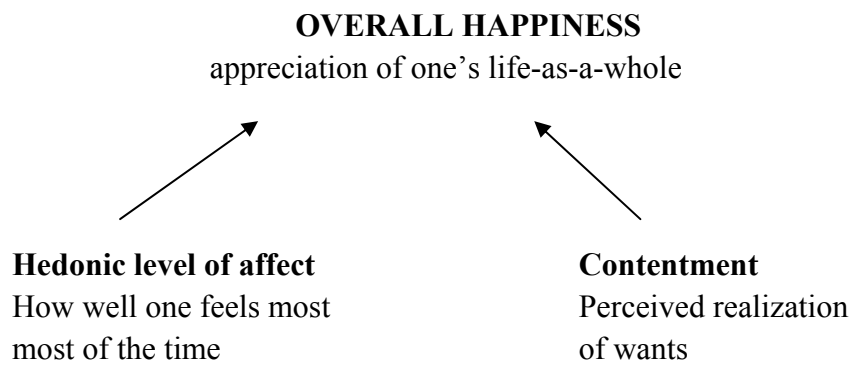
Scheme 3

Four kinds of satisfaction

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

Scheme 4

Overall happiness and its components



Source: Veenhoven (1984, 2008)

Scheme 5

Some currently used questions about happiness

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)
 - 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 nothing¹⁸
-

¹⁸ 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 new.

Scheme 6

What we SHOULD know about happiness

Questions	Answers required for informed choice of..		
	<i>individuals</i>	<i>organizations</i>	<i>governments</i>
Can we get happier?			
How happy are we?			
How far-off from what is possible?			
To what extent is happiness in our control?			
How much a matter of genes?			
How much a matter of luck?			
How much matter of choice?			
What to choose for greater happiness?			
Improve what conditions?			
Develop what capabilities?			
Engage in what activities/strategies?			
How compatible with further goals?			
Means to greater happiness			
Happiness-as-such			

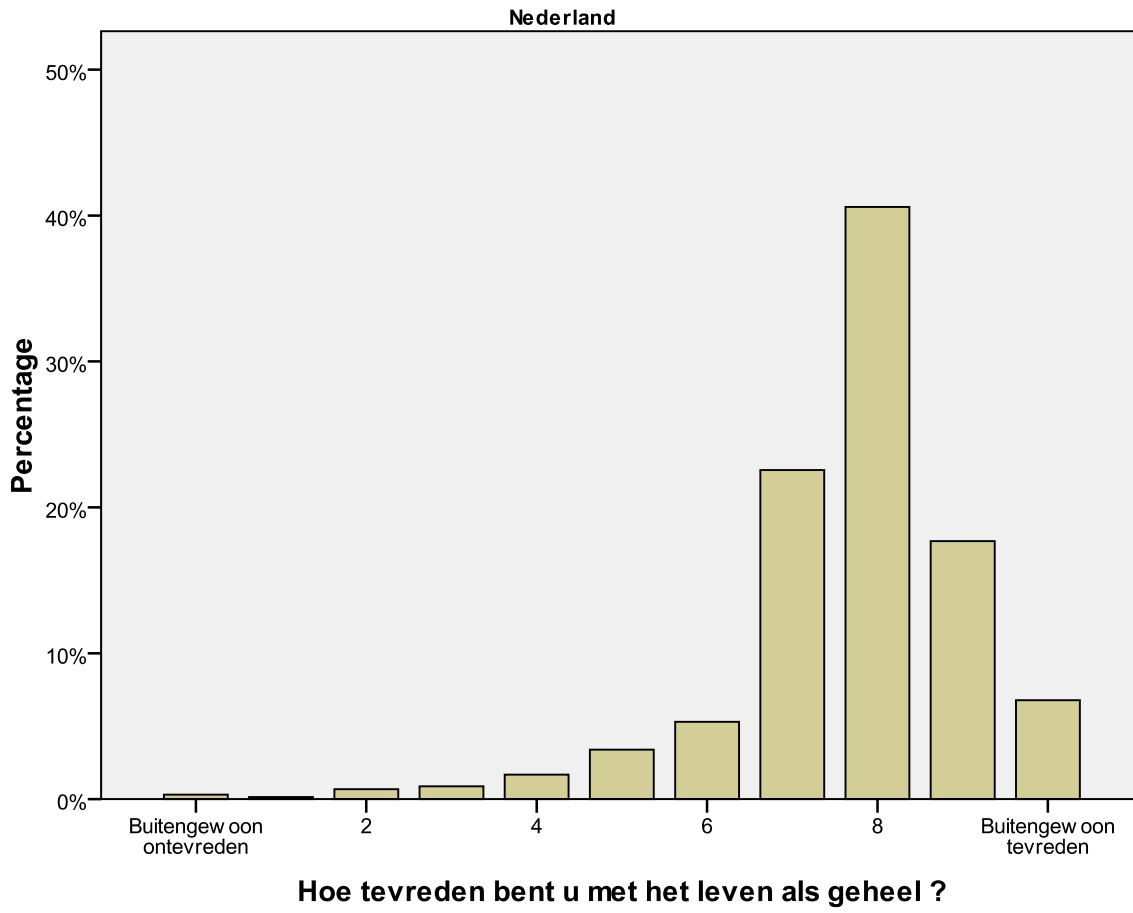
Scheme 7

What we DO know about happiness

<i>Questions</i>	<i>Answers required for informed choice of..</i>		
	<i>individuals</i>	<i>organizations</i>	<i>governments</i>
Can we get happier?			
- How happy are we?			
- How far-off from what is possible?			
To what extent is happiness in our control?			
- How much matter of genes?			
- How much a matter of luck?			
- How much matter of choice?			
What to choose for greater happiness?			
- Improve what conditions?			
- Develop what capabilities?			
- Engage in what activities/strategies?			
How compatible with further goals?			
- Means to greater happiness			
- Consequences of happiness-as-such			

Shading of cells indicates availability of research findings	
	none
	a few
	some
	Considerable
	a lot

Scheme 8
Happiness in The Netherlands



Scheme 9

Explained variance of individual happiness within modern nations

Livability of environment

- Socio-economic position¹⁹ ± 5%
- Social ties²⁰ ± 5%
- Life-events²¹ ± 15%

Life-ability of individuals

- Genetic endowment²² ± 30%
- Learned skills ± 5%?
- Life-choice ± 10%?

As yet unexplained ± 20%?

¹⁹ World Database of Happiness, [Findings on Happiness and Summed effects](#) S5.2.1

²⁰ World Database of Happiness, [Findings on Happiness and Summed effects](#) S5.2.34

²¹ Headey & Wearing (1992, chapter 8)

²² Bartels & Boomsma (2009)

Scheme 10

Some findings on happiness and family

<i>Subject of private choice</i>	<i>Evidence available</i>			
	<i>on people in general</i>			<i>on particular kinds of people</i>
	<i>cross sectional</i>		<i>longitudinal</i>	
<i>raw</i>	<i>partial</i>			
<i>Marry?</i> ^{23 24}				
<i>Live together?</i>	++	+	+	
<i>Have affairs?</i> ²⁵	+			
<i>Split-up?</i>	-	-	+/-	
<i>Remarry?</i>	+	+	+	
<i>Raise a family?</i> ²⁶				
<i>Have children?</i>	+	+/-	-	
<i>How many?</i>	+/-	+/-	+/-	

Key to signs:

++	=	very positive
+	=	positive
+/-	=	mixed findings, both positive and negative
-	=	negative
0	=	unrelated

²³ World database of happiness, [Findings on Happiness and Marriage Career](#), Subject code M1

²⁴ World database of happiness, [Findings on Happiness and Current Marital Status](#), subject code M2

²⁵ World database of happiness, [Findings on happiness and Sex life](#), subject S3.2.3 sexual promiscuity

²⁶ World database of happiness, [Findings on happiness and Having Children](#), Subject code C1

Scheme 11

Some findings on happiness and work

<i>Subject of private choice</i>	<i>Evidence available</i>			
	<i>on people in general</i>			<i>on particular kinds of people</i>
	<i>cross sectional</i>		<i>longitudinal</i>	
<i>raw</i>	<i>partial</i>			
<i>Work at all?</i> ²⁷				
<i>Keep out of paid work?</i>	–	–	–	
<i>Be a full-time mother?</i>	+/-	+/-	+/-	
<i>How much?</i>				
<i>Full-time?</i>	+	+		
<i>Early retirement?</i> ²⁸	–	+	+	
<i>Make career?</i> ²⁹	+	+	0	
<i>In what kind of work?</i> ³⁰				
<i>Manager?</i>	+	+		
<i>White collar job?</i>	0/+	0		
<i>Artist?</i>	–			
<i>In what work conditions?</i> ³¹				
<i>Self employed?</i>	–	–		
<i>Public sector?</i>	0	+		
<i>Commuting time</i>	0	–		
<i>Pay</i>	+	+		

Key to signs:

++	=	very positive
+	=	positive
+/-	=	mixed findings, both positive and negative
–	=	negative
0	=	unrelated

²⁷ World Database of Happiness, [Findings on Happiness and Employment](#),

²⁸ World database of Happiness, [Findings on Happiness and Retirement](#), Subject code R3

²⁹ World database of happiness, [Findings on Happiness and Social Mobility](#), Subject code S5

³⁰ World database of Happiness, [Findings on Happiness and Occupation](#), Subject code O2

³¹ World database of Happiness, [Findings on happiness and Work conditions](#)

Scheme 12

Some findings on happiness and consumption

<i>Subject of private choice</i>	<i>Evidence available</i>			
	<i>on people in general</i>			<i>on particular kinds of people</i>
	<i>cross sectional</i>		<i>longitudinal</i>	
<i>raw</i>	<i>partial</i>			
Ⓐ				
Spend how much?				
Simplifiers ³²	+			
Savings/Debts	+			
Health insurance	+			
On what?³³				
Car	+	-		
House	+	+		
Garden	+			
Household equipment	+	0/+		
Electronic equipment	+	+		
Luxuries	+			
Food ³⁴	+	0/+		
Theater	+			
Holiday trips ³⁵	+	+	0	

Ⓑ**Key to signs:**

++	=	very positive
+	=	positive
+/-	=	mixed findings, both positive and negative
-	=	negative
0	=	unrelated

³² World Database of happiness, [Findings on Happiness and Life style](#)

³³ World Database of Happiness, [Findings on Happiness and Possessions](#)

³⁴ World Database of Happiness, [Findings on Happiness and Nutrition](#)

³⁵ World Database of Happiness, [Findings on happiness and Leisure](#)

Scheme 13

Some findings on happiness and personal development

<i>Subject of private choice</i>	<i>Evidence available</i>			
	<i>on people in general</i>			<i>on particular kinds of people</i>
	<i>cross sectional</i>		<i>longitudinal experimental</i>	
<i>raw</i>	<i>partial</i>			
What education? ³⁶				
Years in school	+	+/-		
Level of education	+/-	+/0/-		
Educational specialization				
Have a training? ³⁷				
Stress reduction, meditation			+	
Coping with illness			0/+	
Marriage counseling			+	
Happiness training			+/0	

Key to signs:

++	=	very positive
+	=	positive
+/-	=	mixed findings, both positive and negative
-	=	negative
0	=	unrelated

³⁶ World Database of Happiness, [Findings of Happiness and Education](#)

³⁷ World Database of Happiness, [Findings on Happiness and Therapy](#)

Scheme 14

Some findings on happiness and conditions in organizational conditions

<i>Type of organization</i>	<i>Evidence available</i>			
	<i>on people in general</i>			<i>on particular kinds of people</i>
	<i>cross sectional</i>		<i>longitudinal experimental</i>	
	<i>raw</i>	<i>partial</i>		
Care homes³⁸				
Autonomy	+			
Cloister³⁹				
Size	0			
Autonomy	+			
Work organizations⁴⁰				
Size	+			
Supportive leadership	+			
Autonomy	+	+		

Key to signs:

- ++ = very positive
 + = positive
 +/- = mixed findings, both positive and negative
 - = negative
 0 = unrelated

³⁸ World Database of Happiness: [Findings on Happiness and Institutional Living](#)

³⁹ World Database of Happiness: [Findings on Happiness and Institutional Living](#)

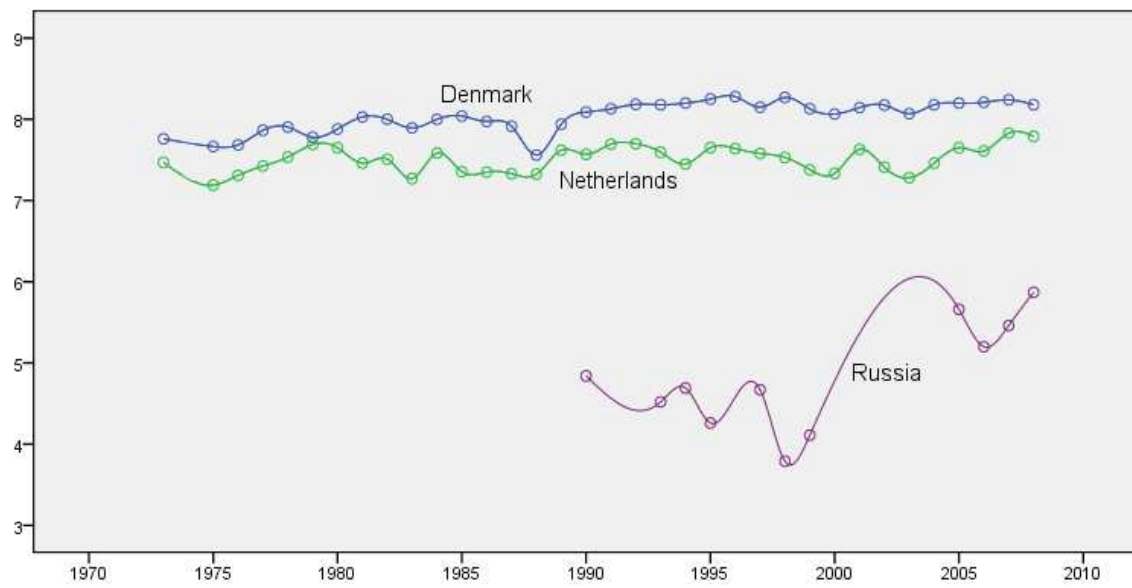
⁴⁰ World Database of Happiness: [Findings on Happiness and Work Conditions](#)

Scheme 15

Average happiness in nations in 2000-2009 on scale 0-10



Scheme 16

Change of average happiness in three nations 1973-2009

Source: World Database of Happiness, Collection **Happiness in Nations** (Veenhoven 2012c)

Scheme 17

Some societal conditions for happiness⁴¹

<i>Subject of public choice</i>	<i>Evidence available</i>			
	<i>on the general population</i>			<i>on particular kinds of countries</i>
	<i>cross sectional</i>		<i>longitudinal</i>	
	<i>raw</i>	<i>partial</i>		
Wealth				
GDP p/c	+	+	+	
Freedom				
Economic freedom	+	+		
Political freedom	+	+		
Private freedom	+	+		
Equality				
Income equality	0	0		
Gender equality	+	+		
Security				
Physical security; murder rate	0	0		
Social security	+	0	0	
Institutional quality				
Rule of law	+	+		
Good governance	+	+		
Modernity				
Industrialization	+	+		
Urbanization	+	+		
Globalization	+	+		
Explained variance	75%			

Key to signs:

++	=	very positive
+	=	positive
+/-	=	mixed findings, both positive and negative
-	=	negative
0	=	unrelated

⁴¹ World Database of Happiness, [Findings on Happiness and Conditions in Nations](#)