World Database of Happiness, Item Bank
Introductory text

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1   AIM OF THIS ITEM BANK

This item bank list methods for measuring happiness. It is limited to measures that fit a specific definition of happiness. At 1-7-2005 the catalog contained 871 such measures, mostly single questions on the enjoyment of life as a whole. These measurement techniques are referred to as *items*.

The item bank forms part of the wider 'World Database of Happiness', which stores the available research findings on happiness, both findings on prevalence of happiness in various populations and findings about its relation to other variables. This item bank provides access to the indicators of happiness that form the basis of these findings. It presents full texts of questions and instructions in English, and occasionally also in other languages. Available information about reliability is noted with each item.

1/1   Relevance context

This all serves to get a better view on the conditions for happiness. The wider ambition is to find out what environments provide the best chances for a happy life and what ways of life are most conducive to happiness in given circumstances. That search does not depart from a preconception of the good life. It rather sets the scene for empirical tests of such blueprints. The inquiry is essentially inductive and does not focus on a particular theory. The approach is similar to the investigation of factors that are promotive to good health in epidemiology, which is also ideologically neutral and data driven. If successful, this endeavor will substantiate the utilitarian creed that the morality of major decisions should be judged by their contribution to the greatest happiness of the greatest number (Bentham, 1789).

1/2   Difference with other item-banks on subjective wellbeing

There are several collections of indicators that are similar at first sight. Cummins (1997) has published a 'Directory of instruments to measure quality of life and cognate areas' and Tilson and Spilker (1990) have listed the many measurement methods in the field of health related quality-of-life research. Most test-banks in psychology also have an entry on 'quality-of-life' or 'subjective wellbeing'.

This collection of happiness items differs in two respects. Firstly this collection is far more selective. It does not include everything labeled as wellbeing or the like, but limits to methods that meet a strict definition of happiness. Secondly, this inventory does not merely list measurement methods and their bibliographical reference; it also links directly to the findings observed with these items.

1/3   Plan of this introduction

This project requires that we start from a clear definition of happiness. That concept of happiness should not involve any moral prescription or causal theory. Assumptions blind. Imagine that health is defined as eating a lot of red meat; we would never have discovered that eating apples is healthy. Though evident in the case of health, this fallacy is common practice in statements about happiness. Priests have defined happiness as religious devotion, revolutionaries have equated happiness with social equality and many economists still equate it with money.

In this study happiness is defined as *subjective enjoyment of life*. That concept is outlined in section 2 of this text. Having established what we mean by happiness we go on to consider the possible measures of this phenomenon. An

overview is presented in section 3, which also ponders on criteria for validity. Application of these criteria brings about a rigorous selection. Most of the currently used indicators appear to tap slightly different things than happiness as defined here. Having chosen, we are still left with several hundreds of measurement methods, for the greater part based on questioning. A detailed classification of these items is given in section 4. Finally the uses of this item bank are listed in section 5.

2   CONCEPT OF HAPPINESS

The word 'happiness' is used in various ways. In the widest sense it is an umbrella term for all that is good. In this meaning it is often used interchangeably with terms like 'wellbeing' or 'quality of life' and denotes both individual and social welfare. This use of words suggests that there is one ultimate good and disguises differences in interest between individuals and society. Here the word happiness is used in the more limited sense of subjective enjoyment of life.

Below I will first present a formal definition of happiness (section 2/1). Within this concept of overall happiness, I then distinguish two components of happiness: hedonic level and contentment (section 2/2). Then I delineate happiness from related notions, first from other qualities of life (section 2/3.1) and next from other concepts of satisfaction (section 2/3.2). I go on to note the variable aspects of this concept, that is, dimensions that are not included in the concept as such (section 2/4). The concept is restricted to present life (section 2/5). Finally section 2/6 summarizes the reasons to define happiness in this way. This matter is discussed in more detail elsewhere. See Veenhoven 1984 (chapter 2) and Veenhoven 2000 (section 1).

2/1   Definition of happiness

Overall happiness is the degree to which an individual judges the overall quality of his/her own life-as-a-whole favorably. In other words: how much one likes the life one leads. The key terms in this definition may be elucidated as follows.

Degree
The word 'happiness' is not used to denote an optimal appreciation of life. It refers to a degree, like the concepts of 'length' or 'weight', it denotes more or less of something. When we say a person is happy, we mean that he or she judges his of her life favorably rather than unfavorably.

Individual
The term happiness is used to describe the state of an individual person only; it does not apply to collectivities. Thus, a nation cannot be said to be happy. At best, most of its citizens consider themselves happy.

Happiness denotes a subjective appreciation of life by an individual. So there is no given 'objective' standard for happiness. A person who thinks he/she is happy, really is happy.

Judges
The word 'happiness' is used where somebody has made an overall judgment about the quality of his or her life. This implies an intellectual activity. Making an overall judgment implies assessing past experiences and estimating future experiences and estimating average quality of life.

One consequence of this conceptualization is that the word 'happiness' cannot be used for those who did not make up their mind. One cannot say whether a person is happy or not, if that person is intellectually unable to construct an

overall judgment. Thus, the concept cannot be used for animals or small children. Nor is the concept applicable to people who did not reflect on the quality of their life or could not reach a conclusion.

Overall

The evaluation of life aimed at is an overall judgment. It embodies all criteria for appreciation, which figure in the mind. In the past hedonists used to equate happiness with sensory pleasures only; however, there are more modes of appreciation. Apart from the sensory system, cognition and affect also enable individuals to appraise their life. Thus, evaluations also involve cognitive appraisals, based on aspirations, expectations and values. The evaluation also draws on affective conditions, in particular on average mood.

The word 'happiness' refers to a judgment, which integrates all the appreciation criteria used. Thus, the idea that one has all one has ever desired does not necessarily make a person happy. Despite all material endowments such a person may feel pain or be depressed. Similarly, the appraisal that one's life is 'exciting' does not necessarily mark oneself as happy either; life may be too exciting to be enjoyable. A Chinese curse says: "May you have interesting times".

Life-as-a-whole

We do not use the word 'happiness' to characterize satisfaction with specific aspects of life, such as marriage or work. 'Happiness' refers to satisfaction with life-as-a-whole. It covers past, present and anticipated experiences. This does not mean that all things ever experienced are given equal weight in the evaluation. As stated above, evaluation involves a sifting and ordering. In this process some aspects may be emphasized and others ignored. Past life-experiences for example, seldom enter into the evaluation process in their original phenomenological Gestalt. What is taken into consideration is mostly a shallow representation of what one tasted previously.

Own life

The term 'happiness' concerns the evaluation of one's own life, not of life in general. A pessimistic 'Weltanschauung' does not necessarily characterize someone as 'unhappy'.

Favorably

Evaluation always embodies appreciation; a conclusion as to whether one likes something or not. The term 'happiness' refers only to judgments concerning this aspect. Happiness judgments concern the dimension extending from appreciation to depreciation, from like to dislike. All humans are capable of appraisals of this kind, though not all humans can generalize all appraisals into a judgment of life-as-a-whole.

The criterion of 'favorableness' is very close to what is called 'pleasantness'; however, it is not quite the same. The term 'favorableness' concerns the appreciation involved in all evaluations, while the term 'pleasantness' refers exclusively to direct affective experience. As such it is more characteristic of the affective component of happiness (to be discussed below) than of overall happiness itself.

2/2   Components of happiness

When evaluating the favorableness of life, we tend to use two more or less distinct sources of information: our affects and their thoughts. One can decide that one feels fine most of the time and one can also judge that life seems to meet ones (conscious) demands. These appraisals do not necessarily coincide. We may feel fine generally, but nevertheless be aware that we failed to realize our aspirations. Or one may have surpassed ones 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 the components are referred to as 'hedonic level of affect' and 'contentment'. To mark the difference with the encompassing judgment I will refer to happiness (the core concept) as <u>overall happiness</u>. A synonym for overall happiness is 'life-satisfaction'.

2/2.1   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 in feelings, in emotions, as well as 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: the average over a long time-span such as a month or a year. The concept does not presume subjective awareness of that average level.

2/2.2   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.

When we assess the degree to which our wants are being met, we may look both backwards and forwards. We may assess what life has brought up to now and may estimate what it is likely to yield in the future. The concept concerns the case where someone combines both the past and the future in an assessment.

2/2.3   Relative impact in the overall evaluation of life

If these components serve as subtotals in the overall evaluation of life, what is then their weight? Most scholars stress contentment, for instance Andrews & Withey (1976) suggest that individuals compute a weighed average of earlier life-aspect evaluations, while Michalos' (1985) multiple discrepancy theory assumes comparisons of life as it is with various standards of how it should be. Many philosophers see it as an estimate of success in realizing one's life-plan (e.g. Nordenfelt 1994).

Yet there are good reasons to assume that overall life-satisfaction is mostly inferred from affective experience (Veenhoven 1997: 59-61). One reason is that life-as-a-whole is not a suitable object for calculative evaluation. Life has many aspects and there is usually not one clear-cut ideal model it can be compared to. Another reason seems to be that affective signals tend to dominate; seemingly cognitive appraisals are often instigated by affective cues (Zajonc 1972). This latter point fits the theory that the affective system is the older in evolutionary terms, and that cognition works as an addition to this navigation system rather than a replacement.

This issue has important consequences for the significance of happiness. If appreciation is a matter of mere comparison with arbitrary standards, there is little of value in a positive evaluation; dissatisfaction is then an indication of high demands. If, however, happiness signals the degree to which innate needs are met, life-satisfaction denotes how well we thrive. This issue is considered in more detail in Veenhoven 1991, and Veenhoven 1996).

Whatever the method of assessment, the fact that we are able to come to an overall evaluation of life is quite important. It is the only basis for encompassing judgments of the quality of life.

2/3   Difference with related concepts

This concept of happiness can be further clarified by noting the difference with related notions. Below we will first distinguish enjoyment of life from other qualities of life (section 2/3.1) and then discern happiness from other enjoyments (section 2/3.2). Note that many these different concepts are often called by the same name.

2/3.1   Difference with other qualities of life

The term 'quality of life' suggests that all merits can be integrated in one final scale of worth. This is not the case. The term is merely an umbrella for different notions of what is good. Below I will delineate four qualities of life and show that the concept of happiness fits only one of these.

Four qualities of life

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

The first distinction is between chances and outcomes, that is, the difference between opportunities for a good life and the good life itself. This is the difference between potentiality and actuality. I refer to this as 'life-chances' and 'life-results'. Opportunities and outcomes are related, but are certainly not the same. Chances can fail to be realized, due to stupidity or bad luck. Conversely, people sometimes make much of their life in spite of poor opportunities. A second difference is between outer and inner qualities of life, in other words between 'external' and 'internal' features. In the first case the quality is in the environment, in the latter it is in the individual. Lane (1994) made this distinction clear by distinguishing 'quality of society' from 'quality of persons'. The combination of these two dichotomies yields a fourfold matrix. This classification is presented in scheme 2/3.1.

In the upper half of the scheme, we see two variants of potential quality of life, with next to the outer opportunities in one's environment, the inner capacities to exploit these. The environmental chances can be denoted by the term *livability*, the personal capacities by the word *life ability*. This difference is not new. In sociology,

the distinction between 'social capital' and 'psychological capital' is sometimes used in this context. In the psychology of stress, the difference is labeled negatively in terms of 'burden' and 'bearing power'.

The lower half of the scheme is about quality of life with respect to its outcomes. Two kinds of outcomes are distinguished, outcomes for the environment and outcomes for oneself. The external worth of a life is denoted by the term *utility of life*. The inner valuation of it is called *enjoyment of life*. These matters are of course related. Knowing that one's life is useful will typically add to the enjoyment of it. Yet not all-useful lives are happy lives and not every good-for-nothing really cares. This difference has been elaborated in discussions on utilitarian moral philosophy, which praises happiness as the highest good. Adversaries of this view hold that there is more worth to life than just pleasures and pains. Mill (1861) summarized this position in his famous statement that he preferred an unhappy Socrates to a happy fool.

Livability of the environment
The left top quadrant denotes the meaning of good living conditions, shortly called 'livability'. Ecologists see livability in the natural environment and describe it in terms of pollution, global warming and degradation of nature. Currently, they associate livability typically with preservation of the environment. City planners see livability in the built environment and associate it with such things as sewer systems, traffic jams and ghetto formation. Here the good life is seen as a fruit of human intervention.

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

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

Life-ability of the person
The right top quadrant denotes inner life-chances. That is: how well we are equipped to cope with the problems of life. Sen (1992) calls this quality of life variant 'capability'. I prefer the simple term 'life-ability', which contrasts elegantly with 'livability'.

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

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

'emotional intelligence'. Though originally meant for specific mental skills, this term has come to denote a broad range of mental capabilities. The training professions favor this broader definition.

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'. From this point of view a middle-aged man is not 'well' if he behaves like an adolescent, even if he functions without problems at this level. Since abilities do not develop along side idleness, this quality of life is close to the 'activity' in Aristotle's concept of eudaimonia. This quality concept is also currently used in the training professions.

Lastly, the term 'art of living' denotes special life-abilities; in most contexts this quality is distinguished from mental health and sometimes even attributed to slightly disturbed persons. Art of living is associated with refined tastes, an ability to enjoy life and an original style of life.

Ability to deal with the problems of life will mostly contribute to happiness as defined here, but is not identical. If one is competent in living one has a good chance at happiness, but this endowment does not guarantee an enjoyable outcome.

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

When evaluating the external effects of a life, one can consider its functionality for the environment. In this context, doctors stress how essential a patient's life is to its intimates. The life of a mother with young children is given higher value than the life of a woman of the same age without children. Likewise, indispensability at the workplace figures in medical quality of life notions. At a higher level, quality of life is seen in contributions to society. Historians see quality in the addition an individual can make to human culture, and rate for example the lives of great inventors higher than those of anonymous peasants. Moralists see quality in the preservation of the moral order, and would deem the life of a saint to be better than that of a sinner. In this vein, the quality of a life is also linked to effects on the ecosystem. Ecologists see more quality in a life lived in a 'sustainable' manner than in the life of a polluter. In a broader view, the utility of life can be seen in its consequences for long-term evolution. As an individual's life can have many environmental effects, the number of such utilities is almost infinite.

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

Here the focus is on mere 'experiential' happiness; on how much one likes the life one lives. The difference is well expressed in the earlier mentioned statement of

Mill that he preferred an unhappy Socrates to a happy fool. Moral excellence is clearly not the same as feeling good.

Core meaning: Subjective enjoyment of life
Finally, the bottom right quadrant represents the inner outcomes of life. That is the quality in the eye of the beholder. As we deal with conscious humans, this quality boils down to subjective enjoyment of life. This is commonly referred to by terms such as 'subjective wellbeing', 'life-satisfaction' and 'happiness' in a limited sense of the word. This is the kind of happiness the utilitarian philosophers had in mind and it is also the kind of happiness addressed here.

Humans are capable of evaluating their life in different ways. We have in common with all higher animals that we can appraise our situation affectively. We feel good or bad about particular things and our mood level signals overall adaptation. As in animals these affective appraisals are automatic, but unlike other animals it is known that humans can reflect on this experience. We have an idea of how we have felt over the last year, while a cat does not. Humans can also judge life cognitively by comparing life as it is with notions of how it should be.

Most human evaluations are based on both sources of information, that is: intuitive affective appraisal and cognitively guided evaluation. The mix depends mainly on the object. Tangible things such as our income are typically evaluated by comparison; intangible matters such as sexual attractiveness are evaluated by how it feels. This dual evaluation system probably makes the human experiential repertoire richer than that of our fellow-creatures.

In evaluating our life we typically summarize this rich experience in overall appraisals. For instance we appreciate several domains of life. When asked how we feel about our work or our marriage we will mostly have an opinion. Likewise, most people form ideas about separate qualities of their life, for instance how challenging their life is and whether there is any meaning in it. Such judgments are made in different time-perspectives, in the past, the present and in the future.

Mostly such judgments are not very salient in our consciousness. Now and then, they pop to mind spontaneously. Though not in the forefront of consciousness all the time estimates of subjective enjoyment of life can be recalled and refreshed when needed. This makes these appraisals measurable in principle.

2/3.2 Happiness and other enjoyments
Even when we focus on subjective enjoyment of 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: Life-aspects versus life-as-a-whole and passing delight versus enduring satisfaction.

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

Next, the experience of enjoyment can be short-lived or enduring. Again, the word happiness is used for both phenomena. Sometimes it refers to passing moods

and on other occasions to stable satisfaction. Once more, these matters are related but not the same.

When combined, these distinctions produce the fourfold matrix presented in scheme 2/3.2. The distinction between part and whole is presented vertically, and the distinction between passing and enduring enjoyment horizontally.

Instant satisfaction
The top-left quadrant represents passing 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 'instant-satisfactions'. Kahneman (2000:4) calls it 'instant-utilities'. This quadrant represents hedonistic happiness, especially when the focus is on sensory experience. The concept of happiness used here is broader however. It concerns both overall satisfaction and life-as-a-whole. Though fleeting enjoyment obviously contributes to a positive appreciation of life it is not the whole of it.

Domain satisfaction
The top right quadrant denotes enduring appreciation of life-aspects, such as marriage satisfaction and job-satisfaction. This is currently referred to as domain-satisfactions. Though domain-satisfactions depend typically on a continuous flow of instant-satisfactions, they have some continuity of their own. For instance, one can remain satisfied with one's marriage even if one has not enjoyed the company of the spouse for quite some time. Domain-satisfactions are often denoted with the term happiness: a happy marriage, happy with one's job, etc. Yet here the term happiness is used in a broader sense, not for the satisfaction with aspects of life, but for the satisfaction with life-as-a-whole. One would not call a person happy who is satisfied with marriage and job, but still dissatisfied on the whole because his health is failing. It is even possible that someone is satisfied with all the domains one can think of, but nevertheless feels depressed.

Top-experience
The bottom right quadrant denotes the combination of passing experience and appraisal of life-as-a-whole. That combination occurs typically in top-experiences, which involve short-lived but quite intense feelings and the perception of wholeness. This is the kind of happiness poet's write about. Again this is not the kind of happiness aimed at here. A moment of bliss is not enduring appreciation of life. In fact such top-experiences even seem detrimental to lasting satisfaction, possibly because of their disorientating effects (Diener et. al. 1989).

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

2/4   Variable aspects of happiness

Happiness judgments may differ in several respects. I mention some to illustrate what is *not* in the definition used here.

One difference is in their certainty: some people are rather definitive about their appraisal of life, whereas others vacillate. Though one may attribute less value to the latter appraisals, the concept applies. Doubtful happiness is still happiness.

Another point of variation is how well considered the judgment is; some people judge rather intuitively, while others engage in elaborate contemplation. Likewise, appraisals of life are probably not always equally appropriate. Like any perception they can be distorted in various ways, such as by misattribution and self-deceit. This is commonly referred to as `false happiness'. Distorted judgments of life are clearly less valuable as an indicator of apparent quality of life. Nevertheless, inappropriate happiness is still happiness. As we will see in section 3/3.1.3, I do not preserve the word for denoting the 'truly good'

2/5   Focus on 'present' happiness

Evaluations of one's life may concern different periods of life: earlier life, current life and (expected) future life. This database is restricted to evaluations of 'present' life. These evaluations are probably colored by reminiscences of past happiness, and by hopes for the future. Yet they are not the same; one can be satisfied with present life in- spite, or even because of, earlier misery. Likewise, one can be unhappy now, but optimistic about the future.

2/6   Why this concept?

We have considered *how* happiness is defined above. Now I will discuss the reasons *why* that conceptualization is preferred above the many other definitions of happiness that have been proposed. In answering this question I return to the above discussion, in particular to that on the difference with related concepts in section 2/3.

Why not include life-chances?
In scheme 2/3.1 happiness is placed as an actual outcome of life, and distinguished from concepts that denote good chances. In this respect the present conceptualization differs from current associations of the term with paradise and good health.

The main reason for limiting to outcomes is to be found in the purpose of this study. The goal is to find out which conditions are most conductive to happiness. If we include conditions in the definition of happiness we get into circular reasoning. Happiness must be conceptually distinguished from its possible determinants.

A second reason is that the quality of life-chances cannot be grasped comprehensively. Another look at scheme 2/3.1 may help to explain why not. Each of the top quadrants involves different qualities that cannot be meaningfully aggregated. In the livability quadrant one cannot add 'fresh air' to 'social justice'. Neither can one sum 'physical health' and 'school intelligence' in the life-ability quadrant. Moreover the two top quadrants can neither be added in an overall index of life-chances. It is not the *sum* that matters, but the *fit* of living conditions and life-abilities. A competitive free market society may set too high demands on insecure and slow people but may be the right pond for energetic individualists. There can be various fitting combinations of conditions and abilities and we cannot really

reason out in advance what the best combinations are. Hence the quality of preconditions can only be assessed by their outcomes, and of all outcome variables happiness is the most comprehensive one. This implication is discussed in more detail in Veenhoven 2000 section 3.

The third reason is found in the aim for ethical neutrality. Notions about chances for a good life are heavily loaded by moral preferences about how life should be. Ideas about livability of society are largely guided by political ideology and notions about required competencies draw also more on normative thinking than on systematic observation. So if we would include such notions into the definition of happiness we would not get beyond common prepossession.

Why not include utility of life?

If one accepts that life-chances should not be included in the concept of happiness, one can still argue that all outcomes are considered and not just individual enjoyment of life. This would mean that the utility quadrant from figure 2/3.1 (left-bottom) is also included. There are in fact definitions of this kind. For instance, Tatarkiewics (1973) defines happiness as 'justified' satisfaction with life. He does not call a useless life happy even if it is enjoyed by the lay-about. There is a point in combining the good and the pleasant, but there are also serious arguments against doing so.

The main problem is that there is no clear criterion to judge the utility of a life. If we focus on contributions to the environment, there is a multitude of possible effects in various spheres that can hardly be assessed and certainly not aggregated in a meaningful index. Problems are even greater if we judge life on moral criteria of perfection. In fact we get stuck in the morass where most philosophy of happiness has ended.

Even if we could agree on some major utilities, there are still insurmountable problems. One is that external effects depend on context, raising children is less of a contribution to humanity in an overpopulated world than when the human species is about to die out. This is linked to the question of degrees of usefulness, how many books should an academic write to lead a useful life? The idea of 'justified' enjoyment requires that some minimal level can be pinpointed.

Last, but not least, the combination of these things would blind us to their actual interrelations. If we throw usefulness and enjoyment in one tub, we cannot see which useful behavior adds to the enjoyment of life and which detract from it. Hence this conceptualization precludes well-informed choice.

Why not emphasize short-lived pleasure?

A focus on subjective enjoyment of life (the bottom right quadrant in scheme 2/3.1) does not necessarily imply a restriction to the 'overall' enjoyment of ones 'life-as-a-whole' (right-bottom quadrant in scheme 2/3.2). Happiness is often described as short-lived satisfaction (left quadrants in scheme 2/3.2), in particular in poetry and advertisement.

The reason to focus on enduring enjoyment is obviously that we use the concept to learn more about the merits of lasting conditions, such as the organization of society and of personal lifestyles. If we define happiness as short-lived delight we will not become much wiser. The concept leads us then to shortsighted pleasure seeking. This is fact a common arguments against utilitarianism. A false reproach however, since the utilitarian concept of happiness does not restrict to passing pleasure.

Jeremy Bentham (1789) defined happiness as the 'sum of pleasures and pains'. He used these words 'pleasure' and 'pain' to denote all enjoyable and aversive experience. Not only sensory feelings, but also higher appraisals such as the joy of understanding and ones remorse when looking at personal failure. The word 'sum' refers to the whole of this experience and would involve all the criteria for appraisal used (overall) and application on all life-domains (life-as-a-whole).

The most basic reason for focusing on overall enjoyment of life is that this brings us closest to the most relevant biological signal. In our biological signal system short-lived likes and dislikes lead us toward or away from particular things, for instance a liking for sweet tastes guides to nutritious foods and a dislike of bitter tastes keeps us away from most poisonous fruits. Yet these sensory experiences tell us little about our wider adaptation. This is rather the function of the hedonic level in moods, which is not linked to specific objects of appreciation. As noted above, mood level signals typically whether we are in a 'right pond' or not, it indicates to what extent the whole of our needs is being met, and this is precisely what we want to know. In this line of reasoning we could even restrict to the hedonic level (the affective component described in section 2/2.1).

Why focus on life-as-a-whole?
Next the question why satisfaction with work or marriage is not denoted as happiness. One answer is again that the aim of the endeavor requires an encompassing concept. If people are quite satisfied with their marriage and work but not with their children, family and the government, there is clearly something missing. Such lacks reflect in the overall judgment of life, at least when these latter domains bear relevance.

Another reason is that domain-satisfactions are largely cognitive constructs, and hence quite vulnerable to social comparison and fashion. This is particularly true for satisfaction with easily comparable things such as income. Reversibly, estimates of overall enjoyment of life draw typically on unreasoned affect. This point is discussed in more detail in Veenhoven 1991 and 1997).

Why focus on present happiness?
Lastly, why does this database limit to present happiness? The main reason is that present happiness bears most information about how well the individual is doing. Since it draws on recent affective experience it is the most likely to reflect need gratification (remember section 2/2.3). Notions of past and future happiness can be mere dreams. In fact there are indications that present unhappiness can give rise to rosy views of happiness in earlier periods and instigate wishful expectations of future happiness.

3   QUESTIONING ON HAPPINESS

Can happiness -as defined above- be measured? Since happiness polls became part of our methodology in the 1960's, there has been an ongoing debate on this point. The following issues figured in this discussion: Can happiness be measured 'objectively' or only 'subjectively' by questioning? If questioning is the only way to assess how people judge life, do interviews tap an existing state of mind or do they merely invite a guess? If people do indeed have an idea about their enjoyment of life, do their responses to questions reflect that idea adequately? These questions have instigated a great deal of empirical research and can now be fairly well answered. (Research reviewed in Veenhoven, 1984, chapter 2.)

'Measurement' was long understood to be an 'objective', 'external' assessment, analogous to the measurement of blood pressure by a doctor. It is now clear that life- satisfaction cannot be measured this way. Steady physiological concomitants have not been discovered and it is doubtful that they ever will be. Neither has any overt behavior been found to be linked reliably to inner enjoyment of life. Like all attitudes, happiness is reflected only partly in overt behavior. Though 'active', 'outgoing' and 'friendly' behavior is more frequent among the happy; it is also observed among unhappy persons. Likewise, unconscious body language does not reliably indicate inner appreciation of life. Consequently, ratings of someone's happiness by his peers or teachers are only weakly related to self-reports. The case of suicide was long considered to be an exception. This kind of behavior was thought to indicate extreme unhappiness, however, abundant research in this field has made it clear that dissatisfaction with life is at best one of the motives for suicide. Because there is a great cultural and personal variation in individuals' capacity to cope with unhappiness, suicidal behavior is only loosely related to degree of unhappiness.

Inference from overt behavior being impossible, we must make do with questioning, either directly or indirectly, in a personal interview or by using an anonymous questionnaire.

3/1   Validity of self reported happiness

Several doubts have been raised about the quality of responses to survey questions about happiness, in particular regarding the validity of single items on overall happiness.

One of the doubts is that most people would have no opinion about their appreciation of life. Answers to questions on that subject would therefore reflect other things: in particular prevailing norms of self-presentation. However, people appear quite aware of their enjoyment of life: eight out of ten Americans think of it once a week or more. Consequently, responses on happiness items tend to be prompt. No response is common.

There is also the objection that people claim themselves to be happier than, deep in their heart, they know they are. Both ego-defense and social desirability bias are said to be involved. This distortion has been mentioned as an explanation for several often observed phenomena: the over-representation of 'very happy' people, the fact that most people perceive themselves as happier than average and the discovery that psychosomatic complaints are not uncommon among persons who characterize themselves as happy. Yet, these facts provide no proof of desirability distortion. There are good reasons why most people could honestly imagine themselves happier than average. Presence of psychosomatic complaints does not necessarily exclude a positive appreciation of life either. The proof of the pudding is a demonstration of distortion itself. Several clinical studies have tried to show this, but failed to find evidence for a general overstatement of happiness.

Although there is no proof of systematic desirability distortion, there is evidence that responses to questions on happiness are liable to various situational influences, such as the site of the interview, the interviewer, the weather, one's mood, etc. These differences can be considered as essentially random error. More systematic measurement error is also involved. Responses are influenced by the precise wording of the questions, answer formats, sequence of questions and context of the interview. These effects can cause problems when scores on different measures of happiness are compared.

3/2   Acceptable items

Having established that happiness can be measured in principle, we can proceed to consider the specific methods of assessing it. We now meet a great variety of questionnaires and interrogation techniques. During the last decades more than a hundred methods have been proposed; some of them presented under impressive names such as 'Life Satisfaction Index', 'General Satisfaction Score' or 'Happiness Scale'. Many of these methods labor under rather obvious defects.

Most methods depend on questioning. Hence the most current defect is that questions are inappropriate. Several do not ask about happiness as defined here, but solicit responses about subtly different things. Close reading shows that many items in so called 'happiness scales' refer to things like 'optimism', 'frustration tolerance' and 'social adjustment'. Investigators who use such questionnaires typically fail to define happiness formally.

Another current defect is that methods are not sufficiently specific. Some 'expert-ratings' for example, do not clearly define what the expert regards as happiness. Similarly, methods based on 'content analysis' sometimes lack clear instructions for interpretation. Again, this is often a result of slovenly conceptualization. Sometimes even more basic defects appear: for example when happiness is assessed on the basis of estimates by peers who do not know the

individual's private thoughts and therefore base their estimate on his overt behavior and living conditions.

Elsewhere I have screened all the current measures for applicability to the concepts defined in section 1. The following indicators were deemed acceptable (Veenhoven 1984: chapter 4).

3/2.1 Items on overall happiness

Overall happiness can only be assessed by direct questioning. It cannot be measured indirectly by questions that tap essentially different matters that are assumed to be related to happiness, such as the related concepts discussed in section 1.3. Direct questions on overall happiness can use various key terms. One of the appropriate words is 'happiness', provided that the context of the question makes clear that happiness-in-life is concerned, rather than happiness-of-the-moment. Another acceptable term is 'satisfaction-with-life'. Questions can be framed in different ways: as closed questions, as open-ended questions and as focused interviews. In the latter two cases, clear instructions for content analysis of responses are required.

Overall happiness cannot be assessed by peer-ratings, because peers do not know precisely what the subject has on his mind and rather tend to imagine how they themselves would feel if they were in the subjects shoes.

3/2.2 Items on hedonic level of affect

Hedonic level of affect can be assessed in three ways: by direct questioning, by projective tests and by ratings based on non-verbal behavior. Again the method of direct questioning is to be preferred, in particular when the individual is asked several times during a certain period how pleasant he/she feels at that given time (experience sampling). Though generally less dependable, indirect methods can sometimes suffice. Some projective tests at least seem to be reasonably valid. Ratings by others on the basis of non-verbal behavior are also acceptable, provided that rating instructions are sufficiently specific. Unlike cognitive judgments, affective conditions may manifest fairly reliably in non-verbal behavior.

3/2.3 Items on contentment

Contentment can be measured only by using direct questions. Like overall happiness, it cannot be validly assessed by indirect questioning or by peer-ratings. Direct questions must again be specific. In this case this means that the question must clearly focus on realization of wants in a life-perspective. Such questions are probably best understood when preceded by an enumeration of one's major aspirations. Questions can again be framed in various formats.

3/2.4 Mixed items

Finally, there are several acceptable indicators that cover two or more of the above happiness variants. The majority of these consist of single direct questions, which by wording or answer format refer to overall happiness as well as to hedonic level. As long as they do not labor specific deficits, these questions are acceptable.

Some indicators work with multiple questions. Characteristically these questions cover both overall happiness and one or both of the discerned components. When all separate items meet the demands outlined above, such composite indicators are accepted.

A last method to be mentioned in this context is the focused interview of which the 'depth interview' is a variant. Such interrogations tend to cover all three

happiness variants. A lack of clear reports on the themes of inquiry and on rating procedures mostly makes it difficult to assess their validity.

3/3   Rejected items

Many of the currently used indicators in the field of subjective wellbeing do not to fit the concept of happiness as defined here. Such indicators are therefore not included in this item bank and hence observations yielded by these items are also not included in the finding-catalogs of this database. This implies rigorous selection: about 80% of the research literature in the field of subjective wellbeing will be left out, for instance almost all the research on 'health related quality of life'.

     The selection is based on an inspection for face validity. That is, close reading of the questions or instructions to assess whether happiness as defined here is assessed. This process is reported in full detail in Veenhoven 1984: chapter 4 and Veenhoven 2000: section 3). I present some illustrative cases below.

3/3.1   Inventories involving items on other qualities of life

Many currently used measures of wellbeing consist of lists of questions, part of which refer to happiness and part to related concepts. Scheme 2/3.1 is a good help to take stock of the substantive contents of such inventories. As an illustration it is applied to the 24 items in Sheeney's 'Wellbeing Scale. See scheme 3/3.1. Clearly only some of the items are in the right-bottom enjoyment quadrant.

Questionnaires on 'adjustment to old age'
Such questionnaires are commonly used in gerontological research. The inventories mix questions about happiness typically with items on 'social participation', 'future orientation' and 'activity' i.e. Lawton's (1975) PGMC and the often used 'Life-satisfaction Scale' of Neugarten et all (1961).

     These items are rejected, because it is not at all sure that high social participation, future orientation and vigor always mark a high appreciation of life. There are always socially active, future orientated and vigorous people who are profoundly dissatisfied with their life. Moreover one can question an orientation on the future in the third age.

     Scores on indicators of this kind cause contamination in correlational analysis: e.g. when vigor is an item in a happiness index, scores on this index correlate with vigorous behaviors. For the purpose of comparison through time and between nations, such scores are also problematic, because concomitants of happiness are typically not the same in all countries at all times. Social activity is more crucial in modern individualistic society than in the context of embedded collectivism.

Health related QOL-inventories
A comparable generation of questionnaires has developed in research on the outcomes of medical treatment. There are general purpose questionnaires and questionnaires that focus on the sequel of specific illnesses. An example of the former is the much used SF-12 (Ware et al 1996). This inventory is largely about physical capability (e.g. climbing the stairs) and functioning in social roles (e.g. work). It also involves questions about general health, vitality and mood. One item is about recent happiness. An example of a special illness inventory is the 'Life-Satisfaction Questionnaire (LSQ) by Carlson et. all. (1996). This 43 item questionnaire focuses on the condition of breast-cancer patients. The questions

concern physical complaints, daily performance, quality of social relations and several domain-satisfactions. Fear for death is not included in this list, but figures in several other inventories.

Happiness as defined here is at best a side issue in these questionnaires. Hence they are also rejected.

3/3.2 Inventories involving other enjoyments

A lot of inventories cover a wide variety of enjoyments. Scheme 3/3.2 presents an example of the assortment in the 40-item SUBI questionnaire. Items are found in all the boxes. In the sum-score items about overall happiness have the same weight as of sleeping badly. Next to these enjoyment items, the inventory has also questions that belong in the top-quadrants of scheme 2/3.1, for instance items on availability of social support (livability) and about stress resistance (life-ability). There are many such muddy measures. Though they typically involve acceptable items on happiness the sum-scores cannot be accepted.

Summed life-domain satisfactions

A common variant is to measure overall satisfaction (right bottom quadrant) by aggregating satisfaction with various life-domains (right top quadrant). For instance by computing the average of satisfaction with 'work', 'marriage' and 'leisure'. Andrews & Withey (1976) presented several such sum-scores, long and short ones, weighted and unweighted.

This method has several drawbacks. Firstly, it does not adequately reflect the individuals 'overall evaluation'. Such sum-scores tap selected aspects of life only, not the ones selected by the subject. Secondly, not all aspect-satisfactions apply equally well to everybody, how about marriage-satisfaction of the unmarried and the job-satisfaction of the unemployed? Thirdly, the significance of life-aspects such as 'work' and 'marriage' is not the same across time, culture and social categories. Comparison is therefore often not possible using such indicators.

Part of these problems can be met by asking respondents to rate domains by importance and then compute a weighted average. Yet this does not solve the problem of missing domains and it is not sure that perceived importance equals actual impact. In fact this method assumes a 'bottom up' evaluation of life, while there is growing evidence that 'top down' appraisal is most common (Veenhoven 1997: 59-62).

Summed life-aspect satisfactions

These objections also apply to 'semantic-differential scales', which involve the ratings of ones life on various evaluation criteria, such as 'boring/interesting', 'lonely/friendly' and 'hard/easy'. Again each of the items falls short as an indicator of overall happiness, an interesting life is not necessarily a satisfying life and neither is an easy life always more gratifying than a hard life. Taken together several such items do not provide a good estimate of the overall evaluation either, because the weights are likely to differ across persons and to be variable across time and culture. Such a semantic differential scale is part of the much-used 'Index of Wellbeing' of Campbell et al. (1976), and this index is therefore not acceptable.

3/3.3 Deficient indicators of happiness

There are also many items that do focus on happiness as defined here, but that fail to use sufficiently sharp questions. Some illustrative examples are presented below. This check pans out negatively for many multiple item questionnaires on happiness. The more items the greater the chance of one being incorrect, and if one item is wrong, the whole questionnaire is rejected.

Comparison with others
Several investigators have asked their subjects how happy they think they are compared to others, rather than how they feel themselves. Such items are rejected. Even if one is happier than one's neighbor is, one can still be unhappy. This invalidates the four-item 'Subjective Happiness Scale' (SHS) of Lyubomirsky and Lepper (1999), the second item of which is perceived happiness relative to peers.

Better than in the past
For the same reason the item 'I have been happier than I am now' is deemed unacceptable. Being less happy than before does not imply that one is unhappy.

Preference for another life
Some investigators derive happiness from responses about questions on appreciation of alternative ways of life. For instance: one of the items in Diener's (1985) 'Satisfaction With Life Scale' (SWLS) is 'If I could live my life over, I would change nothing'. This item is also rejected, and thereby the scale as a whole. An individual could be quite happy, but still opt to try life another way if one could live ones life over. There are clearly many roads to happiness and most people know this.

3/4   Sense of selectiveness

Altogether I reject more than half of the items that claim to tap happiness or life-satisfaction. Since this involves many commonly used inventories, this selection leaves out some 80% of the research literature in the field of subjective wellbeing. Why be so choosy?

The reason is we will never get any wiser if we go on using sloppy concepts. That is why in section 1 I defined happiness in a much narrower way than understood in common language. The aim of this database is to gather the empirical findings on this specific kind of happiness, with the very purpose of reducing the conceptual ambiguity found in current research. Obviously this requires that we limit only to items that deal with matter as defined in section 1.

Why then focus on the enjoyment of life and not on another quality of life? I have given several reasons in section 2/6. Happiness is the most comprehensive indicator of quality of life. This concept does not bring us into circular reasoning when evaluating society and our way of life.
In this section we have seen that it is also a matter that can be measured full stop.

I would not be so choosy if this 'Item Bank' were a mere test-bank, such as the ones mentioned in the introductory section. Yet this catalog is part of the wider database is used to define which investigations will be included, and hence what kind of findings will become available for comparative analysis. Since one cannot compare apples and oranges, the findings must pertain to the same subject matter.

4   CLASSIFICATION OF ITEMS

Accepted items are classified in two ways: first by the substantive meaning they tap and second by their methodological characteristics.

The categorization of meaning involves the kind of happiness the item focuses on, for instance whether the focal point is on pleasant mood or on contentment. This is called the *focus* of the item. Further the items are also classified by the period considered. For example, whether a question on happiness pertains to the last few years or to the mood of the moment. This is referred to as the *time frame* of the item.

The classification of methodic aspects starts with the technique by which happiness is assessed. Questioning is the most common method, but affect level can also be assessed by behavioral observation (cf. Section 3/2). Next to direct questioning, there are also indirect techniques, such as content analysis of diaries. These assessment methods are referred to as the item mode. All assessments of happiness are scored in a way that allows a ranking. Mostly this is done by using numerical scales, but scores are also recorded on verbally labeled scales or on graphic scales. So the next subject of classification is the *rating-scale* used. Both the scale-type and the scale-range are recorded.

Given the many sub-divisions within these five classifications (to be shown below), the number of possible combinations is enormous, however in reality we see only a limited amount of configurations. Many of the items fit the same characteristics. The most common item is a direct question on current life-satisfaction, rated on a numerical 10-step scale. Still such items often differ slightly in wording. To keep these differences in mind all item-codes have an extension, which indicates the variant. This extension a character, where 'a' signifies the first (and often only) *variant*, and 'd' means that there are at least four variants of that item in the catalog.

The classification is presented on scheme 4. The details of this classification system are explained in the next sections.

Section 4/1 presents the rubrics used to determine the *focus* of items. This classification departs from the above distinction between overall happiness and its two 'components', that is, affect level and contentment. Not all the items fit this conceptual tri-partition; hence there is a fourth category for 'mixed' items.

Section 4/2 presents the ordering of *time-frames*. A distinction is made between the period referred to in estimates of average happiness, and periods over which change in happiness is followed.

The categorization of *modes* is given in section 4/3. The major distinction made is between self-reports of happiness and estimates by others. As noted above, other ratings are only accepted for assessment of affect level.

Next an ordering of *rating-scales* is provided in section 4/4 and in section 4/5 I outline how is dealt with similar items that differ only in wording.

4/1   Classification by focus
Kind of happiness addressed

4/1.1 Overall appraisal of life

Keyword happiness

O-HL	Overall: Happiness in Life
O-HP	Overall: Happy Person
O-H?	Overall: Happiness: item not reported
O-H*	Overall: Happiness: various items

Keyword life-satisfaction

O-SLu	Overall: Satisfaction with Life (unspecified)
O-SLC	Overall: Satisfaction with Life-Course
O-SLL	Overall: Satisfaction with Life one Leads
O-SLS	Overall: Satisfaction with Life-Situation
O-SLW	Overall: Satisfaction with Life-as-a-Whole
O-SP	Overall: Satisfied Person
O-SQL	Overall: Satisfaction with Quality of Life
O-SL?	Overall: Satisfaction with Life: item not reported
O-SL*	Overall: Satisfaction with Life: various items

Further keywords

O-DT	Overall: Delighted vs. Terrible life
O-G BB	Overall: Good-Bad Balance
O-LWL	Overall: Life Worth Living
O-QLS	Overall: Quality of Life-Situation
O-*	Overall: various items

Sum-scores

O-Sum	Overall: Summed overall appraisals of life-as-a-whole

4/1.2 Hedonic level of affect

Self estimated average

A-AOE	Affect: Average Overall Estimate

Computed average

A-ARE	Affect: Average Repeated overall Estimates (time sampling)
A-ASA	Affect: Average of Specific Affects

Computed Affect Balance (positive minus negative affects)

A-BB	Affect: Balance (Bradburn's index, ABS)
A-BBr	Affect: Balance (Brenner's index)
A-BD	Affect: Balance (Diener's Daily Mood Form)
A-BL	Affect: Balance (Lichter's index)
A-BK	Affect: Balance (Kamman's index)
A-BS	Affect: Balance (Schultz's index)
A-BC	Affect: Balance (Cohen's index)
A-BW	Affect: Balance (Watson's index, PANAS)

Further items
A-CP   Affect: Cheerful Person
A-CA   Affect: Cheerful Appearance
A-?   Affect: item not reported
A-*   Affect: various items

Sum-scores
A-SumAffect: Summed appraisals

4/1.3 Contentment

Overall self estimate
C-BW   Contentment: Best -Worst possible life
C-RA   Contentment: Realization of Aspirations
C-RG   Contentment: Realization of Goals
C-A   Contentment: Accomplishments in life
C-W   Contentment: getting things Wanted

Computed average
C-ASG   Contentment: Average Success in Goals
C-P   Contentment: Person

Various items
C-?   Contentment: item not reported
C-*   Contentment: various items

Sum-scores
C-Sum   Contentment: Summed appraisals

4/1.4 Mixed items

Ambiguous items
M-TH   Mixed: Time Happy
M-PL   Mixed: Pleasure in Life
M-FH   Mixed: Feel Happy
M-LS   Mixed: Life Success

Mixed multiple items
M-AO   Mixed: Affect + Overall
M-AC   Mixed: Affect + Contentment
M-CO   Mixed: Contentment + Overall
M-ACO   Mixed: Affect + Contentment + Overall

4/2 Classification by time-reference
Period to which life-appraisal pertains

Present

c	current (today, these days, present)
cw	last week
cm	last month, last few weeks
cq	last quarter
cy	last year

Momentary

m	momentary (now)
mi	last instant
mh	last hour
mp	last part of day
md	last day

Generally

g	generally

Lately (past and future happiness not included)

se	since event
h	hitherto

Miscellaneous

u	time frame unspecified
?	time frame not reported
*	various time frames combined

4/3   Classification by observation mode
Method by which appraisal is estimated

4/3.1   Self reports

Single closed questions
sq   1 question
sqt   1 question, asked twice (in same interview)
sqr   1 question, repeated (in successive interviews)

Multiple closed questions
mq   <1 questions
mqt   <1 questions, asked twice (in same interview)
smr   <1 questions, repeated (in successive interviews)

Open questioning
oq   open question
pq   projective questioning
fi   focused interview

Content-analysis of ego-documents
cr   life review
cd   dairies

4/3.2   Ratings by others

Ratings based on clinical contact
rc   rating by clinician

Ratings based on daily contact
rdp   rating by peers
rdn   rating by nurses
rdt   rating by teachers
rdf   rating by family
rdv   rating by various

Ratings based on systematic observation
ri   rating by interviewer (of happy appearance)
tsb   time sampling of happy behaviors

Miscellaneous
*   Multiple observation methods
?   Observation method not reported

4/4   **Classification by rating-scales**

How observations are scored

4/4.1   **Scale type**

Verbal scales
v   verbal: each response option labeled

Numerical scales
n   numerical: only extremes defined

Graphical scales
c   circles
f   faces
l   ladder
lg   Life-graph (happiness plotted on a time-scale)
m   mountain scale
ol   open line scale (responses categorized afterwards)
t   thermometer scale

Miscellaneous
%t   % time happy
rs   rank-order of subjects
?   rating scale not reported
*   various rating-scales combined

4/4.2   **Scale range**

The number of steps indicates the scale-range. Some examples:

verbal scale
very, pretty, not   3 steps

numerical scale
1-10   10 steps
0-10   11 steps

4/5   **Notation of variants in wording**

If a combination of the above characteristics is unique, the code gets an extension a. If there are more items of the same kind that differ only in wording, these variants are indicated with further letter extensions, following the alphabet. If a item-code has an extension 'd', this means that there are at least four variants of that item in the catalog.

4/6   Example

Self-report on single question:
'Taken all together, how would you say things are these days?   Would you say that you are....?'
3   very happy
2   pretty happy
1   not too happy

This question is classified as follows:O-HL/c/sq/v/3/aa

Focus	Overall: Happy life	O-HL
Timeframe	Current	c
Mode	Self report on single question	sq
Scale type	Verbal rating scale	v
Scale range	4 step rating scale	3
Sub-variant	*Wording*	*aa*

5 USE OF THIS ITEM BANK

This catalog stores all the indicators of happiness ever used that passed the selection for face validity. The catalog provides full text of each item and links to the findings observed with them. The collection can be searched from several angles. It can facilitate research in various ways.

5/1 Options

There are two version of this item bank, the original MS-Access database and a simplified version on the web. Both versions provide a view of the number or items in the various classification categories. Both versions also allow access to the full text and provide links to the findings. There is a difference in search options. On the web this catalog can be searched only top-down, that is starting by focus and then selecting further within a particular focus category for e.g. a ten step numerical rating scale. The Access database allows searches at all levels, for instance one can select all the items that use a ten step numerical rating scale, irrespective of the focus.

5/1.1 Select items

The item bank first provides an overview of the available methods for measuring happiness, and then on this basis various selections can be made.

Overview of items

The item bank provides an overview of the main types and their variants. This overview appears in the classification on the search screen. From here one can get to the variations and next to the full text of unique items. Remember that unique variants are indicated by a letter extension at the end of the item-code. On the search-screen, the numbers behind the classes indicate the number of variants in that class and the number of studies where this kind of item has been applied.

Selecting similar items

Using this item bank one can easily select similar items, for instance all the items that focus on hedonic level of affect (code A) in the present (code c). One can further refine this selection, for instance by selecting only those that use a numerical rating scale (code n). Preference may depend on the number of available cases. The numbers at the right on the search-screen indicates these.

Searching often used items

The search-screen also shows the number of studies in which a particular item has been used. This information may be useful in selecting a item that is sufficiently current to allow comparison. Note that the data collection is not complete. In fact only half of the eligible studies has been entered as yet (July 2005).

5/1.2 Show use in earlier studies

Another utility is the link to other registers in this database. This brings the user to the studies which used a particular item, or a selection of similar items, and finally also to the findings.

Link to studies

Once one has picked an item, one can get to the studies that used that item. Clicking the study codes presented on the screen does this. The study description gives short information about the design of the study and full bibliographic detail. Note that there are some items on the list that have been used only in studies that have not been entered as yet or that have never been applied in empirical research. These cases are indicated by a zero for the number of studies in on the search-screen.

Link to populations

For a given item (or class of items) one can also list the populations for which that indicator has been applied. For instance one can search the (few) populations in which hedonic level was assessed using experience sampling (codes 'm' and 'sqr'). Reversibly the system also allows selection of items that have been used in a specific group. For example one can list the happiness items used in studies among mentally handicapped people.

Link to correlations

Likewise one can get to all the variables ever related to scores on a particular happiness indicator. For instance the correlates of happiness as assessed by experience sampling. Again one can also select the other way around, for example to select the items that have been used in studies on the relation between happiness and intelligence.

5/2 Applications

These options can be quite helpful in research on happiness, as they provide easy assess to information that would otherwise be unavailable in a practical form.

5/2.1 Orientation for new research

When an investigator decides to include happiness in a new study, the problem is typically to find a good measure of happiness. Since time restraints often preclude a thorough literature study, the choice is commonly rather haphazard and this regularly causes problems when one comes to analyzing the data: the indicators appears to tap something different after all, are not suited for comparing with most other studies on the subject, etc. This catalog facilitates the search for a good item in several ways.

One, this item bank provides the investigator with an easy overview. A look at the classification gives a general outlook and browsing the records held in this database provides a quick route to the details. A glance at the introductory text will also help the investigator to sharpen the concept.

Two, this item bank allows for a better-informed selection. Since items are linked to the studies held in the wider database of happiness, an investigator can select the items that have been used on the kind of public at aim. For instance, if the focus is on the elderly, one can select all the items ever applied on that population in a few mouse clicks. Likewise one can also find items that have been

used in earlier studies on the same variable. For example, if the aim is to assess how strongly happiness is linked to income, one can easily get to the items used in earlier studies on this relationship.

Further this item bank provides information about earlier assessments of psychometric properties and provides available translations for other languages than English.

5/2.2 Interpretation of findings

The item bank also provides help for the analysis phase by providing the investigator with easy access to comparison data.

Observed responses to a question on happiness make more sense when compared to the scores in other studies that used the same item. Comparison can tell whether one's respondents are relatively happy or unhappy and may alert to possible error. Distributional findings are readily available in the database and can be reached from the particular item in this catalog.

Correlational findings also make more sense in a comparative perspective. Not only can this show us whether the observed correlation is in the normal range, it can also hint at differential effects across conditions, for example a stronger effect of income in poor nations. Since differences in correlations are mostly small, such comparisons require that measurement error be reduced. One way to do this is to restrict to results found using similar or identical happiness items. This item bank provides easy access to such findings.

5/2.3 Method development

This item bank is also a useful tool for improving techniques for measuring happiness as it provides an overview of the available methods and sets the scene for systematic exploration of the strengths and weaknesses of these methods.

Stock taking
Development starts typically with taking stock. What methods have already been tried and where are the white spots? Usually this requires time consuming literature research, which always leaves an investigator uncertain about whether he might have missed some of the main measures. This item bank provides complete information in a minute. The classification gives a systematic overview and the number of items behind each code indicates the diversity in that class. Though the classification does not catch all the relevant aspects, this is at least a good start. Since the catalog presents full texts one can next scan the collection for further dimensions.

Evaluation
A next step is to consider the weak and strong points of particular items. One way is to compare observed reliability, for instance by looking at earlier assessment of overtime correlation or inter-item consistency. The item bank provides the accidental findings that are available on this matter. Another approach is to compare predictive power, for this purpose one can use the links to correlations and compare which items perform best on comparable indicators. Such analyses require a rich data collection and this is a strongpoint of this database.

Presentation of improvements
Stocktaking and evaluation may result in the development of new items. If so, this item bank can also serve to bring these to the attention of the research community. Not only are new indicators readily included in the collection, but also proof of better quality is added in the box on psychometric qualities.

6 SUMMARY

The aim of this item bank is to gather all acceptable methods for measuring happiness. In July 2005 it contained 871 items, mostly single questions used in large-scale survey studies. The catalog is part of the wider World Database of Happiness, which also presents the research findings obtained with these items. The collection differs from other test banks in the field of subjective wellbeing in that it limits to a strict definition of happiness.

Happiness is defined as the *degree to which an individual judges the overall quality of his/her life-as-a-whole favorably*. Within this concept two 'components' of happiness are distinguished: hedonic level of affect (the degree to which pleasant affect dominates) and contentment (perceived realization of wants). These components represent respectively 'affective' and 'cognitive' appraisals of life and are seen to figure as subtotals in the overall evaluation of life, called 'overall' happiness.

All variants can be measured using interrogation. Hedonic level can also be assessed by observations of non-verbal behavior. Though happiness is measurable in principle, not all the questionnaires and observation schedules used for its measurement are deemed acceptable. Many measures tap broader phenomena than defined here. These measures are left out on this item bank. All the items included have successfully passed a test for face-validity.

Accepted items are classified by 1) focus, 2) time-reference, 3) mode of observation, 4) rating-scale type, 5) rating-scale range and 6) variation in wording. Each item has a unique code.

This catalog provides an overview of the available method for measuring happiness and allows easy selection of items that have been used in studies one wants to use for comparison. It is hence a helpful tool for designing new research and for interpreting research findings. This item bank is also useful for method development.

Scheme 2/3.1
Difference with other qualities of life

	Outer qualities	*Inner qualities*
Life chances	Livability of environment	Life-ability of the person
Life results	Utility of life	**Enjoyment of life**

Scheme 2/ 3.2
Difference with other subjective enjoyments

	Passing	*Enduring*
Life aspects	Instant satisfactions (instant utility)	Domain-satisfactions
Life as a whole	Top experience	**Life-satisfaction** (happiness)

Scheme 3/3.1
Illustrative use of scheme 2/3.1 to sort items in a questionnaire:
Sheeney's (1982: 443-449) 'Well-being scale"

	Outer qualities	*Inner qualities*
Life chances	Has love relation	In control over life
Life results	Lives usefully (vs. ordinary) Contributes to society	Interested in life Satisfied with life-domains Satisfied with life-as-a-whole Feels to realize dreams

Scheme 3/ 3.2
Illustrative use of scheme 2/3.2 to sort contents of a satisfaction inventory:
Nagpal, R. & Sell, H. (1985) 'Subjective Well-Being Inventory (SUBI)

	Passing	*Enduring*
Life aspects	Agitated Pain Tired	Satisfaction with life-aspects Satisfaction with life domains Fulfillment of expectations Specific worries
Life as a whole	Ecstatic experiences Oceanic experiences	Overall happiness Contentment

Scheme 4
Classification of happiness items

Substantive Meaning	**Focus**	The kind of happiness addressed.
	Time frame	The period considered
Method of assessment	**Mode**	The technique by which happiness is assessed
	Scale-type	How the observation is scored
	Scale range	Number of degrees of happiness distinguished
Sub-variant	**Wording**	Variation in phrasing of otherwise equivalent item

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