

# IS HAPPINESS RELATIVE ?

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*Published in: Social Indicators Research 24, 1991, pp. 1-34*<sup>1</sup>

## **ABSTRACT**

*The theory that happiness is relative is based on three postulates:*

*(1) happiness results from comparison. (2) standards of comparison adjust, (3) standards of comparison are arbitrary constructs. On the basis of these postulates the theory predicts:*

*(a) happiness does not depend on real quality of life, (b) changes in living-conditions to the good or the bad have only a short-lived effect on happiness, (c) people are happier after hard times, (d) people are typically neutral about their life. Together these inferences imply that happiness is both an evasive and an inconsequential matter, which is at odds with corebeliefs in present-day welfare society.*

*Recent investigations on happiness (in the sense of life-satisfaction) claim support for this old theory. Happiness is reported to be as high in poor countries as it is in rich countries (Easterlin), no less among paralyzed accident victims than it is among lottery winners (Brickman) and unrelated to stable livingconditions (Inglehart and Rabier). These sensational claims are inspected but found to be untrue. It is shown that: (a) people tend to be unhappy under adverse conditions such as poverty, war and isolation, (b) improvement or deterioration of at least some conditions does effect happiness lastingly, (c) earlier hardship does not favour later happiness, (d) people are typically positive about their life rather than neutral.*

*It is argued that the theory happiness-is-relative mixes up 'overall happiness' with 'contentment'. Contentment is indeed largely a matter of comparing life-as-it-is to standards of how-life-should-be. Yet overall happiness does not entirely depend on comparison. The overall evaluation of life depends also on how one feels affectively and hedonic level of affect draws on its turn on the gratification of basic bio-psychological needs. Contrary to acquired 'standards' of comparison these innate 'needs' do not adjust to any and all conditions: they mark in fact the limits of human adaptability. To the extend that it depends on need-gratification, happiness is not relative.*

## **1. INTRODUCTION**

### *The issue*

A common theme in writings on happiness is that happiness is 'relative'. This theory was already advanced by early Greek philosophers, in particular Epicures and the Stoics. Through the ages it figured in philosophy and literature. For a review see Tatarkiewicz (1975, ch. 11). Today the theory lives on in the social sciences as well: in economics (i.a. Easterlin, 1974; Van Praag *et al.*, 1979), political science (i.a. Feierabend and Feierabend, 1966; Davies, 1969; Gur, 1970), in sociology (i.a. Runciman, 1966; Manning Gibbs, 1972; Ipsen, 1978; Parducci, 1968) and in psychology (i.a. Unger, 1970): Brickman and Campbell, 1971; Brickman *et al* 1978; Derme, 1979; Inglehart and Rabier, 1984).

The theory holds that happiness does not depend on objective good, but rather on subjective comparison. As such, happiness is seen as both futile and evasive: 'futile' because a happy life is then not necessarily a good life, 'evasive' because standards tend to rise with success, leaving the individual as unhappy as before. In this view, there is little

sense in trying to promote happiness.

Though held in great respect intellectually, this theory is seldom followed in practice. Personally, we all try to improve our situations in the hope of getting happier. Collectively, we require the (welfare) state to maximize material comfort, legal protection and social security in the belief that such ‘social progress’ will make life more satisfying. So there is something odd about this theory. This article tries to find out what it is.

### *Approach*

To that end paragraph 2 presents a resumé of the theory: its basic postulates, main inferences and ideological implications. Next paragraph 3 tests four main hypotheses derived from the theory: It appears that the theory fits the data badly. Paragraph 4 explains why: it enumerates three basic theoretical flaws and mentions some sources of misunderstanding.

### *Concept of Happiness*

Any discussion of the theory requires that we first define happiness. Happiness is conceived here as the *degree to which an individual judges the overall quality of his life favorably*. In other words: how well he likes the life he leads. As such, happiness can also be called ‘life-satisfaction’. When this evaluation of life crystallizes into a stable view, we can speak of happiness as an ‘attitude’ towards one’s life.

There is evidence that *the overall* evaluation of life draws on two more or less distinct sources of information: how well one feels generally and how favourable one compares with various standards of success. These aspect-appraisals are referred to as ‘components’ of happiness. The affective component is the ‘degree to which the various affects a person experiences are pleasant’ and will be called *hedonic level*. The cognitive component is the ‘degree to which an individual perceives his aspirations to be met’ and is labelled *contentment*. These concepts are described in more detail in Veenhoven, 1984a, 22—28.

This definition of happiness has of course consequences at the empirical level. When considering evidence for the theory that happiness is relative, I will focus on investigations that have measured this particular phenomenon. Elsewhere I have described criteria for the valid measurement of happiness as defined here (Veenhoven, 1984a: ch. 4). Only studies which meet these demands are considered in this article.

## **2. THE THEORY HAPPINESS IS RELATIVE**

The theory can be summarized in three basic postulates and four inferences:

### **2.1 Postulates**

*Happiness results from comparison*. The evaluation of life is a more or less conscious mental process and involves assessment of the degree to which perceptions of life-as-it-is meet the individual’s standards of what-life-should-be. The better the fit, the happier the person.

*Standards of comparison adjust*. Standards follow perception of reality. If living conditions are seen to improve, standards rise. If conditions are seen to get worse, standards are lowered. Adjustment follows with some delay.

*Standards of comparison are arbitrary.* Standards of comparison are individual mental constructs which do not necessarily fit any real requirements for a good life. People may want things that are actually bad for them and fail to want that they in fact need. This is especially likely if propaganda and fashion seduce them to reach out for the wrong things.

## 2.2 Inferences

*Happiness is insensitive to actual quality of life.* Because standards of comparison are arbitrary, the judgements based on them are arbitrary as well. Hence people can be subjectively happy in objectively bad condition, or feel unhappy in good ones. Happiness is a coinage of the brain.

*Happiness cannot be raised enduringly.* Because standards adjust, changes to the better or worse have only a shortlived effect on happiness. In the long run any improvements are overhauled by a raise of standards.

*Happiness builds on hardship.* Because standards of comparison anchor in earlier experience, people tend to be happier after hard times. The worse life was earlier, the lower ones standards and the more favourable the judgement of present life.

*Happiness tends to the neutral.* Because standard adjust continually, people are typically 'neutral' about their life, rather than 'positive' or 'negative'. Over their lifetime happy periods balance unhappy periods.

## 2.3 Variations

The theory has several variations, figuring under different names. The variations concern specific assumptions about standards of comparison and rules for calculating success. Proponents of the theory that happiness is relative tend to shift between these variations as it suits their argument. Thus they have always managed to escape falsification.

### 2.3.1 Standards of comparison

Different assumptions have been made about the standards people use in evaluating their life. Most of these assumptions draw on research in related fields.

*Comparison with others.* A common view is that people compare themselves to others: in particular to compatriots of about the same age and social class. This 'social comparison' is seen to focus on observable and socially valued matters such as job prestige and the material level of living. The better off people perceive themselves to be relatively, the happier they feel.

Because it is differences vis à vis others that makes happy or unhappy rather than the actual quality of life, collective changes for the better or worse do not affect happiness. Therefore, social progress cannot raise happiness. Happiness for everybody is impossible, the happiness of one requiring the unhappiness of another. General happiness can at best be optimized by distributing social rewards in such a way that a comparison is favorable for most citizens, for instance by preventing conspicuous consumption by a few very wealthy compatriots.

A present day formulation of this old idea is the theory of 'relative deprivation' that arose from research on satisfaction with one's social status (i.a. Runciman, 1966).

*Comparison with earlier living conditions.* Another view is that people compare their situation with earlier ones. They look for a change for the better or worse. The more improvement they see in their life, the happier people are. Expectations are, of course, highly dependent on information and opinions provided by others and are therefore very liable to fashion, manipulation and rumour.

Again, happiness is unrelated to objective conditions of life, but a matter of optimism or pessimism. The gloomier one was, the happier one is. Lasting improvement of happiness is unlikely. Changes for the better tend to raise expectations and thus do not materialize in greater happiness. Overstressing of progress by mass-media and politicians may even cause an inflation of aspirations and thus result in a decline of happiness.

This old idea has presently been applied in accounts of political discontent (i.a. Geschwender, 1964).

*Comparison with aspirations.* A related view is that people make comparisons with their aims in life: called 'life-goals' or 'aspirations'. The more they think they are getting what they want, the happier they are. Aspirations are seen to draw on all earlier mentioned standards, but to have their own dynamics as well. In line with the economists' postulate of 'endless needs', aspirations are believed to rise infinitely. Everything people think they can have, they want to have. Aspirations are also assumed to decrease after consistent failure. A current claim is, in fact, that people tend to set their aspirations slightly above the level of their last achievement.

Once more, happiness depends on mental constructs rather than on the realities of life. People can be unhappy in perfect conditions because they want more, and be happy in misery because they acquiesce. Lasting happiness is again unlikely because any improvement is overhauled by a rise in aspirations. At best we can try to slow down such adjustments by preaching modesty.

This view was central in early Stoic philosophy. Modern reformulations link up with empirical research on satisfaction with task-performance (i.a. Lewin *et al.*, 1944).

*Multiple standards.* All the above speculations are integrated in Michalos' (1985) Multiple Discrepancy Theory, which holds that people use several standards in evaluating their life. Michalos distinguishes seven ones: (1) what one wants, (2) what other people have, (3) the best experience in the past, (4) expectations for the first few years, (5) personal progress, (6) what one deserves, and (7) what one needs. He demonstrates that perceptions of success in these matters predict happiness better when combined than separately. Michalos found the perceived gap between what one 'has' and what one 'wants' to be the best predictor of happiness. In fact the perceived realization of wants figures as a mediator variable between all other discrepancy variables and happiness.<sup>2</sup>

### 2.3.2 Calculus of success

Different assumptions have been advanced as to how people assess the degree to which life meets their standards. For a review see Andrews (1981, 402/9).

*Degree of imperfection.* One idea is that happiness depends on the degree to which life is perceived to fall short of standards. According to Michalos (1980) people orient themselves on the *size* of the deficiency-gap. Mason and Faulkenberry (1978) rather think of a *ratio* expressed as the percentage of goal achievement. Whatever they do, people are expected to be perfectly happy when standards and reality match completely. The more reality falls short, the less happy people are.

*Above or below neutral.* The other view is that there is some neutral point at which people feel neither happy nor unhappy. The more above that point, the happier they are, the more below, the unhappier. Neutral points could result from average life-experience as remembered by the subject (suggested by Thibaut and Kelly, 1959, 81) or by recent experiences and contrasts (suggested by Brickman and Campbell, 1971 in the line of adaption level theory). Parducci's (1968) range-frequency theory holds that people tend to project the neutral point near the middle of the range between the best and the worst possibility they can think of, even if the distribution is actually skewed.

## 2.4 Ideological Implications

If this is all true, there is little sense in trying to promote happiness. This inference is an issue in several longstanding social debates which are at the heart of our ideological system. If happiness is relative indeed, there is something wrong with current beliefs and moral convictions.

### *Asceticism justified*

Since Antiquity the theory that happiness is relative figures in the debate between advocates of a sober lifestyle and hedonists who claim that we have our senses in order to enjoy them. The former use the theory as weapon against the latter. If happiness is a matter of comparison, we can be equally happy if we do without luxury and lust. If happiness is an arbitrary illusion, why bother about anyway? This argument is the core of Stoic philosophy and was greedily accepted by later Christian moralists who looked for good reasons to renounce the flesh. Though asceticism is no longer dominant in western society, it has not disappeared. In fact, it smoulders in current discontent about the consumer society. Proof for the theory that happiness is relative is one of the things that may stir up the fire.

### *Human rationality in doubt*

The theory is also an issue in the debate about human nature that was at the heart of the 'Enlightenment' in Western thought. The humanist position in that debate is that we need not comply with God or King because humans are wise enough to make their own choices. That position is echoed in the US constitution which states the 'right to pursue happiness'. If, however, humans are made happy by illusion rather than by quality, one can hardly maintain they are rational and able to make their own choices. If, moreover, lasting happiness is in fact unattainable, there is little reason to guarantee the free pursuit of it.

### *The 'Greatest Happiness Principle' no longer a valid moral criterion*

The rediscovery of human individuality instigated a reorientation on moral principles, the word of God no longer being accepted as the last word. In that discussion the 19th century Utilitarianism proposed that the moral quality of actions should be judged by their happiness revenues, the best actions being the ones that yield the 'greatest happiness for the greatest number'. Though few accept this principle as the sole criterion, it is a leading idea nowadays: both in the personal sphere of life and in public choice. Next to 'justice', 'equality' and 'freedom', 'happiness' is one of the end-values of modern welfare states. Therefore it is also a criterion in the redistribution of scarce commodities by the state. If, however, happiness depends on standards that are arbitrary and easily manipulated, there is little moral value in that. If these standards tend to adjust and make lasting improvements impossible, there is not much sense in trying to promote any 'greatest happiness' either: we

might as well rely on principles dictated by divine revelation or revolutionary axiom.

#### *Happiness no legitimation for welfare society*

In line with the greatest happiness principle, current welfare states legitimize themselves to some extent by the happiness they provide for their citizens. Therefore, public happiness is periodically measured in these societies (in so-called Quality of Life surveys) and the high scores proudly published. These results serve as an argument against critical claims of widespread alienation and deprivation in present society. If, however, happiness is in fact irrelevant and elusive, the argument loses power.

#### *No hope for improvement*

Leading religious thought has long served to quieten us with the imperfections of earthy life. Today we live in hope of improvement. The idea that we can become happier is part of that belief: in particular the idea that the general happiness can be improved in the long run by building a better society. The theory that happiness is relative is of course at odds with that perspective. It implies that we are doomed to remain as unhappy as we are now and have always been. The belief in social progress is, in fact, another ideological foundation of current welfare states, which draws on utopian thinking in earlier centuries. Without the prospect of general improvement of happiness, welfare states will probably succumb to interest conflicts and missionary movements.

### **3. EMPIRICAL EVIDENCE**

For long time the theory was mere speculation, at best supported by introspective recognition. In the last few decades systematic empirical checks have been made. Several investigators claim to have proved the theory true. Their results are now widely quoted.

Below I will test the four inferences (hypotheses) mentioned in par. 2.2. Doing so I will first review earlier claims of empirical proof and then present further evidence. I will not go into all the facts linked to the theory, but focus on data about happiness as defined in the introduction.

#### **3.1 Tests of the Inference that Happiness is Unrelated to Real Quality of Life**

The first inference mentioned in par. 2.2. is that happiness is insensitive to actual quality of life, the standards of comparison on which happiness depends being quite arbitrary. This hypothesis is tested in three ways: First two commonly cited pieces of evidence will be checked: the case of ‘happiness and national wealth’ and the case of ‘happiness in the handicapped’. Next we take a broader view on the correlational research literature.

##### **3.1.1 *Equally Happy in Poor and Rich Countries ?***

The relationship between material wealth and happiness is a good test case. Wealth is an important standard in social comparison because it is both well observable and socially valued. Wealth is also a prominent cue in comparisons through time and an easy quantity standard for defining aspirations. If happiness is indeed relative we can expect ‘being better off’ to be related to happiness, but not ‘wealth as such’.

*Claimed proof.* Easterlin (1974) claims to have shown these predictions to be true. He compares average happiness *between* different countries around the world and he concludes that the differences in happiness between poor and rich countries are small and inconsistent (p. 106/7). See **scheme 1a**. Next Easterlin compares happiness *within* countries between income brackets. He presents differences in happiness between rich and poor in 29 nations. He sees the rich to be consistently happier than the poor (p. 99—104).

On the basis of the latter observation Easterlin concludes that happiness depends on relative wealth, whereas the first leads him to believe that happiness is insensitive to wealth as such.

*Proof reconsidered.* Easterlin's comparison between rich and poor countries involved two nation-sets: the 14 nations of Cantril's (1965) famous world-survey and another 9 nations in which Gallup polls had asked identical questions on how happy one feels generally. These data are presented in the tables 6 and 7 of his report. Looking at these tables one sees a clear — though not perfect — relationship. To make sure I computed product-moment correlations. These are +0.51 and +0.59 respectively. I would not call that relationship 'uncertain as Easterlin does on p. 118.

How do these high correlations fit the presentation in **scheme 1a**? That presentation is simply misleading. Easterlin played the classic trick of scales: the scale for national wealth is 2.5 times longer than the happiness scale and logarithmic. If both variables are plotted on equal scales, quite a different picture emerges. See **scheme 1b**. Now we not only see a clear positive relationship, but also a curvilinear pattern, which suggests that wealth is subject to a law of diminishing happiness returns.

It is possible that these data do not even show the relationship to its full extent. In both sets of nations the underdeveloped countries are underrepresented. Therefore, I examined the same relationship in the data of a more recent large-scale world survey, performed by Gallup International in 1975 (Gallup, 1976/77). This study samples parts of the world rather than nations and covers the poor regions of Sub-Sahara Africa and East Asia (not, unfortunately, the communist countries and the Middle East). In this sample the correlation between GNP per capita and average happiness is +0.84! ( $p < 0.01$ ). The pattern is again curvilinear.

Easterlin's second piece of evidence is that — within countries — the rich are happier than the poor. He does indeed show that the rich are typically happier in the 29 countries he considers. Yet he ignores the sizable variations in the difference. If Easterlin had considered these variations, he would have observed that the difference between rich and poor tends to be smaller in the more prosperous countries. This obviously does not fit comparison theory, which predicts that the differences are independent of the level of living in the country because it is the relative difference that matters. Still another thing is that his data are outdated. They were all gathered around the year 1960. Elsewhere I have shown that correlations between happiness and income have decreased in first world nations during the last decades (Veenhoven 1984a, 193).

Therefore I did a similar analysis with data gathered between 1975 and 1985 in 22 nations.<sup>3</sup> The data are presented in **scheme II**. As can be seen there is no straight tendency of the rich being happier. Though the correlations tend to be positive, they vary much between countries and are often close to zero. The strong positive correlation that Easterlin presents as the universal pattern appears in fact only in half of the cases. The other half is characterized by quite small positive correlations and in one case the correlation is even negative. The variation is not random, but follows the economic prosperity of the country: the higher the gross national product, the lower the correlation between individual happiness and relative income ( $r = -0.35$ ). The USA marks as an exception in this pattern,

probably because of the pronounced social inequality in that country.

### 3.1.2 *Happy in Spite of a Serious Misfortune ?*

If standards of comparison adjust to failure and success, we can expect people to remain fairly happy in spite of serious misfortune. We can also expect this if we assume people to compare themselves with people in similar situations, and thus to equally unlucky ones.

*Claimed evidence.* Several investigators do indeed report high levels of happiness among unfortunate people: Cameron *et al.* (1971) for malformed persons, Brickman *et al.* (1978) for paralyzed accident victims shortly after the accident, and Shulz and Decker (1985) among long term spinal cord injured persons. The studies are summarized in **scheme IIIa**.

*Evidence reconsidered.* A first thing to note is that these handicapped people are not as happy as ‘normal’ ones. **Scheme IIIa** shows, in fact, consistently lower scores. Still, the difference may be smaller than one would expect.

Yet the difference probably is greater than appears in the scores. As can be seen in the second column, the first two studies did not assess happiness in the same way. The happiness of the unfortunates was assessed in face-to-face interviews, while controls were interrogated by telephone or a written questionnaire. Contrary to Brickman’s reassurance on p. 919, these interrogation modes do not yield different responses, the same subjects have been shown to report more happiness in a face-to-face interview than through the telephone (Smith, 1979, 27) or a questionnaire (Suchman, 1967). The differences are in the realm of one point of the 11 step-scale used here.

Still another thing is that the controls in Cameron’s study are not just ‘normal’. Cameron drew these malformed subjects largely from hospitals and matched his control group accordingly. That means that about two-third of the ‘normals’ were in hospital at the time they filled out the questionnaire.

Still, the happiness of these handicapped people is remarkable. Yet this achievement is not necessarily bought by lowering standards and shifting reference groups. It may also result from genuine satisfaction. Though the physical handicaps involved do set severe limitations, they do not block all needgratifications, in particular not when the individual develops skills to come into his own in other ways.

The example of happiness-in-spite-of-a-handicap is misleading for another reason as well. It is a typical case of misfortune hurting less than expected. Yet there are also examples of misfortune that does hurt according to expectation. Some of these are presented in **scheme IIIb**: mothers of handicapped children, widows and widowers and holocaust victims. In all these three cases we can expect the same adjustment of standards as attributed to the handicapped: that is a lowering of aspirations and a downward shift of reference groups. Yet all are clearly unhappy relatively. If any adjustment of standards is involved in these cases, it apparently does not suffice for maintaining happiness.

### 3.1.3 *No Correlation With the ‘Objective’ and the ‘Stable’?*

Links of happiness to ‘wealth’ and ‘handicaps’ are, of course, examples of a more general rule. The theory predicts in fact that happiness is insensitive to all conditions: to the good as well as to the bad, in particular to lasting states of adversity or fortune. Several authors write that this is precisely what empirical happiness research has shown (i.a. Brickman *et al.*, 1978, 925, Inglehart and Rabier, 1984, 30).

*Claimed proof.* The evidence referred to is the common observation in Quality of Life research that happiness is only weakly linked to so-called *objective* conditions, but highly related to subjective ones.<sup>4</sup> Objective conditions found largely uncorrelated to happiness are typically social categorical variables (age, gender, income, religion) and characteristics of the living environment (size of town, quality of house, public transportation). Subjective conditions which do relate to happiness concern: satisfaction with all these matters (in particular satisfaction with health) and various personality traits (ego-strength, maturity, optimism). The low correlations with objective matters are seen as a proof that standards adapt to any circumstances. The high correlations with the subjective factors are seen as a confirmation that happiness is a matter of outlook.

Inglehart and Rabier (1984, 32) moreover claim that *stable* conditions such as 'education' and 'gender' affect happiness even less than *variable* conditions such as 'income' and 'marital status'. The more stable the condition, the more likely that standards adjust.

*Proof reconsidered.* The facts referred to are correct in themselves. Yet they tell only half the story. A closer look at the literature reveals that a lot of 'objective' conditions do affect the subjective appreciation of life: both individual circumstances and collective social conditions. To begin with the former: happiness is substantially affected by one's work (working conditions, profession) and intimate relations (presence of a spouse, contacts with friends). Negative life-events in these realms, such as losing one's job or losing a spouse, have been shown to lower the appreciation of life lastingly. At the collective level even greater differences appear. There are large differences in average happiness between countries: not only the earlier discussed difference between poor and rich countries, but also differences between countries of varying political stability. Further, not all 'subjective' factors appear related to happiness, for instance not the 'ethical values' one adheres to, or one's 'lifestyle preferences'. Not even all personality characteristics are linked with happiness (f.e. not psychological differentiation and time-orientation). For a complete review of the empirical findings see Veenhoven (1984a) and Argyle (1987).

Even if happiness were unrelated to all 'objective' conditions, there would still be the question of how it can still depend so much on 'subjective' ones. The argument that happiness is only a matter of how one looks at things is too easy. If the 'subjective' correlates reflect a tendency to take a rosy view, why does that view not lead to unrealistic expectations and rosy memories, thus creating reality-standards gaps that even the optimist cannot deny?

If we recognize that the 'subjective' correlates of happiness involve more than just optimism, explanations are even more difficult. For instance, a major co-variate is 'competence in living' (as appears in correlations with mental health, autonomy and social skills). This is quite comprehensible: competent people being likely to create relatively good conditions for themselves: to find better jobs, a nicer spouse, to quarrel less, to live more productively, etc. Yet according to the theory that happiness is relative, these advantages must be overhauled by rising standards, leaving the competent as unhappy as the incompetent.

Contrary to the claim of Inglehart and Rabier (1984, 32) there is no consistent evidence that 'variable' conditions are less related to happiness than 'stable' ones. In fact, the literature suggests the reverse: modest correlations with life-events (increase in pay, loss of job, illness), but high correlations with stable personality traits and characteristics of the country (See Veenhoven, 1984a).

*To sum up*

The better their social and personal living conditions, the happier people generally are.

### 3.2 Tests of the Inference that Happiness Cannot Be Raised *Enduringly*

The second inference holds that any improvement of living conditions is overhauled by adjustment of standards in the long run: either by ‘inflation of aspiration’, ‘upward reference shift’ or ‘habituation’. Similarly, deterioration of living conditions is seen to affect happiness only temporarily.

Evidence for this hypothesis has been presented at two levels: at the macro level in an analysis of the long-term happiness revenues of economic growth of the country and at the micro level in comparison of lottery winners and controls.

#### 3.2.1 *No Happier in Spite of Economic Growth?*

Claimed proof Easterlin (1974) compared average happiness in the USA between 1945 and 1970. In that period the national income of the country almost doubled. Yet the level of happiness remained largely the same. Easterlin interprets this as another argument for his thesis that happiness is relative (next to the arguments summarized in par. 3.1.).

*Proof reconsidered.* The USA was already quite affluent at the end of World War II. If wealth is subject to the law of diminishing returns, it is thus quite comprehensible that further increase did not add much to happiness. Yet matters are likely to be different in countries that start with a lower standard of living.

This point is neatly illustrated by the case of Western Europe. At the end of World War II happiness was low in England, France, the Netherlands, and West Germany. The level of living was low as well, housing shortage and food rationing being the rule. Between 1948 and 1975 these countries witnessed both a startling economic recovery and a general rise in happiness. The percentage of unhappy persons in the population was halved during that period (Veenhoven, 1984, p. 171).

#### 3.2.2 *No More Happy After Fortune and No Less After Adversity?*

*Claimed proof.* Brickmann *et al.* (mentioned in par. 3.1.) also considered the happiness of lottery winners. They compared winners of a major prize in the Illinois state lottery within controls living in the same areas (N respectively 22 and 22, non-response 48% and 41%, both interviewed by telephone). The lottery winners appeared slightly happier, but not significantly.

*Proof reconsidered.* Methodologically the evidence is not very strong: the numbers are small, the non-response is high and the control group is not very well matched. Further Brickmann *et al.* do not really rule out the possibility that lottery players tend to be less happy than average.

Even if we accept the findings as true, there is still doubt about their interpretation. Brickmann *et al.* attribute the absence of a difference to an ‘inflation of aspirations’ in the lottery winners. Yet they did not demonstrate anything of the kind. Here again there are other explanations such as (1) problems of reorientation in work and social relations and (2) cost of being envied and regarded as nouveau-riche. In this context it is worth noting that Diener (1985) did find very rich Americans to be much happier than average. Adaptation of standard is far more likely among the very wealthy than among lottery

winners. The former are more likely to compare themselves to other rich people, to have lived in luxury all their life and to have reason to expect to become even richer than they are now.

*Evidence to the contrary* A test of the hypothesis requires in fact data that allow the observation of changes in happiness after fortune or adversity. Therefore I went through my Database of Happiness Veenhoven (1990) in search for longitudinal studies which involve measures of both happiness and fortune/adversity. I found a dozen such studies, most of which concern time lags of one or two years. As the issue is whether happiness can be ‘lastingly’ improved I focus here on the few that cover lags of three years and more. These studies are summarized in **scheme IV**.

These three studies show that typically favourable life-events (f.e. got married, passed exam, promotion at work) tend to be followed by an increase in happiness, while adverse events (e.g. loss of spouse, serious illness, loss of job) tend to be followed by a decrease in happiness. The changes in happiness remain visible over periods of three to eleven years.

The relationship between earlier life-events and later happiness can be spurious. It is not unlikely that adverse events happen more often to ineffectively coping people, who are still ineffective later and therefore still unhappy. In this context it is worth realizing that the studies measure ‘change’ in happiness, rather than ‘level’ of happiness, that many of the events are largely beyond the control of the individual (f. e. death of spouse), and that the Chiriboga study controls personality. There is moreover reason to assume that the statistics underestimate the true effects. Not all the events that happened after T<sub>1</sub> assessment of happiness will have been unexpected at that time: for instance divorce. These events are likely to have affected happiness at T<sub>1</sub> and their effect is hence not fully reflected in the betas.

A noteworthy difference is that ‘affective’ indicators of happiness (‘happy’ item, Affect Balance) show somewhat stronger effects than cognitive’ measures (life-satisfaction). This fits the argument in 4.1 that the affective component of happiness (hedonic level) is less relative than its cognitive components (contentment).

*To sum up*

Though not all changes to the better or worse affect happiness lastingly, some at least do.

### 3.3 Tests of the Inference that Happiness Builds on Hardship

This inference follows from the variant that stresses comparison through time. It predicts that hard times tend to be compensated later. Difficult experiences in the recent past mark a low reference point that sheds a rosier light on present day conditions. In this line Brickman and Campbell (1971, 293) suggest that a moderate unhappy youth predisposes to adult happiness. Is that true?

*Claimed proof.* A commonly mentioned study in this context is Elder’s (1974) famous investigation among ‘Children of the Great Depression’. This study involved retrospective interviews about conditions in youth and a follow-up during adulthood. Happiness at the various stages of life was scored retrospectively on a so-called ‘life-chart’. It appeared that the respondents who remember most hardship in their youth characterized their youth as less happy indeed, but demonstrated more increase in happiness in the years after. They ended up happier in middle age. Elder claims this is because memories of the Depression functioned as a standard for evaluating subsequent life-experiences (p. 259).

*Proof reconsidered.* Though suggestive, this finding is not convincing. The result may be an artefact of the life-graph method, which is likely to overemphasize contrast and to focus on salient experiences in the past. Decisive evidence requires identical questions on present happiness at different points in time.

Even if Elder is correct, there is also evidence to the contrary. In an intensive depth study among college students, Wessman and Ricks (1966, 104—22) found retrospective reports of an unhappy life-history to be strongly linked to present unhappiness. Likewise, five years after the end of World War II, students in war-afflicted countries appeared less happy than students who had witnessed the war from behind safe frontiers (Barschak, 1951, 179). The above case of the holocaust survivors (**scheme IIIb**) is even more clear: these people had the worst time possible and should hence compare their present situation most favourably. Yet in fact they appear to be less happy than same aged compatriots who got off scot-free.

Obviously, hard times influence happiness in many ways and not just by setting standards. Adversity influences skills for living: positively if problems can be dealt with and negatively if the individual loses control. This may mean that Elder's 'Children of the Great Depression' learned more from their experiences than that they suffered from it. A difficult youth may also predispose to a pessimistic view which colors the appreciation of life into adulthood. The gradual 'defrosting' of such a perceptual set may then as well explain Elder's result.

*To sum up*

There is no convincing evidence that earlier hardship predisposes to later happiness: not even that moderate hardship does.

### 3.4 Evidence for the Inference that Happiness Tends to be Neutral

The last inference is that experiences of happiness and unhappiness alternate and largely outbalance each other. Comparing ourselves with others, we are either happy or unhappy because we are better or worse off relatively, and this happiness is only shortlived because we soon adjust standards. Likewise, comparison with earlier conditions predicts that happiness oscillates around neutral. If we improve, we feel happy for some time, but soon we get used to that level and feel neutral again, or even unhappy because we came to expect continuous progress. The same applies to comparisons with expectations and aspirations. If all this is true, we can expect that happy and unhappy periods will alternate through our life, and that in the general population the number happy and unhappy people will tend to match each other. This implication is known as the zero sum theory. See i.a. Unger (1970) for a formal statement.

For a long time, this implication has been held to be true. Yet the last few decades' empirical happiness research has shown that it simply is false.

*Evidence to the contrary.* The claim that happiness oscillates around zero has been considered in longitudinal studies on both overall life-satisfaction and hedonic level (remember the conceptual distinctions in the introductory paragraph). If happiness oscillates around zero, retest-correlations should be negative: the happier one is now, the more likely one is to be unhappy at the next interview. This is not the case however: correlations are about +0.50 (research reviewed in Veenhoven 1984a, 44—371, see also Stones and Kozma 1986).

Early investigators claimed to have found evidence for cyclical variation in hedonic level (Hersey, 1932; Morgan, 1934). However, more sophisticated studies carried out later

on did not reproduce that pattern. Over a six week period, Wessman and Ricks (1966, 63) found no alternating fluctuations nor a balance of positive and negative affect. A similar result is reported by Fordyce (1972, 151/3).

Representative surveys find that the great majority of the population claims to enjoy life more or less. Only in very poor countries does the number of unhappy citizens equal that of the happy ones. (Research reviewed in Veenhoven, 1984b, 509—22). Similarly, studies on hedonic level in Western nations show that positive affect typically outbalances negative affect (Veenhoven, 1984b, 523; Bless and Schwarz, 1984).

*Counter claims.* The finding that people are typically happy rather than neutral met with many objections: not only from proponents of the zero-sum theory, but also from social critics who cannot believe that people enjoy life in this society. It is claimed that people overstate their happiness for reasons of social desirability and self-defense, and that survey questions evoke stereotypes rather than real experience. Elsewhere I have checked all these claims in detail and found them generally untenable. Such distortions do occur to a modest extent, but are certainly not the rule. (Veenhoven, 1984a, ch. 3) The best evidence comes from time-sampling studies of hedonic level. Such studies are the least open to desirability distortion. They nevertheless show that pleasant experience dominates (i.a. Kirchler, 1984).

Another attempt to save the zero-sum theory was made by Parducci (1965, 1968) who claims that, when comparing themselves to average citizens, people tend to project that average at the midpoint of the range they oversee, assuming implicitly a normal distribution. Distributions of life-chances are often skewed however: society may, for instance, provide justice to the great majority but discriminate against a salient minority. In that case most citizens are likely to place themselves above the average, while, in fact, they are not. Though there is probably some truth in this theory, it can hardly explain the overwhelming dominance of happiness that has been observed. The bias involved is a minor one and is moreover likely to neutralize itself, because it can work both ways.

*To sum up*

The zero-sum theory is not confirmed by the facts; people feel typically happy rather than neutral.

## 4. DISCUSSION

Clearly, the theory does not fit the facts: all the hypotheses derived from it were in fact falsified. This result raises two questions: (1) What is wrong with the theory? and (2) Why is it still adhered to so much?

### 4.1 What is Wrong with the Theory?

A theory can be wrong at two levels: at the level of its postulates and at the level of inferences. I will limit to the first level, because it is the most basic. I see major weaknesses in all three the postulates: in the postulate that happiness ‘depends on comparison’, in the postulate that standards of comparison ‘adjust’ and in the postulate that such standards are ‘arbitrary’ mental constructs. Though not entirely untrue, these claims are gross overstatements.

#### 4.1.1 *Happiness Does Not Result from Comparison Only*

The overall evaluation of life involves more than consciously comparing one's situation to standards one has in mind. There is also an intuitive appraisal of whether one generally feels good or not. A person will not call himself happy if he has all he wants but nevertheless feels depressed most of the time.

*'Happiness' is not 'contentment'*. Proponents of the theory that happiness is relative tend to equate 'pleasant affect' with 'perception of success' in reaching standards. Yet these are two different issues. As Zajonc (1980) has argued persuasively, affective experience is distinct from cognitive appraisal. Pleasant affect does not depend on perceptions of success exclusively. Though positive comparisons may be a source of pleasant affect, they are by no means the only one.

At this point we must remember the definitions advanced in the introduction to this paper. I defined *happiness* as the overall evaluation of life and I distinguished 'components' of happiness involving specific 'affective' and 'cognitive' appraisals: respectively *'hedonic level' of affect* and *'contentment'*. I suggested these components serve as sources of information on which people draw when striking the overall balance of their life.

This distinction helps to make clear that the postulate that happiness draws on comparison applies only partly to the phenomenon under discussion here. It applies to the cognitive component of happiness: called 'contentment'. It does not fully cover 'overall happiness' which depends on 'hedonic level' as well. In fact the theory ignores affective experience altogether.

*Happiness depends on need-gratification as well.* Proponents of the theory that happiness is relative also tend to equate 'standards of comparison' with 'needs'. Here again, these are distinct issues. 'Needs' are bio-psychological prerequisites for functioning, which are innate, largely unconscious and universal. 'Standards' are constructions of the mind, subject to learning and variable between cultures and individuals.

Several theorists of motivation have tried to grasp what is involved in these innate needs (also referred to as 'instincts' or 'basic needs'), e.g. McDougal (1908) and Wentholt (1975). Maslow's (1965) theory is the best known one; he sees inwiredXinwardX needs for food, shelter, safety, companionship, esteem and development. Whatever the needs postulated: all theorists see them as a product of evolution and hence something that is crucial for functioning and finally survival. In that view it is logical to presume that nature has not left the gratification of such crucial needs to the wisdom of conscious reasoning alone, particularly not because the ability to think is a rather late evolutionary development. Nature seems to have safeguarded need-gratification by linking it to pleasant affect; pleasant and unpleasant affects functioning as red and green lights on the human adaptive machinery. Unpleasant affect signals deficiencies that threaten functioning and automatically slows down action. Positive affect signals gratification and encourages current activity to go on. In this vein Arnold (1960, 86) characterized hedonic experience as 'the intuitive appraisal that something is either good or bad for us'.

In this view, hedonic affect monitors need-gratification. When we feel good, functioning is apparently not threatened by any serious deficiencies; the green light is on. In other words: hedonic experience says something about the degree to which our condition fits the demands implied in our nature. Here subjective happiness meets the objective good. It is then not so strange that people feel generally happy rather than neutral. If minimum needs are being met, people feel good and on that basis tend to judge

their life positively. Happiness is in fact the normal condition: equally normal as 'health'.

#### 4.1.2 *Happiness is Not Doomed to Follow Adjusting Standards*

The postulate of adjusting standards concerns cognitively constructed yardsticks such as 'aspirations' and 'expectations'. It does not apply to the above mentioned 'needs'. Needs do not adjust. Moreover the postulate does not fully apply to standards of comparison either. Though standards do adjust, they are not without any anchor.

##### *Needs no adjustable matters*

'Needs' are given requirements for functioning, which are inherent to the human organism. Needs involve necessities (food, sensory stimulation, cognitive control, social ties, etc.). That is: things without which we cannot live and to the pursuit of which we are therefore preprogrammed. Consequently needs cannot be arbitrarily adjusted: neither downward nor upward.

Downward adjustment of needs brings inevitable discomfort. If we renounce food and company, the automatic alarms of hunger and loneliness start ringing. These alarms keep on ringing as long as the deprivation endures. Habituation can at best dim the discomfort somewhat. Favourable comparison does not turn off the alarm either: we are no less hungry if our neighbours are equally hungry or when we are not so hungry as we had expected to be.

Upward adjustment also has its limits. We are build to reach out for more than the minimum, but we are not saddled with insatiable needs. Needgratification above the minimum is encouraged by positive affect, but this motivation typically follows the law of diminishing returns: the more friends we have, the less pleasure we derive from an extra one. Some needs involve even maximum levels, safeguarded by automatic adversity reactions: g. e. in the case of the need for food.

In this light it is quite comprehensible that we found happiness to be lower in the poorest countries of the world (remember **scheme Ib**). In these countries a large proportion of the population is undernourished ( $\pm 40\%$  in Africa at that time) and hence one basic need clearly not gratified. No doubt improved nourishment will raise happiness lastingly in these countries.

##### *Standards of comparison not without any anchor*

Still happiness does at least partly depend on comparison. Is happiness then relative to that extend? Only partly so: though standards of comparison are variable mental constructs, they are not without any anchor. Standards do not just fluctuate with accidental success and fashion but draw as well on the more solid grounds of innate needs and collective value orientation.

As to the link of standards to needs: the postulate presumes in fact that humans are born as a tabula rasa and that learning can imprint and erase whatever standards it may. That is not a very plausible assumption: how could the human race have survived if it had been born without any sense of direction? How could aspirations prove to be so similar across cultures (as shown by Cantril, 1965)? Obviously, standards are not entirely unrelated to the basic human needs discussed above. Needs set at least the minimum standards: e.g. for food, clothing and social contact. Some saints may set aspirations below need-level, but they do so at great pains and often at the cost of their life. Above the minimum level the relation between needs and standards is probably looser, but is still existent.

The variation of individual standards is also limited by their links to collective value

orientations. Collective notions of the good life are not only slower to adjust; some of them are more or less invariant. This is, for instance, the case with the principle of ‘fairness’ that figures as a standard in several theories (i.a. in Michalos’ MDT Theory). This standard is hardly sensitive to comparison with others, earlier experience or expectations for the future. If a person works harder but gets less, he will always consider that unfair even if his neighbour is treated in the same way. The appeal of this principle roots both in the structure of our brain and in the organisation of human society.

#### 4.1.3 *Happiness is Not Based on Arbitrary Mental Constructs*

Finally the postulate that standards of comparison are subjective mental constructs that have no sound link with any objective good. Also this postulate does not fully apply: firstly because it does not concern needs and secondly because not even standards of comparison are fully arbitrary.

##### *Needs no arbitrary matters*

As we have seen needs are necessities rather than arbitrary matters, and mark inborn universals rather than individual constructions. Hence to the extent that happiness depends on needgratification, it is not an insignificant appraisal. High hedonic level at least signals good functioning. In this context it is understandable that the happy tend to be healthier and live longer (Research reviewed in Veenhoven, 1984a, 260—73).

##### *Standards of comparison no mere whims either*

The postulate is right in that the standards of comparison we construct do not necessarily fit ‘real’ requirements for the good life. Yet this is not to say that they not typically do. As argued above, standards are partly dictated by innate needs and by cumulated wisdom. Moreover, to the extent that we construct standards by ourselves we are not completely at the mercy of incidental experience. Human rationality allows a broader view.

#### 4.1.4 *To sum up*

The overall appreciation of life (happiness) does not result from conscious comparison (contentment) exclusively, but depends also on how well we feel affectively (hedonic level of affect). Hedonic level depends largely on the gratification of innate needs: it is in fact an automatic signal that tells us whether minimal demands for bio-psychological functioning are being met. These needs are fixed inwired requirements of the human organism rather than variable constructions of the individual mind. Consequently ‘needs’ are not ‘adjustable’. They mark in fact the limits of human adaptability. As needs concern basic requirements for survival they cannot be disposed as ‘arbitrary’ demands. The theory happiness-is-relative overlook these needs and falsely equates them with standards of comparison.

## 4.2 **Why So Persistent?**

How did the theory happiness-is-relative persist throughout the centuries in spite of these apparent theoretical flaws? Why are present day social scientists inclined to turn a blind eye to the empirical evidence against it? There are, of course, ideological reasons; the theory is music to the ears of critics of individualism, hedonism and the welfare society. Yet that cannot fully account for its continuous support. Its persistence is also a matter of sloppy thinking.

### *Conceptual confusion*

Discussions on happiness have always been haunted by conceptual confusions, and the debate on this issue is no exception. The problem is that the term happiness is used for different phenomena and that the theory applies to some of these but not to others.

We have already met with one such case where the difference between ‘overall happiness’ and ‘contentment’ was concerned. Most authors are not explicit about this difference and call all of them happiness. Yet in their analyses they focus in fact on the cognitive component, which they deem to be relative and generalize that conclusion to the affective component which they call by the same name.

The case of ‘top-experience’ is another example. Short-lived states of euphoric delight are also called happiness. The theory happiness-is-relative probably applies fairly well to these phenomena: extreme positive experiences seem to evoke countervailing negative affects: See Solomon’s (1980) Opponent Processing Theory. Also can one doubt the significance of these experiences as they often result from mental disorganization. Yet ‘top-experience’ is not the same as ‘life-satisfaction’. One cannot transpose conclusions about the former phenomenon to the latter.

Similar confusion exists with the appreciation of specific aspects of life, such as ‘income-satisfaction’ and ‘housing-satisfaction’. There is good evidence that satisfaction in these domains depends very much on comparison (see Van Praag *et al.*, 1979; respectively Ipsen, 1978). Yet again such observations cannot be transposed to satisfaction with life-as-a-whole, because life-satisfaction depends on hedonic level of affect as well. (See Maxwell, 1985 for a demonstration of the inapplicability of the ‘relative income hypothesis’ on life-satisfaction).

This all is common practice with authors who fail to define happiness in advance. Unfortunately, these constitute the majority.

### *Arguing by analogy*

Several authors who were wise enough to distinguish at the conceptual level, nevertheless end up in the same faulty conclusions because they assume analogies. The famous article of Brickman and Campbell (1971), for instance, assumes that happiness is subject to the rules of Adaption Level Theory that appeared in psychological research on ‘sensations’. The analogy is implicitly assumed. The authors do not wonder whether an attitude like phenomenon such as happiness is likely to behave as sensations. If they had, they would probably have concluded the opposite.

### *Taking the exception for the rule*

There are, of course, people who are never contented because they always want more. It is probably true that these people do not achieve any lasting happiness and that their temporary delight is irrelevant. Such cases are appealing and can teach us about the dynamics of happiness. Yet there is a tendency to over-emphasize such exceptions and present them as the rule. Early moral philosophers did so, because they aimed at admonitory advice in the first place and lacked representative empirical evidence. Present-day psychologists could know better, but seem to be fascinated by the deviant.

### *Bias to cognitive explanation*

Lastly, the theory happiness-is-relative may owe its persistence to the fact that it reduces happiness to a matter of conscious thinking. Such explanations have appealed to philosophers throughout the ages and are currently the vogue in modern psychology. In the case at hand alternative explanations lead into the ill-understood fields of motivation and emotions.

## 5. CONCLUSION

Happiness in the sense of life-satisfaction depends only partly on comparison, and even standards of comparison do not fully adjust to circumstances. To a great extent happiness depends on the gratification of innate bio-psychological needs which do not adjust to circumstances: needs mark in fact the limits of human adaptability. The better these needs are gratified the better we feel and the more satisfied we are with life. People cannot be happy in chronic hunger, danger and isolation: not even if they have never known better and if their neighbours are worse off.

To the extent that happiness depends on need-gratification it is not relative. Happiness cannot be disposed as an evasive and insignificant matter.

## **NOTES**

<sup>1</sup> An earlier version of this paper was presented at the International Conference of Psychology in Sydney, Australia, September 1988.

<sup>2</sup> Michalos' 'have-want gap' is in fact what I defined as 'contentment' (the so-called 'cognitive component' of happiness).

Data are drawn from representative surveys found in the World Database of Happiness.

Catalogue of Correlates (Veenhoven. 1990).

<sup>3</sup> This pattern is often mentioned in the literature because it contradicts expectations.

Investigators usually looked for deprived social categories, their work being mostly instigated by welfare organisations in search for new client groups. Instead they found that happiness depends largely on matters that welfare cannot influence such as 'personality' and 'intimateties'.

**REFERENCES**

- Andrews, F. M. (1981)  
*Subjective Social Indicators.*  
Objective Social Indicators and Social Accounting Systems (Academic Press, New York).
- Antonovsky, A., Maoz, B., Dowty, N. and Wijsenbeck, H. (1971).  
*Twenty-five years later: A limited study of sequelae of the concentration camp experience,*  
Social Psychiatry. vol.6. p. 186—93.
- Arnold, M. B. (1960)  
*Emotion and Personality*  
Columbia. New York.
- Barrow, R. (1980)  
*Happiness*  
Robertson, Oxford U.K..
- Barschak, E. (1951)  
*A study of happiness and unhappiness in the childhood and adolescence of girls in different cultures,*  
Journal of Psychology. vol. 32, p. 173—215.
- Bless, Herbert and Schwarz, Norbert (1984).  
*Ist schlechte Stimmung die Ausnahme?*  
(unpublished paper) Universität Heidelberg.
- Brickman, P. and Campbell, D. T. (1971)  
*Hedonic Relativism and Planning in the Good Society*  
Academic Press, London. p. 287—302.
- Brickman, P., Coates, D. and Janoff-Bulman (1978)  
*Lottery winners and accident victims: Is happiness relative?,*  
Journal of Personality and Social Psychology. vol. 36. p. 917—27.
- Cameron, P., Van Hoeck, D., Weiss, N. and Kostin, M. (1971).  
*Happiness or life-satisfaction of the malformed.*  
Proceedings of the 79th Annual Convention of the American Psychological Association.  
vol. 6. nr. 2. p. 641—2.
- Cantril, H. (1965)  
*The Pattern of Human Concern (Rutgers University Press.*  
New Brunswick (NJ)).
- Chiriboga, D. A. (1984)  
*Social stressors as antecedents of change.*  
Journal of Gerontology. Vol. 39. nr. 4, p. 468—77.

- Davies, J. (1979)  
*The J-curve of rising and declining satisfaction as a cause of some great revolutions and a contained rebellion,*  
in: Graham, H. D. and Gurr, T. R., eds.. *The History of Violence in America* (Bantam, New York). p.690—739.
- Diener, Ed., Horwitz, J. and Emmons, R. A. (1985)  
*Happiness of the very wealthy.*  
Social Indicators Research, vol. 16, p.263—74
- Easterlin, R. A. (1974)  
*Does economic growth improve the human lot? Some empirical evidence,*  
in: David, P. A. and Melvin, W. R. (eds.) *Nations and Households in Economic Growth* (Stanford University Press, Palo Alto. Ca.). p. 98—125.
- Elder, G. H. jr. (1974)  
*Children of the Great Depression*  
University of Chicago Press. Chicago.
- Feierabend, I. K. and Feierabend, R. L. (1966)  
*Aggressive behaviors in politics 1948— 1966,*  
Journal of Conflict Resolution, Vol. 10, p. 249—72.
- Fordyce, M. W. (1972)  
*Happiness, Its Daily Variation and Its Relation to Values*  
Unpublished Ph.D-thesis US International University.
- Gallup, G. H. (1976/77)  
*Human Needs and Satisfaction: A global survey.*  
Public Opinion Quarterly, p. 459—69.
- Geschwender, J. A. (1964)  
*Social Structure and the negro revolt: an examination of some hypotheses,*  
Social Forces, vol. 43, p. 248—65.
- Gurr, T. R. (1970)  
*Why Men Rebel*  
Princeton University Press, Princeton.
- Heady, B., Holstrom, E. and Wearing. A. (1984)  
*The impact of life events and changes in domain satisfactions on well-being.*  
Social Indicators Research, vol. 15, nr. 3. p. 203—27
- Heady, B., Glowacki, T., Holstrom, E. and Wearing, A. (1985)  
*Modelling change in perceived quality of life,*  
Social Indicators Research, vol. 17, p. 267—98.

- Hersey, R. B. (1932)  
*Workers' Emotion in Shop and Home*  
University of Pennsylvania Press, Philadelphia. USA.
- Inglehart, R. and Rabier, J. R. (1984).  
*Du Bonheur .....Les Aspirations s'adaptent aux situations,*  
*Futurible*, p. 29—58.
- Ipsen, Detlev (1978)  
*Das Konstrukt Zufriedenheit.*  
*Soziale Welt*. vol. 29, nr. 1, p. 44—53.
- Kirchler, F. (1985)  
*Jobloss and mood*  
*Journal of Economic Psychology*, vol. 6, p. 9—25.
- Lewin, K., Dembo, T., Festinger, L. and Sears, P. (1944)  
*Level of Aspirations*  
Ronald Press. New York.
- Manning Gibbs, R. A. (1972)  
*Relative Deprivation and Self-reported Happiness of Blacks: 1946—1966*  
Unpublished Doctoral Dissertation. University of Texas at Austin. USA.
- Maslow, A. H. (1954)  
*Motivation and Personality*  
Harper. New York.
- Mason, R. and Faulkenberry, G. D. (1978)  
*Aspirations, achievement and life satisfaction.*  
*Social Indicators Research*, vol. 5, p. 133—50.
- Maxwell, N. L. (1985)  
*The retirement experience psychological and financial linkages to the labor marker.*  
*Social Science Quarterly*. vol. 66, p.22—3
- McDougall, W. (1908)  
*An Introduction into Social Psychology*  
Methuen. London.
- Michalos, A. C. (1985)  
*Multiple discrepancies theory (MDT).*  
*Social Indicators Research*, vol. 16. p. 347—413.
- Morgan, A. E. (1934)  
*An attempt to measure happiness,*  
*International Journal of Ethics*. vol.44, p. 271—4.

- Nock, S. L. (1981)  
*Family life-cycle transitions: Longitudinal effects on family members.*  
Journal of Marriage and the Family, Vol.43, nr. 3, p. 703—14.
- Parducci, A. (1984)  
*Value judgment: toward a relational theory of happiness,*  
in: Eiser, J. B., ed., Attitudinal Judgement ,Springer, New York.
- Parducci, A.(yr?)  
*The relativism of absolute judgments,*  
Scientific American, vol. 219, p. 84—90.
- Praag, B. M. S. van, Kapteyn, D. and Herwaarden, F. G. van (1979)  
*The definition and measurement of Social Reference Spaces,*  
The Netherlands Journal of Sociology, Vol. 15, p. 13—25.
- Runciman, W. 6. (1966)  
*Relative Deprivation and Social Justice*  
University of California Press, Berkeley.
- Schulz, R. and Decker, S. (1985)  
*Long-term adjustment to physical disability,*  
Journal of Personality and Social Psychology, vol. 48, p. 1162—72.
- Smith, T. W. (1979)  
*Happiness: Time Trends, Seasonal Variation, intersurvey differences and other mysteries,*  
Social Psychology Quarterly, vol. 42, p. 18—30.
- Solomon, R. L. (1980)  
*The Opponent-Process theory of acquired motivation: the cost of pleasure and the benefit of pain,*  
American Psychologist. vol. 35, p. 691—712.
- Stones, M. J. and Kozma, A. (1986)  
*Happy are they who are happy,*  
Experimental Ageing Research, vol. 12, p. 23—9.
- Suchman, S. (1967)  
*Reducing the cost of surveys,*  
NORC Monographs in Social Research ,Aldine. Chicago.
- Tatarkiewicz, W. (1975)  
*Analysis of Happiness*  
Nyhoff, The Hague.
- Thibaut, J. W. and Kelly, H. H. (1959)  
*The Social Psychology of Groups*  
Wiley, New York.

Unger, H. F. (1970)  
*The feeling of happiness*,  
Psychology, vol.7, p.27—33.

Veenhoven, R. (1984a),  
*Conditions of Happiness*  
Reidel, Dordrecht/Boston.

Veenhoven, R. (1984b)  
*Databook of Happiness*  
Reidel, Dordrecht/Boston.

Veenhoven, R. (1988a)  
*The utility of happiness*  
Social Indicators Research, vol. 20, p. 333—54.

Veenhoven, R. (1989d)  
*National Economic Prosperity and Individual Happiness*,  
in: Grunert, K. G. and Olander, T., Understanding Economic Behavior , Kluwer Academic,  
London, p. 9—32.

Veenhoven, R.,  
*World Database of Happiness, Catalogue of Correlates. Printout 10-1-1990.*  
Ongoing register held at Erasmus University Rotterdam, the Netherlands.

Wentholt, R. (1975).  
*Map motivatieleer*  
Erasmus University Rotterdam. Department of Social Sciences.

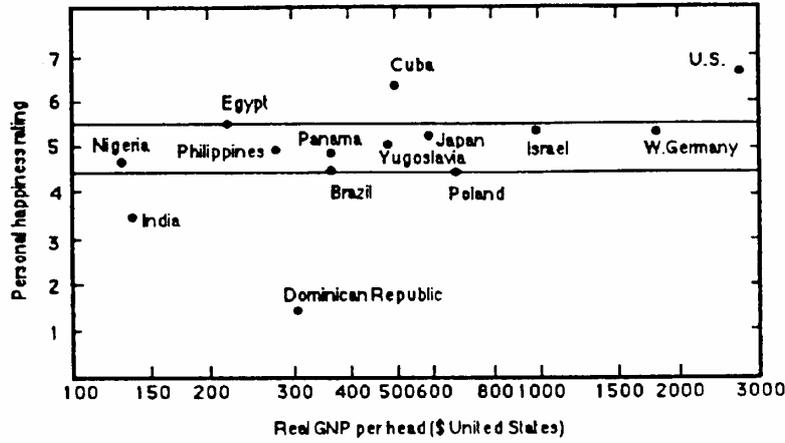
Wessmann, A. E. and Ricks, D. T. (1966)  
*Mood and Personality*  
Holt, Rinehart and Winston, New York.

Zajonc, R. B. (1981)  
*Feeling and thinking. Preference need no inference*,  
American Psychologist, vol. 35. p. 151—75.

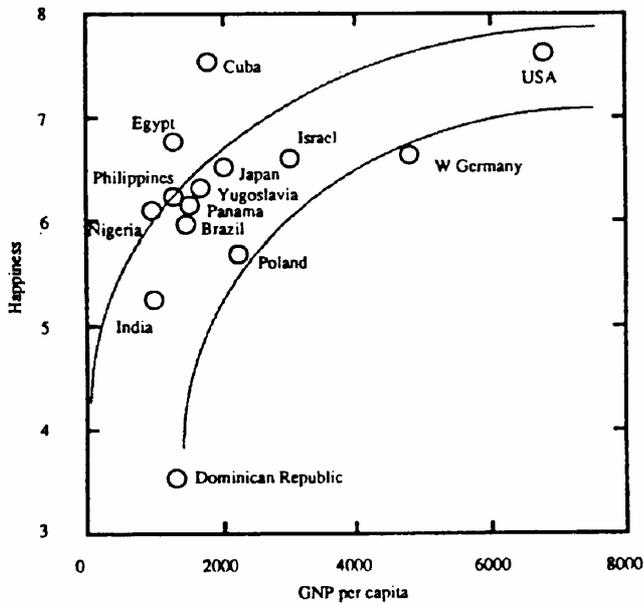
Scheme I

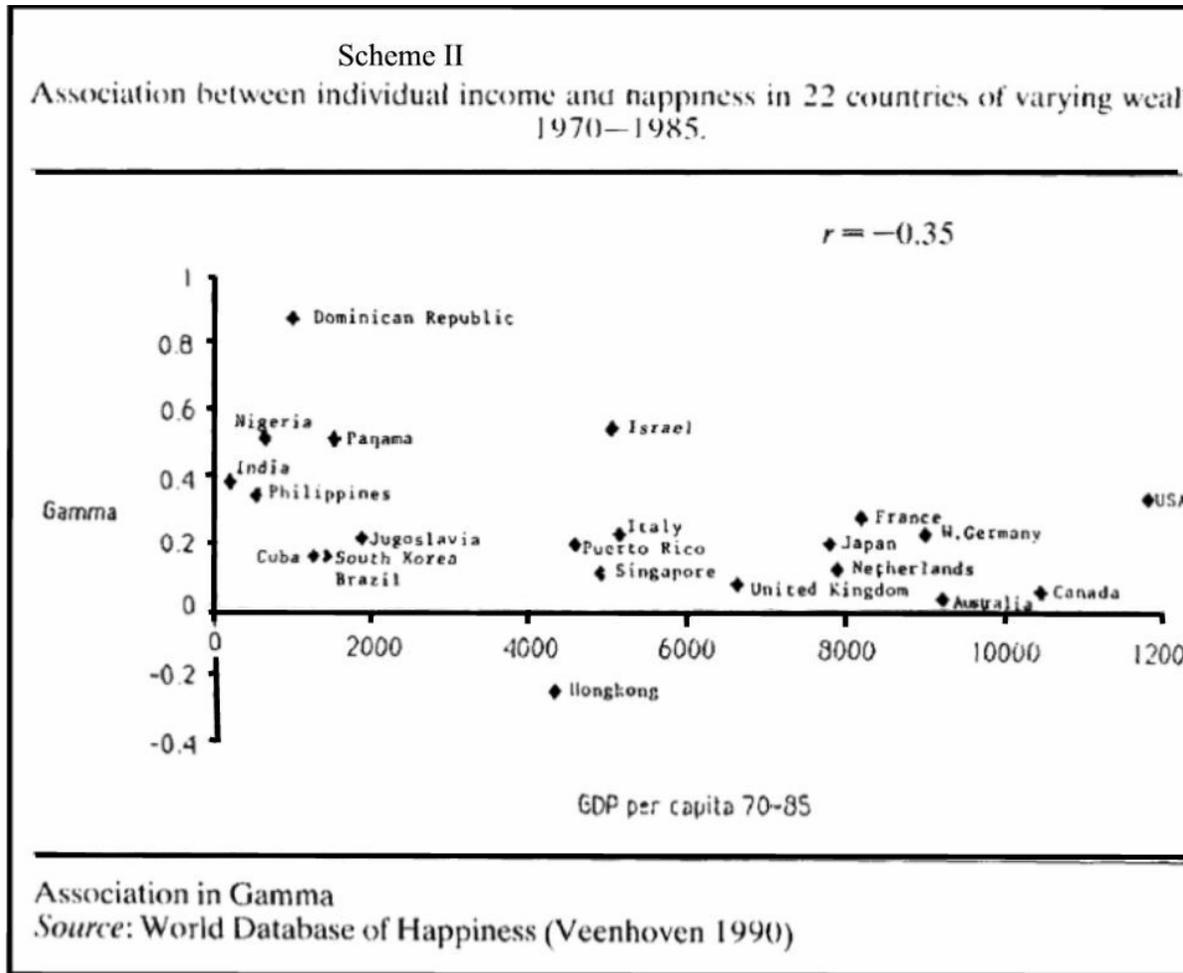
Presentations of Cantril's data on average happiness in countries of different wealth in 1960.

a: Easterlin's presentation (Easterlin, 1974, p. 106)



b: My presentation (based on the same data)





SCHEME III

HAPPINESS AND MISFORTUNE					
a Examples often claimed in support of the theory that happiness is relative					
subjects	interrogation	happiness item	standardized scores (0—10)	significance of difference	source
paralyzed accident victims (1 to 12 months after injury) controls picked from telephone directory	face to face telephone	How happy are you at this stage of life'?	5.4 7.0	p < 0.01	Brickman <i>et al.</i> 1978: 921
spinal cord injury (20 yrs after injury) general population sample	half face to face half telephone	Affect Balance Scale (Bradburn 1969)	6.2 6.7	ns	Schulz and Decker 1985:1167
malformed	questionnaire*	These days my life is: just great/ more than satisfactory/satisfactory/ less than satisfactory/ miserable	7.5 7.7	ns	Cameron <i>et al.</i> 1971: 641-2
		How would you describe your general mood: happy neutral/sad'?	8.1 8.5	ns	
matched control group (2/3 hospital patients)	questionnaire*	Do you find life frustra- ting? Never/infrequently/ sometimes/frequently/ constantly	6.7 6.8	ns	
b Examples not so often cited					
mothers of handicapped young child	mailed questionnaire	Affect Balance Scale (Bradburn, 1969)	6.7 8.4	p < 0.005	Friedrich and Friedrich 1981. 55
matched controls	mailed questionnaire				
60+ widowers	interview	Generally speaking how happy would you say you are these days: very happy, pretty happy or not too happy?	5.5 8.0	p < 0.01	Glenn 1985 .596
60+ married males	interview				
holocaust survivors	interview	Cantril (1965) Ladder Rating	5.6 6.5	p < 0.01	Antonowski <i>et al.</i> 1971. 189
Israelies of same age	interview				

\* read to blinds and controls

## SCHEME IV

## Longitudinal studies on change in happiness after major life-events

subjects	time lag	measures	analysis and results	source
people in transition Los Angeles, USA Purposive sample N = 134	T <sub>1</sub> :1969, T <sub>5</sub> :1980  11 yr	<i>happiness:</i> Question:in general how happy are you these days? Very happy/pretty happy/not too happy. Assessed at T <sub>1</sub> toT <sub>5</sub> <i>life-events:</i> 168 item checklist of events. S5 indicated whether or not events had occurred in the past year. Assessed at T <sub>1</sub>	<i>analysis:</i> Happiness at T <sub>5</sub> by Events at T <sub>1</sub> controlling psychological characteristics at T <sub>1</sub> (symptoms: happiness, self criticism) <i>results:</i> favourable events: — males $\beta = + 0.24$ (05) — female s $\beta = + 0.16$ (ns) adverse events: — males $\beta = -0.27$ (01) — females $\beta = +0.02$ (ns)	Chirlboga 1984: 474
Adults Melbourne, Australia Non-probability sample N = 184	T <sub>1</sub> : 1978, T <sub>2</sub> : 1981  3 yr	<i>happiness:</i> 1. 10-item index on affects in the past week (Bradburn 1968, ABS) 2. 6-item index on satisfaction with life in general Assessed at T <sub>1</sub> and T <sub>2</sub> <i>life-events:</i> 94-item checklist of events (fe. passes exam, got married, lost job, parent died, had serious accident). S5 scored whether or not these events had happened to them in the past 3 yrs. when and how often (Adapted Dohrenwend 1978 PERI) Net score is degree to which favourable events outweigh adverse ones Assessed at T <sub>2</sub>	<i>analysis:</i> Happiness at T <sub>2</sub> regressed on past three years Events (assessed at T <sub>2</sub> ) controlling Happiness at T <sub>1</sub>  <i>results:</i> Affect Balance $\beta = +0.17$ (01) Life satisfaction $\beta = +0.24$ (001)	Heady <i>et al.</i> 1984: 215
Labour force, USA Probability area sample  N = 963	T <sub>1</sub> : 1973, T <sub>2</sub> : 1977  4 yr	<i>happiness:</i> Question: 'feeling about present life' rated on 7-point scale — not too happy-very happy — not very satisfying, very satisfying Assessed at T <sub>1</sub> and T <sub>2</sub> <i>life-events:</i> loss of spouse between T <sub>1</sub> and T <sub>2</sub> due to — divorce (N = 79) — death (N = II) Assessed at T <sub>2</sub>	<i>analysis:</i> Happiness at T <sub>2</sub> by Loss of spouse between T <sub>1</sub> and T <sub>2</sub> ,controlling Happiness at T <sub>1</sub> . Age, Sex, Race and Education  <i>results:</i> divorced — happiness $\beta = -$ (05) — satisfaction $\beta = -$ (ns) widowed — happiness $\beta = -$ (05) — satisfaction $\beta = +$ (ns)	Nock 1981:710