# HAPPINESS IN HARDSHIP 

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## ABSTRACT

Happiness is often seen as the fruit of an easy life, but empirical studies show that happiness can go together with considerable hardship. Average happiness is high in current western nations, in spite of chronic problems such as criminality, time-pressure and social inequality. Likewise, the happiness of the average citizen is not affected by calamities such as the 11 September terrorist attack on New York. At the individual level there are also examples of happiness in hardship: the happiness of poor and handicapped people is only slightly below average.

These paradoxical findings can be explained in three ways: one explanation is that they do not adequately reflect reality, because of measurement bias or false consciousness. A second explanation holds that subjective happiness is insensitive to objective conditions. A third explanation is that we can live with some problems and even flourish when confronted with challenge.

These three explanations are considered in the light of the available evidence. It is concluded that the last one fits best. Happiness requires livable conditions, but not Paradise.

Many philosophers have associated happiness with trouble-free living. Some 2300 years ago, the Greek philosopher Epicure defined happiness as the absence of pain and advised his followers to avoid the social rat race and retreat into contemplative communes (Poot 2003). Likewise, the $19^{\text {th }}$ century German philosopher Schopenhauer saw happiness as 'not suffering too much' and also advised one should live a tranquil solitary life (Schalkxs 2003).

This view on happiness is also found in utopian fantasy, where the ideal society is typically depicted as ordered and without problems. In these earthly paradises there is no social conflict, no competition and no jealousy. In Skinner's 'Walden Two', for instance, all such nasty troubles have been eradicated by psychological condition techniques (Skinner 1948).

The idea of happiness as trouble-free living is also common in religious thinking, in particular in beliefs that renounce the world. Happiness is seen to have existed in Paradise and is expected in Heaven, both sanctuaries from hardship. It is not seen as something that can be realised in an earthly existence. At best one can reduce suffering a bit by withdrawing from worldly life as much as possible.

This theory is in fact one of the reasons why many philosophers see little value in happiness. A common objection against the utilitarian 'greatest happiness principle' is that happiness is mere sullen contentment and that this peace of mind requires a sheltered society, such as the technocratic paradise of 'Brave New World'. 'Self-actualisation' is typically mentioned as an alternative end-value that promises more pith.

In line with this philosophy, several empirical investigations have tried to demonstrate that happiness is antithetical to problems, in particular to social problems. Most of this research was instigated by welfare institutions, eager to legitimise their existence. Much to the regret of investigators and their commissioners, some of the findings do not fit this theory too well. It appears that people can be quite happy, in spite of considerable problems in society and in their private lives. These unexpected results have given rise to disenchantment with the concept of happiness. They have fuelled doubts about biased measurement and false consciousness and gave support to theories that denounce happiness as mere mental illusion.

I will describe this research in more detail below and then entertain the question: Does this mean that happiness is truly illusionary? I start with a quick overview of the field.

## 1 STUDY OF HAPPINESS

Empirical research on happiness started in the 1960's in several branches of the social sciences. In sociology, the study of happiness developed from 'social indicators research'. In this field, 'subjective' indicators were used to supplement traditional 'objective' indicators and 'happiness' became a main subjective indicator of social system performance (Andrews \& Withey 1976, Campbell 1981). In psychology, the concept was used in the study of mental health. Jahoda (1958) saw happiness as a criterion for 'positive mental health' and items on happiness figured in the pioneering epidemiological surveys on mental health by Gurin, Veroff \& Feld (1960) and Bradburn (1969). At that time happiness also figured in the groundbreaking cross-national study of 'human concerns' by Cantril (1965) and came to be used as an indicator of 'successful aging' in gerontology (Neugarten \& Havinghurst 1961). Twenty years later, the concept appeared in medical outcome research. Happiness is a common item in questionnaires on 'health related quality-of-life' such as the much-used SF-36 (Ware 1996). Lately, economists, such as Oswald (1997), Frank (1999) and Frey \& Stutzer (2002) have also picked up the issue.

The study of happiness has been rapidly institutionalized over the past few years, most investigators have joined forces and formed the 'International Society for Quality Of Life Studies (ISQOLS ${ }^{1}$ ). There is a specialized academic journal, the 'Journal of Happiness Studies' ${ }^{2}$ and research-findings are easily obtainable in the 'World Database of Happiness ${ }^{\prime 3}$.

### 1.1 Concept

Happiness is defined as the degree to which people evaluate their overall quality of present life-as-a-whole positively. In other words, how much they like the life they live.

When we appraise how much we appreciate the life we live, we seem to use two sources of information: affectively, we estimate how well we feel generally, and at the cognitive level we compare 'life as it is' with perceived standards of 'how life should be'. The former, affective source of information seems to be more important than the latter cognitive one (Veenhoven 1996: 33-35).

I refer to these 'subtotals' in the evaluation of life as respectively 'hedonic level of affect' and 'contentment'. I use the terms 'happiness' or 'life satisfaction' for the comprehensive judgment. These
definitions have been delineated in detail in earlier publications (Veenhoven 1984: chapter 2, Veenhoven 2000).

### 1.2 Measurement

Measurement has long been understood to be `objective' and `external' assessment, analogous to the measurement of blood pressure by a doctor. By now, we know that happiness cannot be measured this way. Steady physiological correlates have not been discovered, and probably never will be. Nor have any overt behaviors been found that can be linked consistently to inner enjoyment of life.

Like most attitudinal phenomena, happiness is only partially reflected in behavior. Though some social behaviors tend to be more frequent among the happy, i.e. active, outgoing, friendly, such conduct is also observed among some unhappy persons. Likewise, non-verbal behaviors such as frequent smiling or enthusiastic movements appear to be only moderately related to self-reports of happiness. Consequently, estimates of people's happiness by their peers are often wrong. Suicidal behavior is probably more indicative of unhappiness. Almost all people who attempt to or commit suicide are quite unhappy. However, not all the unhappy resort to suicide. In fact, only a fraction does.

Inference from overt behavior being impossible, when determining degrees happiness on unhappiness, we must make do with questioning. That is, simply asking people how much they enjoy their life-as-a-whole. Such questions can be posed in various contexts: clinical interviews, life-review questionnaires and common survey interviews. The questions can be posed in different ways: directly or indirectly, using single or multiple items ${ }^{4}$. A common survey question is:

Taking all together, how happy would you say you are: very happy, quite happy, not very happy, not at all happy?

Such questions are commonly used in survey research. The validity and reliability of such simple self-reports however is doubted. In earlier publications I have considered the objections and inspected the empirical evidence for claims of bias. I concluded that responses to these questions do adequately reflect how much people enjoy their life, though not very precisely. For more detail and references, see Veenhoven 1984 chapter 3 and Veenhoven 1998.

### 1.3 Investigations

Measurement of happiness is used in an increasing number of investigations. Happiness is now a common item in large-scale population surveys, such as the Eurobarometer and the World Value Studies. Measurement of happiness also figures in many studies of specific groups, such as single mothers, students or lottery-winners. The bulk of these studies revolve around a one-time questionnaire, but there are a number that contain follow-up studies and they have even been some experimental investigations.

To date, happiness has been assessed in some 3000 empirical investigations and the volume of research on happiness is increasing exponentially. The findings of all this research are stored in the above-mentioned World Database of Happiness (WDH 2003), which contains data on assessments of how happy people are (distributional findings) and differences in conditions of
more and less happy people (correlational findings). These findings are easily accessible on the web (www.eur.nl/fsw/research/happiness).

## 2 PARADOXICAL FINDINGS

Many of the findings are in line with the theory of happiness as living a trouble-free life. Average happiness is much lower in nations that are afflicted by poverty, war and injustice than in nations that are not. Likewise, individual happiness is lower after personal calamities such as widowhood or job loss. Still there are also findings that contradict this theory and suggest that there are also some troubles we can live with.

### 2.1 Happiness in an imperfect society

Social ills are often mentioned as a source of unhappiness, both chronic social problems and sudden crises in society. Yet not all tribulation we read about in the newspapers really afflicts the happiness of citizens.

### 2.1.1 Chronic social problems

On the political right, criminality is often mentioned as a main threat to happiness, while the left stresses persistent inequality. All parties seem to agree that the increasing pace of life reduces happiness in modern society. Opinions are strong on this matter, but the empirical evidence is surprisingly weak.

## Criminality

There is much concern about crime, in particular about violence. The media reported more on matters related to violence and bloodshed in the last decade and murder rates have actually risen in several countries. There is widespread public support for safety policies: But does this evil really reduce average happiness in the country?

One check is to compare happiness in nations that differ in degree of prevalence of criminality. A plot of happiness against homicide rates is given in scheme 1. Though there is a tendency of lower happiness in the most homicidal nations, the tendency is modest, $r=-.36$, and is not well visible.

This unexpected result could be caused by the Latin American nations, where people are fairly happy in spite of high homicide rates. Possibly Latin culture involves some compensators and thus distorts the big picture. I checked this possibility by considering three parts of the world separately, the rich western nations, former communist countries and Latin America. Yet I did not find much relation in these subsets (data not shown). Since happiness also depends on the economic development of the country I also controlled per head. This reduced the correlation even more, the partial correlation is only -.20 .

Another check is to compare over time and see whether rising homicide rates are followed by a decline in happiness. There is no evidence for such a trend, happiness raised somewhat over the last decade in most western nations and also in nations reputed to have rising criminality, such as the USA. More sophisticated trend analysis may show otherwise, but is unlikely to reveal a strong effect.

There is also much concern about inequality in modern society, and in particular about the widening gap between rich and poor. This societal evil is denoted by terms as 'social exclusion'
and 'new poverty' and ranks high on the political agenda. Yet again there is little evidence for detrimental effects on happiness.

A chart of happiness and income inequality in 45 nations in the 1990s is presented in scheme 2. In this plot we see again little relation between inequality and happiness. Though happiness is indeed high in egalitarian countries such as Denmark it is also high in unequal Latin American nations such as Brazil. In this picture the former communist countries combine equality with misery. Together this means that the correlation between happiness and income equality is zero. Again, various intervening variables may distort this picture. Yet statistical control for income per head does not produce the expected negative relationship. Instead, a positive correlation emerges, the partial correlation is +.42 ! Within country comparisons across regions has yielded somewhat different results (Alesina e.a. 2001, Oswald \& Blanchflower 2003), but these effects are small in size.

Comparison over time is difficult in this case, since income inequality has not changed much over the last decade in affluent nations. In spite of much talk about a growing split in society, income inequality appears to have increased only in Britain and the USA (Ritakallio 2001). Yet happiness did not decrease in either of these countries (Veenhoven 2003).

## Time pressure

There is good evidence for a growing pace of life in modern society, we spend more hours at work and on other scheduled activities and have less free time. This development is usually described as harmful. Garhammer (2002) calls it 'time stress' and Schorr's (1991) bestseller on this subject is entitled 'The Overworked American'. A lot of people believe that it is a curse of this era. However, the available data do not suggest that this is detrimental for happiness, at least not for average happiness in affluent nations.

A comparison of European nations in the 1990s is given in scheme 3. Happiness is again plotted vertically and an indicator of time-pressure horizontally. Instead of the predicted negative relationship, we see a positive one, happiness being lowest in relaxed Portugal and highest in speedy Sweden. Obviously, this result could be due to intervening factors, such as economic affluence and political democracy. Statistical control for such variables does abate the positive correlation, but does not reveal the expected negative relationship.

Comparison over time does not reveal any harm to happiness either. Though time pressure has risen over the last decade, average happiness did not decline; in scheme 4 we can see that happiness has raised somewhat in Western Europe since the 1970s. Not only has happiness risen, life expectancy is also still on the rise. We get older than ever and also live longer without disability (WHR 2002). All this suggests that the growing time-pressure does not really hurt.

### 2.1.2 Sudden crisis

Possibly we are more vulnerable to unexpected trouble, since we cannot accommodate to this so easily and because it undermines the predictability of our existence. Data on this are scarce as yet, but the available findings suggest again that we can live with some turmoil in society.

## Economic recession

There is much concern about the effects of economic recession on the individual citizen and these miseries are described vividly in the media. It is easy to imagine that recession hurts, it involves
bankruptcies, job insecurity and cutting down on consumption, all of which shatter aspirations and expectations. Yet again, the impact on overall wellbeing appears to be small in present day affluent societies.

Together with the late Aldi Hagenaars, I took stock of the effects of the 1980-82 economic recession on the wellbeing of Europeans (Veenhoven 1989). We found that the decline of the economy incited worries about finances and job, but did not afflict general wellbeing. In some countries there was a short-lived dip in life-satisfaction, but not in all. We did not find any rise in stress. Reports of depression and anxiety in surveys did not peak and sales of antidepressants and sedatives did not rise. General practitioners registered fewer stress-related complaints in the Netherlands and the number of suicides did not rise.

Possibly recessions have hurt more at other times and in other places, in particular in less affluent societies. Still this suffices to demonstrate that setbacks do not always harm happiness.

## September $11^{\text {th }}$

The unexpected attack on the Twin Towers in New York is another case. Several commentators saw this as the end of happiness in the western world, since the event glaringly showed the vulnerability of modern society to forces such as terrorism and the unpredictability of history. In response, trend analysts searched for evidence of sinking morale, but found very little.

The trend in happiness in the UK and in Italy since the early 1970s is depicted in scheme 4 These pictures show no dip in happiness after September 2001. Similar trend graphs for other western nations can be found in Veenhoven 2003 and an analysis of Gallup polls in the USA did not reveal any dip either (Gallup 2002).

Scheme 4 also depicts some other crises in the late 20th century in these countries. As one can see, there is no consistent pattern of reaction. In the UK, happiness dipped after the 1986 Chernobyl accident, but not after the 1973 oil-crisis, while it also dipped after the successful Falkland war. The case of Italy shows no dips after disturbing events at all, but rather a continuous rise in happiness.

### 2.2 Happiness in spite of personal misfortune

At the individual level there are also examples of things hurting less than expected. I present some illustrative cases below.

## Physical handicaps

The most illustratory case is the happiness of severely handicapped people; in particular paralysed accident victims. Being confined to a hospital bed forever would seem the worst that can happen to a person. These people are indeed desperate in the beginning, yet most of them adjust after some time. Average happiness in this group remains lower than average, but not as low as one would expect. The results of two investigations are summarised in scheme 5 .

## Old age

A related case is old age. This is typically not seen as the best phase of life, because of the inevitable losses involved in growing old. Young adulthood is commonly seen as the happiest
time of life (Harris 1977). Yet empirical studies found surprising little relationship between happiness and age, scheme 6 shows average life-satisfaction in age groups in Western Europe. At first sight there seems to be no difference at all, but on closer inspection one can see a slight $U$ pattern. Life-satisfaction is high among adolescents and drops somewhat in adulthood, in particular in the thirties. There is a rise around retirement age, which extends into old age. People over 80 are most satisfied with life.

## Poverty

Surprisingly, for economists in particular, the poorest people are not much less happy than the richest in affluent societies. This phenomenon is illustrated in the flower chart shown in scheme 7, which presents the relationship between happiness and income position in Italy in 1995. As one can see, happiness is highest in the medium income brackets and hardly differs between the highest and the lowest incomes.

The differences are greater when intervening variables are taken into account, such as age and family situation, but even the most sophisticated studies show modest effect sizes at best (Oswald \& Blanchflower 2003, Saris 2001). Follow-up studies have shown that changes in income affect happiness, in particular income loss. Yet the effects appear to be short lived, even in a poor nation like Russia (Schyns 2000).

## 3 EXPLANATIONS FOR HAPPINESS IN HARDSHIP.

These paradoxical findings are dealt with in two ways: one is to denounce them as misapprehension; the other is to seek causal mechanisms.

### 3.1 There is no paradox

If the paradox is illusionary, the illusion can be both in the perception of happiness and in the perception of hardship. There are arguments for both explanations.

### 3.1.1 Less happy than surveys suggests

Since the beginning of empirical research on happiness, there have been doubts about the high levels reported in general population surveys. Social critics are unwilling to believe that so many people really do enjoy life in this unjust society and attribute the findings to false measurement and false consciousness.

## False measurement

Several methodological objections have been raised against the unexpected high levels of happiness found in western nations. One of the misgivings is that most people have no opinion about their satisfaction with life. They will be more aware of how happy they are expected to be, and report this instead. Though this may happen incidentally, it appears not to be the rule. Most people know quite well whether or not they enjoy life. Eight out of ten Americans think about it every week. Responses to questions about happiness tend to be prompt. Non-response to these items tends to be low, both absolutely ( $\pm 1 \%$ ) and relatively to other attitudinal questions. `Don't know' responses are also infrequent.

A related assertion is that respondents mix up how satisfied they actually are, with how satisfied other people might think they are, given their life-situation. If so, people considered as
being well off would typically report high life-satisfaction, and people regarded as disadvantaged should follow suit with low satisfaction-reports. This pattern does occur, but it is not general. For instance, in The Netherlands a good education is seen as being required for a good life, but the highly educated appear slightly less satisfied with life in comparison to their less educated counterparts.

Another objection concerns the presence of systematic bias in responses. It is assumed that questions on happiness are interpreted correctly, but that the responses are often biased by social desirability. There is indeed evidence of some social desirability bias; it has been shown that the same people report more happiness in a face-to-face interview than on a written questionnaire. The difference is modest however, less than $10 \%$ of the scale range. If we take this into account, average life-satisfaction in Western Europe would be 6.7 instead of 7.4, which is still above the midpoint of this 10 -step scale.

## False consciousness

Another qualm is that people are reluctant to acknowledge their unhappiness and therefore make themselves believe that they are happier than they actually feel.

Some clinical studies have tried to demonstrate such ego-defensive distortion by comparing responses to single direct questions with ratings based on depth interviews and projective tests. The results are generally not much different.

Another test is to compare self-estimates of general happiness with less obtrusive measures of mood level. One such measure is the Affect Balance Scale, which involves questions about specific affects during the past few weeks. Scores on this scale appear to be highly correlated with self-reports of happiness, at the nation level the correlation is $+.69^{5}$. Another method is to measure average mood using experience sampling. A study among students found a strong correlation ( $\mathrm{r}=+.61$ ) between average mood as assessed by dairy records and an overall estimate of happiness (Wessman \& Ricks 1965).

The above objections imply that research using these measures to determine happiness will fail to find any meaningful correlations; if self-reports of happiness tap mere 'hot air'; there will be little correspondence with 'hard' indicators of wellbeing. Yet this is clearly not the case. At the nation level, there are high correlations with economic affluence, political freedom and institutional quality. The explained variance amounts to some $75 \%$ (Veenhoven 1997). At the individual level, happiness appears to predict longevity. A long-term follow-up study showed that nuns who were happy in their twenties lived about 7 years longer than their sisters who had been unhappy at that time in their life (Danner et. al 2001). In this context it is also worth realizing that the high levels of happiness in present day society go together with an unprecedented length of life.

### 3.1.2 Life less bad than we think it is

The paradox can also be in the perception of hardship. The adversities considered may be less dire than we think they are. This could be due to over-reporting of bad news in the media and the over-emphasizing of hardships by politicians and social scientists.

The case of criminality is a good example. Newspaper coverage of homicides tripled in the USA during the last decade, while the homicide rate actually fell ${ }^{6}$. Likewise, there has been much political hubbub about the 'new poverty' since the 1980s, whilst income differences remained largely the same in Western Europe and actually decreased somewhat in France and Italy (Ritakallio 2001).

There seems to be system in this perceptual distortion. Biologically, we are probably quite alert to hazards, since this adds to survival chances. This may be one of the reasons why bad news sells. Next there are also institutional incentives for the overstatement of peril; both politicians and social scientists earn their living by the exploiting of problems. This can be seen to lead into a pattern of 'worried happiness'; because we are alert to potential hazards we cope adequately and therefore enjoy life, but we remain aware.

### 3.2 Paradox has logic

This brings us to substantive explanations for the observed paradoxes of happiness. One explanation holds that subjective happiness is insensitive to objective harm. Another is that we can live with quite some troubles and even need the challenge.

### 3.2.1 Happiness is not sensitive

The most common explanation for cases of happiness in hardship is that happiness does not really depend on external conditions, but is rather produced by internal psychological states. One explanation of this kind holds that happiness is 'relative', the other is that happiness is a 'trait'.

### 3.2.1.1 Happiness is relative

A common theory of happiness assumes that we compare life-as-it-is to conceptions of how-life-should-be. Standards of how life-should-be are seen to draw on perceptions of what is feasible and what other people have. These standards of comparison are thought to adjust. The more money we earn and the more our neighbors have, the higher the amount of money we will deem necessary for a decent living.

At the individual level, this theory predicts that happiness is a short-lived phenomenon. We would be happy when life comes close to an ideal, but in coming closer to that ideal we will set higher demands and end up as equally unhappy as before. Likewise, social comparison will impede lasting happiness. When we have surpassed the Jones, our reference drifts upward to the Smiths, and we feel unhappy again. This theory has many variations.

At the societal level, the theory implies that average happiness will fluctuate around a neutral level, because individual citizens oscillate between happiness and unhappiness, the average will be in between. Social comparison is also likely to result in a neutral average; the happiness of the citizens who do better is balanced by the unhappiness of the ones who do worse. Consequently, average happiness should be approximately the same in all countries.

Empirical evidence Some often-cited investigations claim support for this theory. Easterlin (1974) saw the theory proved by his observation that happiness is as high in poor countries as it is in rich countries. Brickman et al (1978) assert that happiness is relative because they found that lottery-winners are no happier than paralyzed accident victims are.

I have exposed these sensational claims elsewhere (Veenhoven 1991). Average happiness is not the same in all nations and does not tend to a neutral level. Happiness appears not to be the same in poor and rich nations, but quite different ( $\mathrm{r}=+.64$ ). I also checked some other implications of the theory that happiness is relative. One such implication is that changes in living-conditions, to the good or the bad, do not lastingly affect the appreciation of life. However there is good evidence that we do not adjust to everything; for instance, we do not adjust to the misfortune of having a handicapped child or the loss of a spouse. Another implication I checked is that earlier hardship favors later happiness. However, survivors of the

Holocaust were found to be less happy than Israelis of the same age who were not affected by it. All in all, there is no empirical support for the theory that happiness is relative.

Theoretical flaws Proponents of this theory see happiness as a purely cognitive matter and do not acknowledge affective experience. They focus on conscious wants and neglect unconscious needs. Contrary to 'wants', 'needs' are not relative. Needs are absolute demands for human functioning, which do not adjust to any and all conditions; in fact, they mark the limits of human adaptability. Below I will argue that an evaluation of life draws on need-gratification in the first place and is therefore not relative ${ }^{7}$.

### 3.2.1.2 Happiness is a trait

Another account for the examples of happiness in hardship holds that happiness is a fixed disposition. This theory figures at the individual level and at the societal.

Personal character trait. The individual level variant sees happiness as a psychological trait; a general tendency to like or dislike things. This tendency is seen to stem from inborn temperament or early experience. This trait is believed to shape the perception of lifeexperiences and the overall evaluation of life. In this view, hardship will not affect happiness too much; trait-discontented people will always be disgruntled and the habitually satisfied will always see the sunny side of things.

I have taken stock of the empirical evidence for this theory elsewhere (Veenhoven 1994, 1995, Ehrhardt, Saris \& Veenhoven 2000). I inspected whether happiness is 1) temporally stable, 2) cross-situational consistent and 3) innerly caused. None of these appeared to be the case. With respect to the first question, it appeared that happiness does not remain the same over time, particularly not over the length of a lifetime. Individuals revise their evaluation of life periodically. Consequently happiness changes quite often, both absolutely and relatively towards others. Secondly, happiness appears to be sensitive to changes in living-conditions. Improvement or deterioration is typically followed by a rise or decline in appreciation of life. This appears for instance in the sequel of widowhood and divorce. Lastly I made it clear that happiness is not entirely an internal matter. Though evaluations of life are influenced by personal characteristics, these inner alignments modify the impact of environmental effects rather than determine them.

National character trait The societal variant of this theory (folklore-theory) assumes that happiness is part of the national-character. Some cultures would tend to have a gloomy outlook on life, whereas others are optimistic. Russia is often mentioned as an example of the former kind, and the USA as an example of the latter. In this view, Russia-like cultures remain unhappy in spite of prosperity, whilst US-like cultures remain happy in spite of hardship.

I have also examined the empirical evidence for this theory (Veenhoven 1994, 1995, 2001). I first inspected whether the differences in average happiness in nations are indeed unrelated to variation in objective quality of living-conditions in these nations. This appeared not to be the case. As noted earlier, societal qualities such as economic development and political freedom explain about $75 \%$ of the variation in average happiness! I next inspected whether happiness is lower than expected on the basis of these qualities in nations with a reputation for misanthropy, such as France and Russia. This appeared not to be the case. Lastly, I considered the happiness of migrants. I compared their appreciation of life with
average happiness in the country-of-settlement and with happiness in their country-of-origin. If happiness reflects the quality of the conditions one lives in, the happiness of migrants in a country must be close to the level of autochthons. If however, happiness is a matter of socialized outlook, the happiness of migrants must be closer to the level in their motherland. I considered the happiness of first generation migrants in Australia and West Germany. The traittheory also failed this test.

### 3.2.2 Happiness needs no Paradise

The other explanation holds that subjective happiness depends on objective wellbeing, but that we can handle some hardship and even flourish when confronted with challenge. This explanation draws on the 'livability' theory of happiness (Veenhoven 1995), which is also referred to as 'need theory' (Lucas \& Diener 2000). This explanation can be summarized as follows:

## Hedonic affect serves as an adaptation compass

Humans can feel good or bad and this capacity is likely to exist in all mobile organisms. The prime biological function of this capacity is to inform the organism whether it is in a livable biotope or not. Flora can do without this ability, since it cannot move.

Mood level most. Humans can also differentiate between momentous emotion and general background mood. The latter is most informative for deciding whether one is in a good pond. Other higher animals, such as cats, also seem to be able to react to how well they generally feel in an environment. Unlike cats, humans can reflect on mood and can probably estimate mood level over longer periods.

Primacy of affect. In evolution, this affective orientation capacity preceded the development of cognition. The human ability to reason about one's situation was added to an existing capacity for intuitive affective appraisal and did not replace it. Cognition serves a secondary role in appraisals. This appears in the fact that affective reactions go before cognitive evaluation (Zajonc 1980) and that evaluation is not really possible when ones capacity to appraise 'how it feels' is impaired.

## Happiness draws on hedonic level of affect

The focus on general mood and primacy of affect also apply also to the overall evaluation of life. As noted earlier, happiness judgments draw primarily on affective information, in particular on hedonic level of affect. Happiness is not 'calculated' by comparing life-as-it-is to standards of how-life-should-be, but rather 'inferred' from how well one feels generally. The basic heuristic is 'I feel good, hence I am happy' (Schwartz \& Strack 1991).

## Happiness linked to needs

Hedonic level of affect reflects the gratification of basic needs. 'Needs' are requirements for functioning that are so vital, that evolution has safeguarded their fulfillment by means of hedonic signals. There are different need-affect circuits in the human body, for instance separate signal systems for monitoring food intake and companionship. The total of these signals is displayed in
hedonic mood. Like the green or red lights on some machines, good and bad moods indicate whether the organism is thriving well. Unlike emotions, mood does not signal specific problems.
'Needs' should not be mixed up with 'wants'. Not everything wanted is really needed and the pursuit of wants can even be detrimental to need gratification. Needs are given by nature and limited in principle. Wants are products of our thinking and as such endless ${ }^{8}$. Needs are absolute, wants are relative (Veenhoven 1991).

## Needs for 'functioning' requires some challenge

A main class of needs is 'functioning needs'. Maslow (1970) referred to this kind as 'growth needs' or 'self-actualization needs'. All organisms have a drive to use and develop their potentials. The survival value is rather obvious, trained organisms have a better chance than untrained ones. Again there seem to be different reward circuits, linked to different capabilities. In thinking animals, the need for intellectual stimulation is quite pronounced. The pleasure that accompanies fully functioning has been described as 'flow' (Csikszentmihalyi 1997).

In children, the needs for functioning manifest most clearly in play. Children play for fun, not for any external reward. In adults, functioning needs move to seeking competition at work and challenging leisure activities, such as mountain climbing. Wants often serve as a means to keep going and are this is one of the reasons why wants have no limit.

## These needs developed in harsh conditions

The human species did not develop in Paradise, but in the conditions of a hunter-gatherer life in the African rift valley. Life was hard in that situation and not very secure. Hence it is likely that evolution given rise to an ability to face such adversities. Though reason tells us that it might be better to avoid trouble, we nevertheless thrive when putting these abilities to practice.

In several earlier publications I have argued that need theory is the best explanation for the observed pattern of happiness (Veenhoven 1991, 1994, 1995, 2000). This theory also provides also a plausible explanation for the cases of happiness in hardship presented in this chapter.

### 3.2.3 In sum

The various explanations for the paradox of happiness in hardship reviewed in this chapter are summarised in scheme 8 , it also recapitulates my view of their reality value. Which boils down to the conclusion that there is no paradox. The illusion of a paradox is based on over estimation of hardship and in false theories of happiness.

## 4 CONCLUSION

Though happiness calls for livable conditions, we can deal with hardship and even thrive when challenged to cope with it. Paradise is not a prerequisit for happiness.

Scheme 1
Happiness and murder rate in 55 nations in the 1990 s


Scheme 2
Happiness and income inequality in 52 nations in the 1990s


Scheme 3
Happiness and time pressure in EU nations in the 1990s

high workspeed/tight deadlines $0=$ never; $6=$ all the time

Scheme 4
Trends in happiness in two nations 1974-2002



Scheme 5

## Happiness and handicap

> Average Happiness

1. Accident victims, in rehabilitation:
5.9

Controls:
7.6
2. Disabled for 20 years: 5.0

General population: 5.4

Sources: 1) Brickman et. al. 1978, 2): Schulz \& Decker, 1985

Scheme 6
Happiness and Age in 8 EU-nations 1980s


Source: Veenhoven \& Okma, 1999

Scheme 7
Happiness and income in Italy 1995


Scheme 8
Explanations for paradoxical findings

## There is no paradox

- Less happy than surveys suggests
- False measurement false
- False consciousness false
- Life less bad than we think it is true


## Paradox has logic

Happiness not sensitive to any hardship

- happiness is relative false
- happiness is a trait
false
- Happiness needs no Paradise
probable


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## NOTES

${ }^{1}$ International Society for Quality of Life Studies: www.cob.vt.edu/market/isqols
Next to this social science association, there is a health-science oriented association, named International Society for Quality of Life Research: www.isoqol.org
${ }^{2}$ Journal Of Happiness Studies: www.wkap.nl/journals/johs
${ }^{3}$ World Database of Happiness: www.eur.nl/fsw/research/happiness
${ }^{4}$ An overview of acceptable measures of happiness can be found in the World database of Happiness, Catalog of happiness Querries, www.eur.nl/fsw/research/happiness/querries.
${ }^{5}$ This correlation appears in an analysis of 40 nations in the 1990s, using the dataset 'States of nations' (www.eur.nl/fsw/research/happiness/statesofnations)
${ }^{6}$ Between 19990 and 1996 the homocide rate dropped from 9.8 to 7.3 in the USA (UN-DY 1993/1998 table 21)
${ }^{7}$ The theory applies better to some domain-satisfactions. For instance, income-satisfaction appears to largely a matter of comparison, and standards of reference on this matter have been shown to drift (VanPraag 1993). There are also indications for comparison processes in satisfaction with health and satisfaction with job.
${ }^{8}$ In economy it is commonly stated that 'needs are endless'. This assertion is based on observed buying behaviour and concerns in fact 'wants' rather than 'needs'.

